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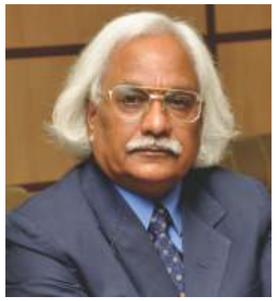
Dr. Ashok K. Chauhan
Founder President,
Ritnand Balved Education Foundation
Chairman, AKC Group of Companies

Our Hon'ble Founder President, Dr. Ashok K. Chauhan, Educationist, philanthropist believes that research and innovation are the crux of any nation's development. Under his visionary leadership and guidance Amity University Gurgaon has developed as a Research and Innovation driven university. According to Dr. Chauhan there is no dearth of talent in our country, but the need is to provide suitable platforms to identify the talents and at the same time education institutes should put thrust of research and innovation activities. With his constant encouragement Amity is at the forefront of cutting edge technology and scientific research. It has set up a strong R&D infrastructure and has created numerous facilities and labs with modern state of the art equipment. Today, Amity is the hub of scientific learning and high-end research and with the continued mentorship of Hon'ble Founder, President, Amity will continue achieving breakthroughs and excellence in the area of research and innovation.

Dr. Aseem Chauhan
Chancellor, Amity University
Additional President,
Ritnand Balved Education Foundation

The MASHAL (torch light) of vision and mission set up by our Hon'ble Founder President is very effectively carried by our young and dynamic Hon'ble Chancellor, Dr. Aseem Chauhan. He is a driving force behind all ventures and is well known for his innovative thinking. What sets Dr. Aseem Chauhan in the mould of a leader is his defining visions and approach to doing things. It is no wonder that he has been instrumental in taking Amity to unprecedented heights and is busy with pan India expansions of the institution. His skill in incubating and mentoring ventures is fast becoming legend, but his joy lies in the creation.

MESSAGE FROM VICE CHANCELLOR



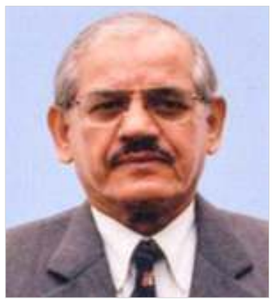
It gives me immense pleasure to note that the Directorate of Research and Publications (DRP) of the Amity University Gurgaon is bringing out the DRP-Annual-Report to widely disseminate the research and innovation activities and programmes being pursued at our prestigious University. I am also happy to note that the DRP-Report is carrying the latest research developments in the diverse areas to create the vital interdisciplinary interest and foster interdepartmental cooperation.

I am of the opinion that the universities worldwide are judged on their contributions to knowledge creation, technology development, innovation and industry readiness of their graduates. Sponsored R&D forms a major pillar of strength of a university and so is its quest for innovation and interdisciplinary and translational research. I am indeed happy to note that here in AUH we are engaged in R&D in areas of vital interest to industry and society. It is also a matter of great satisfaction that in our university research and innovation culture has percolated to the UG levels.

May I therefore invite the innovative and creative minds of the faculty and inspired students to celebrate the success as made so far and engage themselves with relentless curiosity in accelerating the pace of industry and society relevant research and innovations at the university. I wish the publication great success..

Prof. P.B. Sharma,
Vice Chancellor, Amity University Gurgaon
President - Association of Indian Universities
(Former Founder VC – DTU and VC–RGTU)

MESSAGE FROM DY VICE CHANCELLOR



It is indeed a matter of pride that the Directorate of Research & Publications (DRP) of Amity University Haryana is publishing its annual report. Even though seven years young, AUH is well on its way to becoming an ideal platform for scientists and researchers to transform their ideas into success and impact the development and global image of India. The DRP of AUH is committed to faster integration of all sciences and pursue all activities in a seamless environment such that the integrative science and interdisciplinary approach could enable research scholars to achieve major breakthrough in the advancement of new sciences and technologies for accelerating growth in the Country, in all spheres. DRP is doing great service in the fields of bio-sciences, bio-technology and stem cell technology.

My best wishes to the team of DRP and wish them continued success in the future.

Maj Gen Bhim Singh Suhag (Retd.),
Dy Vice Chancellor, AUH

MESSAGE FROM PRO-VICE CHANCELLOR

The Directorate of Research and Publications (DRP) provides a platform to inculcate research acumen among students and faculty members.It is a warehouse of all research at Amity, keeping pace with the new knowledge creation. DRP is committed to promote and encourage research environment by information dissemination of all research grant and funding opportunity on real time basis to potential researchers. ICT driven technology is implemented for quick real time reference. DRP is engaged to deliver and showcasing innovative research initiatives, including publications, projects, and patents at AUG. It is nodal centre for designing, maintenance and updating all the research activities. The Directorate also provides development programmes for faculties and researchers providing publicity support within the University as well as representation outside. The team is committed to promote and achieve excellence.

Prof. Padmakali Benerjee
Pro-Vice Chancellor, AUH

FROM THE EDITOR'S DESK

The Directorate of Research & Publication (DRP) since its inception has successfully completed four years of guiding and keeping track of the progress made by AUH faculty in terms of research and innovations. Directorate of Research & Publication is responsible for providing research leadership, which normally includes: promoting and facilitating leading-edge research, including collaborative and interdisciplinary research; building, and providing sufficient support for, a community of innovative researchers to enhance research capacity at the university and to increase internal and external research opportunities for faculty, post-doctoral fellows, and graduate students; developing networks between the research centre and researchers in the field in the public and private sectors, nationally and internationally; transferring knowledge to society through outreach).

DRP has been able to fulfil its mission in promoting research and innovation apart from ensuring proper implementation of research projects and mobilization of extra-mural research funds to AUH. Most heartening development was that our faculty competed and procured major grants funded by the Government Funding Bodies such as DBT, DST, DAE, IUAC, MNRE, Ministry of Ayush etc. and as a consequence during preceding year more than 13 Cr worth projects were awarded to AUH and 41 patents were filed. AIB/AIISH could compete with a mega infrastructural grant from the DST to help set up a 'Lipidomics Center' in AUH. DRP has also been able to motivate graduate and post graduate students to opt research as their carriers. As a result, our students not only have been able to compete for internship in various national educational institutes but could also get better placements in leading organizations. AIB/AIISH is in the process of world class modular laboratories which will provide even more impetus in our research and innovation drive. The impetus provided by DRP has yielded quality publications in high impact factor journals and books. Few of our publications have also made to cover pages of these journals. To show case the excellence in global science, the past year also saw regular visits of galaxies of distinguished guest speakers and in organizing various national and international meetings in AUH. Our students and faculty were also invited to several national and international meetings where they presented their research, chaired sessions and fetched awards. DRP has been able to promote and manage research and innovation drive of AUH, however, there is more to be done. We hope that our efforts will bring in more extra-mural grants and laurels in terms of quality publication and patents.

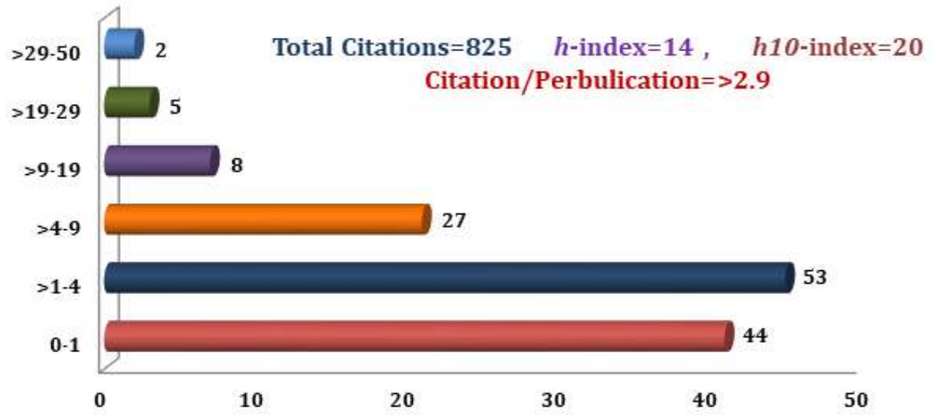
Team DRP

RESEARCH HIGHLIGHTS

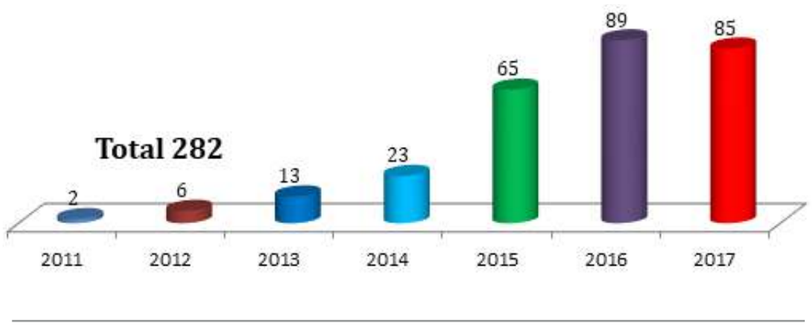
S.No.	Particulars	No.	Amount (Rs)
1	Projects Granted	31	₹12.25 Cr
2	Consultancy Projects Granted	24	₹1.17 Cr
3	Collaborative Projects with Other University/Institutions Granted	5	₹6.26 Cr
4	Projects Submitted	70	₹63.52 Cr

S.No.	Particulars	No.	Total
1	Scopus Publication	282	282
3	PhD Scholars	362	362
4	Patents Filed	41	41
5	Total Publication Journals	1704	2635
6	Total Publication Books	166	
7	Total Publication Conference	660	
8	Total Articles	105	

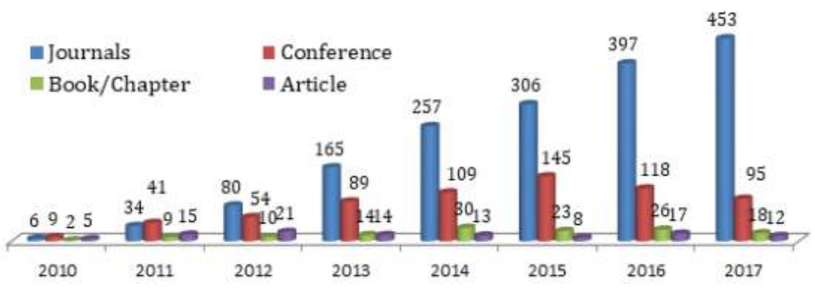
AUH CITATIONS



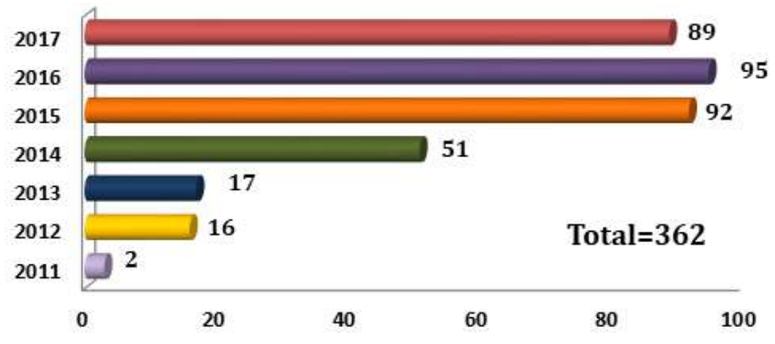
SCOPUS PUBLICATIONS (YEAR WISE)



AUH PUBLICATIONS



PH.D SCHOLARS @ AUG



nature COMMUNICATIONS

ARTICLE

DOI: 10.1038/s41467-017-00370-5 OPEN

Differential alternative splicing coupled to nonsense-mediated decay of mRNA ensures dietary restriction-induced longevity

Syed Shamsh Tabrez[1], Ravi Datta Sharma[2], Vaibhav Jain[1], Atif Ahmed Siddiqui[1] & Arnab Mukhopadhyay[1]

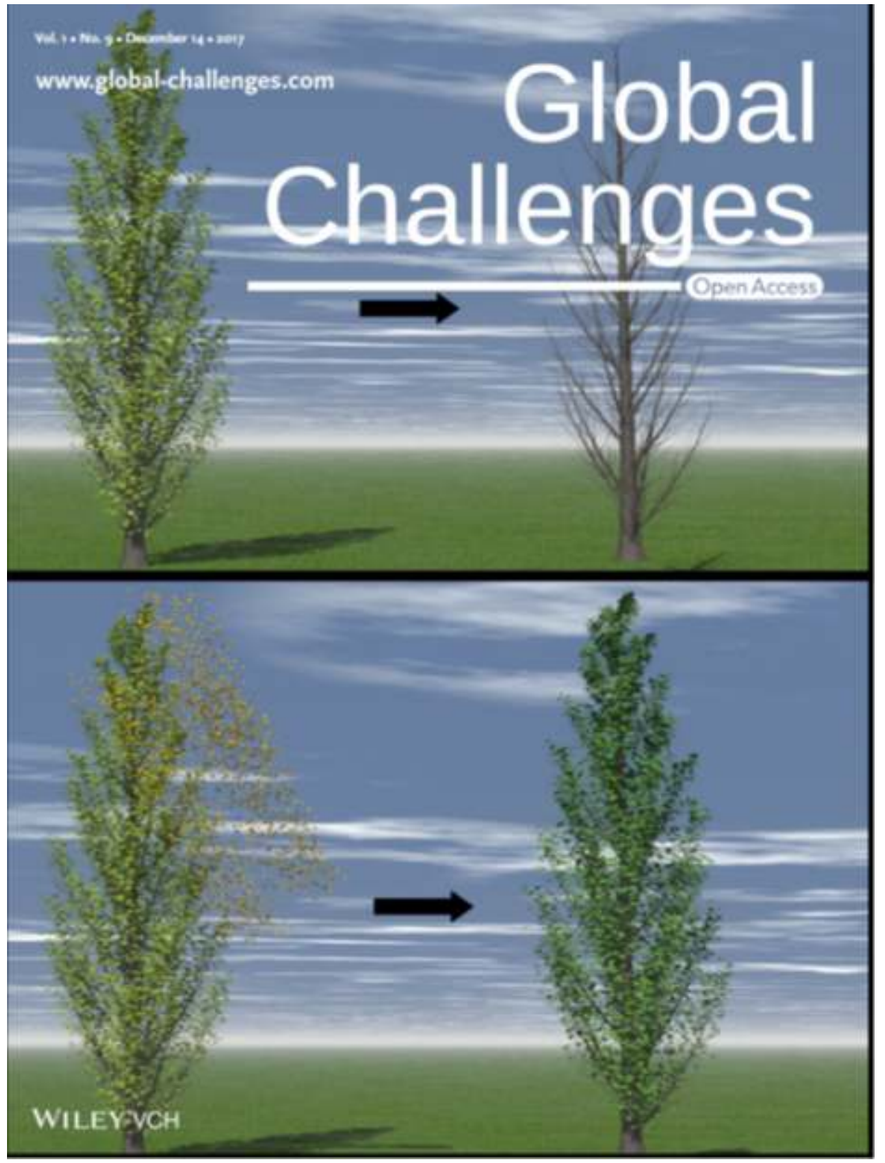
Alternative splicing (AS) coupled to nonsense-mediated decay (AS-NMD) is a conserved mechanism for post-transcriptional gene regulation. Here we show that, during dietary restriction (DR), AS is enhanced in *Caenorhabditis elegans* and mice. A splicing mediator *hrpu-1* regulates a significant part of these AS events in *C. elegans*; knocking it down suppresses DR-mediated longevity. Concurrently, due to increased AS, NMD pathway genes are upregulated and knocking down UPF1 homologue *smg-2* suppresses DR lifespan. Knockdown of NMD during DR significantly increases the inclusion of PTC-containing introns and the lengths of the 3′UTRs. Finally, we demonstrate that PHA-4/FOXA transcriptionally regulates the AS-NMD genes. Our study suggests that DR uses AS to amplify the proteome, supporting physiological remodelling required for enhanced longevity. This increases the dependence on NMD, but also helps fine-tune the expression of metabolic and splicing mediators. AS-NMD may thus provide an energetically favourable level of dynamic gene expression control during dietary restriction.

[1] Molecular Aging Laboratory, National Institute of Immunology, Aruna Asaf Ali Marg, New Delhi 110067, India. [2] Amity Institute of Biotechnology (AIB), Amity University Haryana, Panchgaon, Manesar, Haryana 122413, India. Correspondence and requests for materials should be addressed to A.M. (email: arnab@nii.ac.in)

Cover image

On The Cover: The interaction map of comparative transcriptomic profiles of the *CDR6/ROA1* null mutant of *Candida albicans* with WT. Clustering was based on gene involvement in biological functions using Cytoscape software. *Red* and *green circles*, genes down- and up-regulating, respectively. The size of the circle is proportional to -fold change (the higher the -fold change, the bigger the size of the circle). For details, see the article by Khandelwal *et al.*, pages 412–432.

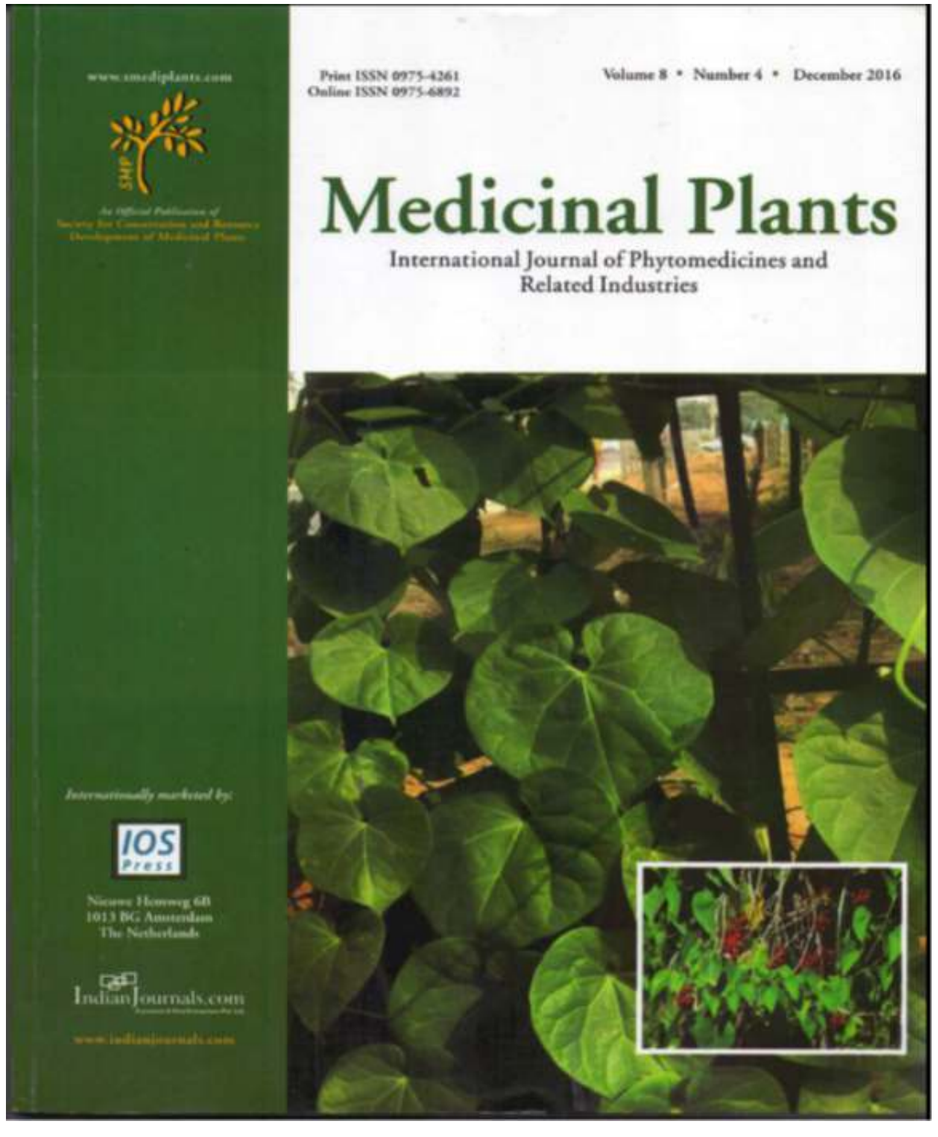
RESEARCH WORK PUBLISHED ON JOURNAL COVER PAGE



The cover image depicts a wilted tree with (bottom) and without (top) nanoferrite coating. The tree with the coating revives, while the leaves shred off without the coating. The image highlights the need to develop nanomaterial-based fungicides to protect plants, addressing a global challenge of saving plant life.

Overnight Culture of mutant Strain of Candida albicans, spotted on to BSA agar plate and grown at 30°C for 5 days

RESEARCH WORK PUBLISHED ON JOURNAL COVER PAGE



Tinospora Cordifolia is commonly known as Giloy or Gudichi It has a large glabrous, deciduous climber belonging to family Menispermaceae and is a potential source of nutritive minerals for human beings. The plant is rich source of diverse phytochemical

THE MAKING OF BIONNAVA LAB

R&D SPONSERED PROJECTS

R&D FUNDED PROJECTS SANCTIONED = 31 | TOTAL GRANT SANCTIONED = RS. 12,25,00,983/-

R & D SPONSORED PROJECTS

S. No.	Year	Title of the Project	Institution	Principal Investigator	Sponsoring Agency	Grant Sanctioned (In Lacs.)
1.	2012	To decipher therapeuie Potential of sesamol and peryllyl alcohal as antifugal agents against candida albicans	AIB	Dr. Saif-PI	SERB-DST	16.20
2.	2012	Compartive characterization of fatty acidome for latent sensitive and r esistant MTB strains	AIB	Dr. Zeeshan Fatima -PI	DST-SERB	18.18
3.	2012	Combating MDR in Pathoenic yeast Candida albicans	AIB	Dr. Rajendra Parsad	DBT	135.47
4.	2013	To study the e ffect of iron homeostasis on mycobacterium tuberculosis drug extrusion pumps conferring multidrug resistance	AIB	Dr. Zeeshan Fatima-PI Co-Dr. Saif Hameed-PI	BRNS/BARC	22.46
5.	2014	Role of Protein kinas a signalling in androgen mediated gene response	AIB	Dr. Gargi Bagchi, PI Dr. S. Ray Co. PI	DBT Bio-care	46.80
6.	2014	Carbon dioxide Fixation by Cul turable and non culturable (Metagenomic-Approach) Microbial Com munity and role of microbe for calcite and biofuel production.	ASEES	Dr. Shaili Srivastava Nigam - PI	DST	20.00
7.	2014	A Synergetic Study of Aerosols by Surface - Based Sungphotometry and Twilight Photometry	ACOAST	PI- G.A Aher , Co-PI Prof. P.C.S. Devara	ISRO Bangalore	33.00
8.	2015	Fungal Analysis	AIB	Dr. Rajendra Parsad	Univ. of Lyon France	6.00
9.	2015	Understanding the molecular Bases of resistance to septoria for wheat improvement in Ethiopia	AIB	Dr. Manju Sharma, Tilahun Mekonneh Negassa	NAM S & T Centre	2.70
10.	2015	Silica coated porous zinc oxide nanostructure : A poterit nanocomposit for development ofslow release agrochemicals	AIB	Dr. Nitai Debnath -PI	DST	26.45
11.	2016	Role of Cyclic di-AMP in ribosome biogenesis,165 rRINA methyltransferse (RsmD) function and drug resistance in Mycobacerium.	AIB	Dr. Krishina Murari Sinha.	SERB/DST EMR	40.00
12.	2016	Ion beam induced modi▪ications in MgO based nanophosphors: L uminescence and related studies.	ASAS	Dr. Ankush Vij	IUAC New Delhi	10.00
13.	2016	"Fund for Improvement of S&T infrastructure in University and Higher Education Institutuion (FIST) Programme-2016"	AIB	Prof. Rajendra Prasad	FIST - 2016	165.00
14.	2016	Structral studies on Banana bunchy top virous from India	AIB	Dr. Sangita Venkataraman	SERB	33.39
15.	2016	Identi▪ication of cgamp speci▪ic phoshodiesterase from Liesnmania donavani and its role in virulence	AIB	Dr. Krishna Murari Sinha	DBT	32.49
16.	2016	Develoments of Nanophasphors for solid state lighting-Electronic Structure and	ASAS	Dr. Ankush Vij	DAE-CSR INDORE	13.15

		Luminescence study				
17.	2016	"Development Of Multiferroic Magnetoelectric Materials And Dilute Magnetic Semiconductors For Multifunctional Applications	ASAS	PI- Dr. Shalendra Kumar	DST	11.00
18.	2017	Novel potential antifungal drug active against multidrug resistant yeast from the candida genus.	AIB	PI - Dr. Rajendra Prasad & Dr. Slawomir Milewski	Indo-Polish DST	26.31
19.	2017	Developing rapid sensitive high throughput user friendly kit for routine detection of androgens and antiandrogens in water	AIB	Dr. Gargi Bagchi, PI Dr. S. Ray Co. PI	DST	32.20
20.	2017	Insight into the mechanism of drugs transport mediated by multidrug transporters of candida-[14117]	AIB	Prof. Rajendra Prasad	DBT	74.72
21.	2017	"Unraveling the Role of mTORC2 in Regulation of Sphingolipid Biosynthesis in Breast Cancer Progression"	AIB	PI-Dr Ujjaini Gupta & Co-PI Prof. Rajendra Prasad	DBT, Biocare	54.53
22.	2017	Comparative sphingolipid pro-iling of breast cancer ce ll and tissue types for identi-ication of potential metastatic biomarkers	AIB	Dr. Ujjaini Das Gupta	SERB	47.15
23.	2017	Identify disease gene association using Text mining approach	AIB	Dr. Alok Srivastava	DBT	29.88
24.	2017	Monitoring Pollutants, toxins and microbial community in the chambal river to predict its environment and social consquences	ASEES	Dr. Purnima Khanna	SERB	33.30
25.	2017	Evaluation antimycobacterial potential of Unani drugs Qurs-e-Sartan Kafoori and Sharbat-eEjaz-A Mechanistic Approach	AIB	Dr. Zeeshan Fatima	AYUSH	30.00
26.	2017	Computational study to design novel algorithms for solving advection-donimated time-dependent advection advection-diffusion problems	ASAS	Dr. Naresh Mohan Chadha Co-PI Kajol Mandol	NBHM, DAE	15.50
27.	2017	Synaptic plasticity underlying alcohol-induced behavior: An a pproach towards understanding the molecular basis of ethanol sensitivity	AIB	Dr. Avani Shukla	SERB	29.00
28.	2017	Study of in depth genetic heterrogeneeity with respect to resistance and compensatory adaption of MDR Mtb clinically strains inside BM-Mesenchymal stem ce lls circulating in the Nor th East Region (22952)	AIB	Prof. Rajendra Prasad	DBT	50.20
29.	2017	Comprehensive Omics studies to understand the biology of drug resistant Mycobacterium tuberculosis clinical isolates from Arunachal Pradesh	AIB	Dr. Zeeshan Fatima Dr Sarban Singh and Dr Pawan Malhotra	DBT	67.00
30.	2017	Fabrication of high performance thermally, wind and sound drven -lexible nanogenertor for a wide range application	AINT	Dr. Brijesh Kumar	SERB	44.00
31.	2018	Development of an Immunosensor for Detection of Infectious Disease by NanoWire Field Effect Transistor coupled with Nanoparticles	AIB	Dr.Ranjita Ghosh Moulick	DST-SERB	41.00

COLLABORATIVE R & D PROJECTS

S. No.	Year	Title of the Project	Institution	Principal Investigator	Sponsoring Agency	Sanctioned Amount (In Lacs)
1	2014	Inteaguted sustain able power generation from sort - rotation forestry "Enhanced Biomass" in Rural and semi-Urban area of India within clean development mechanisam (Co2-mitigation)"	ASET	PI- Dr. AK Raghav, Co-PI Dr. Nadeem Khalil	DST	163.00
2	2014	India-European Union (EU) Research Project" Safeguarding Water Resource in Indian with Green and Sustainable Technology :"(SWINGS) under India-European Union Science & Technology Copperation Agreement.	ASET	PI- Dr. AK Raghav, Co-PI Dr. Nadeem Khalil	DST	420.00
3	2014	Novel Mechanisms of MDR in an opportunistic Human Pathogenic Yeast, Candida alegulation bicans, Department of Biotechnology	AIB/JNU	Dr. Rajendra Parsad CoPi:Dr.Alok Mandal	DST	42.00
4	2015	Investingating Aerosol-Cloud Forced Climate Change over India: A Multi-Satellte Approch	ACOAST	PI Dr. Rohini L. Bhawar Co-PI Prof. P.C.C Devara	Ministry of Earth Science	1.72
5	2017	Characterization of Materials for eht Luminescence based Applications	ASAS	Dr. Ankush vij	KIST	
Total						626.72

SPONSORED RESEARCH AGENCIES

Science and Engineering Research Board (SERB)
Department of Science and Technology (DST)
Govt. of India

Department of Biotechnology
Govt. of India

Ministry of Earth Sciences
Government of India

Indian Space Research Organisation

Funding Agency: Science & Engineering Research Board
(Budget: 16.20 Lacs)

"To decipher therapeutic potential of sesaml and perillyl alcohol as antifugal against Candida albicans"

Dr. Saif Hameed
Amity Institute of Biotechnology

ABSTRACT

Fungi are the one of the most common microbes living around us in the environment which could be pathogenic and sometimes life threatening. But ever increasing phenomenon of multi drug resistance is a major obstacle associated with the treatment strategies thereby limiting the number of effective therapeutic drugs and prompting us to identify novel antifungal agents. Since, compounds based on combinatorial chemistry and synthetic procedures could be much expensive and have toxicity effects, natural compounds that can be used as antifungal agents have become a renewed source of interest. This study examined the antifungal potential of natural compounds, possessing a diverse range of pharmacological properties and how it holds a good promise against human fungal pathogens thereby considerably improving our therapeutic strategies.

RESEARCH MOBILIZATION

Funding Agency: Science & Engineering Research Board
(Budget: 18.18 Lacs)

"Comparative characterization of fatty acidme for latent sensitive and resistant MTB strains"

Dr. Zeeshan Fatima
Amity Institute of Biotechnology

ABSTRACT

Tuberculosis (TB) remains major health issue globally and in particular developing nations. Emergence of HIV related TB, multidrug resistant (MDR) TB has further complicated its management. MDR-TB which is normally man made occurs via several mechanisms, including over expression of drug-efflux pumps, alteration of membrane permeability, drug modifications, and target alternation. This situation has terrified the global health community and raised a demand to explore novel drug targets and effective anti-TB compound. The advancement of lipidomics technology has not only enhanced the awareness about lipid molecules but help to discover their unique biological roles distinct from their usual function. Considering the uniqueness of MTB cell envelop full understanding of MTB lipid domain highly emphasized. Therefore, this study focused on understanding MTB lipid biology to eradicate TB from India and abroad.

Funding Agency: Bhabha Atomic Research Center
(Budget: 22.46 Lacs)

"To study the effect of iron homeostasis on mycobacterium tuberculosis drug extrusion pumps conferring multidrug resistance"

Dr. Zeeshan Fatima
Amity Institute of Biotechnology

Dr. Saif Hameed
Amity Institute of Biotechnology

ABSTRACT

Tuberculosis (TB) remains major health issue globally and in particular developing nations. Emergence of HIV related TB, multidrug resistant (MDR) TB has further complicated its management. MDR-TB which is normally man made occurs via several mechanisms, including over expression of drug-efflux pumps, alteration of membrane permeability, drug modifications, and target alternation. This situation has terrified the global health community and raised a demand to explore novel drug targets and effective anti-TB compound. Micronutrient are required for growth and development of MTB out of which iron is critical as it required as cofactor for many biological processes. Pathways of iron acquisition and their regulation could be new strategy to overcome MDR. Therefore, this study focused on exploring role of micro-nutrients to eradicate TB from India and abroad.

Funding Agency: Department of Science Technology, SERB
(Sanctioned Amount: Rs 20.00 Lacs)

"Carbon dioxide fixation by culturable and non culturable (metagenomic approach) microbial community and role of microbe for calcite and biofuel production"

Dr. Shaili Srivastava
Amity School of Earth and Environmental Sciences

ABSTRACT

The impact of anthropogenic CO2 emissions on climate change may be mitigated in part by C sequestration in terrestrial ecosystems as rising atmospheric CO2 concentrations stimulate primary productivity and ecosystem C storage. Carbon capture and storage (CCS) is an approach to mitigating global warming based on capturing carbon dioxide (CO2) from large point source. The natural fixation of CO2 is through the living plant and microorganisms. Some bacteria like chemoautotrophs and chemolithoautotrophs can fix atmospheric CO2 through Rubisco and other carboxylating enzymes. In view of above, methods are developed to enrich culturable and unculturable bacteria in presence of CO2 enriched environment. The carbon concentrating mechanism in bacteria would be studied on the basis of molecular characterization of enzymes i.e Rubisco and carbonic anhydrase. Isolated enriched microbes would be utilized for environmental applications including sequestration of CO2 and its conversion in to useful product like biosurfactant, polyhydroxy alkanoate and lipid/biofuel production.

Funding Agency: NAM S&T CENTRE
(Budget: 2.70 Lacs)

"Understanding the Molecular Bases of resistance to Septoria for wheat improvement in Ethiopia"

NAM S&T CENTRE Research Training Fellowship for Developing Country Scientists (RTFDCS)scheme for 201415 to Mr. Tilahun Mekonnen Negassa, LecturerResearcher & PhDStudent at Addis Ababa University of Ethiopia

Tilahun Mekonnen Negassa
Institute of Biotechnology,
Addis Ababa University,
P.O .Box: 1176,
Addis Ababa, Ethiopia

Dr. Tanushrikaul
Group Leader,
ICGEB, New Delhi
Supervisor

Dr. Manju Sharma
Assistant Prof. AIB, AUH
Supervisor

ABSTRACT

There are two major septoria diseases in wheati.eseptoriatritici blotch (STB synSeptoria leaf blotch), incited by the fungus S. tritici(sexual state: Mycophaerellagraminicola),and septorianodorum blotch (SNB, syn. septoria glume blotch), caused by the fungus S.nodorum(sexual state: Leptosphaerianodorum). Study of virulence spectrum and molecular diversity of both pathogens shall help in establishing molecular breeding strategy for development resistant varieties of wheat. The student is still pursuing Ph.Dwork in Addis University, Ethiopia.

Funding Agency: Department of Science & Technology, SERB
(Sanctioned Amount: Rs 26.45 Lacs)

"Silica coated porous zinc oxide nanostructure: A potent nanocomposite for development of slow release agrochemicals"

Dr. Nitai Debnath
Amity Institute of Biotechnology

ABSTRACT

Indiscriminate use of agrochemicals in the form of pesticides, herbicides, fertilizers etc. end up contaminating ground water table and soil with highly toxic pesticide residues. If these agrochemicals are loaded within porous nanocarriers, the effective dose of the agrochemical will be reduced as they will be released slowly and will be available to the target for a longer period of time. In this project silica coated porous nano zinc oxide will be synthesized and its efficacy for delivery of agrochemicals will be studied. Nanosilica has entomotoxic property and nano zinc oxide has antimicrobila property. So not only the cargo but also the carrier will provide plant protection.

In this project the following targets will be achieved:

1. Synthesis of nanosilica conjugated porous zinc oxide nanostructures.
2. Physico-chemical characterization of silica coated zinc oxide nanorods.
3. The incorporation of Nitrogen (N), Phosphorous (P), Potassium (K) fertilizers and insecticides (chemical insecticide like imidacloprid etc., botanical insecticide like azadirachtin etc.) within this nanocomposite will be studied.
4. The incorporation of different NPK fertilizers and insecticides within silica coated porous zinc oxide nanorods will be studied by FT-IR and HPLC. The release kinetics of the agrochemicals after different time points will be precisely estimated by HPLC.
5. Different bioassays will be designed to study the effect of these controlled release agrochemicals encapsulated by antimicrobial and entomotoxic nanocomposite on plants (like Vigna sp.) in green house. Effect of slow release insecticide will be tested on field insect pests like Spodoptera etc. The accumulation of these slow release fertilizers and insecticides on plant leaves and soil will also be studied in comparison with commercially available counter parts.
6. As the users will be exposed to the nanocomposite, a detailed toxicity study of it is of paramount importance. Standard toxicity assay like MTT assay, LDH etc. will be performed in cell line.

Successful application of slow release agrochemicals will have huge impact in not only reducing the cost, but also in reducing the residual toxicity of these pollutants. The technology will be patented. Through industry collaboration large scale production of the nanocomposite carrier will be planned for its commercial application.

Funding Agency: SERB EMR
(Sanctioned Amount: Rs 40.00 Lacs)

"Role of Cyclic di-AMP in ribosome biogenesis, 16S rRNA methyltransferase (RsmD) function and drug resistance in Mycobacterium"

Dr. Krishna Murari Sinha
Amity Institute of Biotechnology

ABSTRACT

Emergence of drug resistant strains of Mycobacterium tuberculosis (M. tb.) is a major hurdle in the treatment of tuberculosis disease. Ribosomes are one of the most common targets of antibiotics and mutations in different components of ribosomes are responsible for drug resistance. Biogenesis of ribosomes is a highly coordinated process initiating from the processing of primary RNA transcript into 23S, 16S and 5S rRNA. Nucleotides of these rRNAs are further modified by specific enzymes, r-proteins are added and modified leading to individual subunit formation followed by the formation of individual ribosomal subunits (50S and 30S) with the help of several assembly factors. Nucleotide modification of rRNAs is in concert with ribosome biogenesis. 16S rRNA which is 1542 nt long in E. coli and present in 30S subunit contains 10 methylated nucleotides and a pseudouridine residue. These modified nucleotides have important roles to play in translation and ribosome biogenesis. Methylation of G966 and C967 of 16S rRNA in E. coli are involved in maintaining the fidelity of initiation of translation. Methylated G966 also stabilizes a set of elongator t-RNAs at the P-site. G966 is methylated by RsmD at N2 position. We have previously shown that mycobacterial RsmD homolog (Rv2966c) has an N-terminal hairpin loop structure consisting of 16 amino acid residues. Further work has shown that the hairpin is involved in binding to cyclic di-AMP. Cyclic di-AMP does not bind to Nterminal truncated Rv2966c or full length E. coli RsmD. We would like to understand the role of c-diAMP in Rv2966c biology. It will be interesting to find out whether Rv2966c has methyltransferase activity in disAΔ cells, its localization in ribosomes and whether the maturation of the ribosomes are affected in the mutant cells. We have also identified ribosomal proteins RplK and RpsA as interacting with c-di-AMP. Role of signaling pathways like mTOR in the maturation of ribosomes are known in eukaryotes. Role of such signaling pathways is not known in prokaryotes. Understanding this signaling pathway would help to unravel the mechanism of emergence of drug resistance in Mycobacterium and could be utilized for drug designing against the bacteria.

Funding Agency: Inter University Accelerator Centre (IUAC) New Delhi
(Sanctioned Amount: Rs 10.00 Lacs)

"Ion beam induced modifications in MgO based nanophosphors: Luminescence and related studies"

Dr. Ankush Vij
Department of Physics, ASAS

ABSTRACT

MgO is a well known materials pertaining to its applications in diverse areas such as d0 magnetism, magnetic tunnel junctions, catalysis luminescence, radiation dosimetry etc. Although the material has been investigated for applications in thermoluminescence (TL) dosimetry for many decades, it has not found wide acceptance as a practical TL detector because of the high variability of its TL properties. However, recently it has been shown that lanthanides doped MgO with Li as co-dopant exhibits excellent TL properties suitable for radiation dosimetry. In addition, considering the potential of nanomaterials, it is worthwhile to explore the properties of rare earth ions doped MgO phosphors in their nano form. Since energetic particles as SHI are promising candidates for tailoring the properties of the materials and this energy deposition leads to the production of new color centers, defects and fragmentation of the grain boundaries which may modify their luminescent properties. However upto best of our knowledge, the use of energetic heavy ions has been restricted to MgO thin films for magnetic or electrical properties. We here therefore propose to study the ion beam induced modifications in MgO based nanophosphors.

Funding Agency: Ministry of Science &Technology, DST
(Sanctioned Amount: Rs 1.65 crore)

Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST) Program – 2016

"Lipidomics in Health and Diseases - Beyond the Analysis of Lipids"

Dr. Rajendra Prasad
Amity Institute of Biotechnology

ABSTRACT

Lipids are a diverse group of metabolites that have many key biological functions, acting as structural components of cell membranes, energy storage sources and intermediates in signaling pathways. Due to their importance lipids are under tight homeostatic control and exhibit spatial and dynamic complexity at multiple levels. It is thus not surprising that altered lipid metabolism plays important roles in the pathogenesis of most of the common diseases. Lipidomics emerged as a discipline, which is dedicated to global study of lipidomes, including pathways and networks of lipids in biological systems. When studying the lipidomes at a systems level, one of the key challenges is how to address the lipid functionality at many physiological levels, from metabolic and signaling pathways to spatial systems such as cellular membranes and lipoprotein particles. Besides the better analytical techniques to study lipids, computational techniques have started to emerge which enable modeling of lipidomes in their spatial and dynamic context. Together, the recent methodological advances in lipidomics have a potential to open novel avenues for predictive and preventive medicine. Leading experts of Amity Institute of Biotechnology and Integrative Sciences and Health have teamed up to focus on progress in systems approaches to study lipids in health and disease, with specific emphasis on cancer, tuberculosis, neural disorders, host-pathogen interaction, cellular stresses, fungal infections and sustainable agriculture.

RESEARCH MOBILIZATION

Funding Agency: Department of Science and Technology, SERB
(Sanctioned Amount: Rs 33.39 Lacs)

"Structural studies on Banana Bunchy Top Virus from India"

Dr. Sangita Venkataraman
Amity Institute of Biotechnology

ABSTRACT

Viruses are obligate parasites that have proteinaceous capsids enclosing their genetic material. X-ray diffraction studies on single crystals of viruses enable visualization of structures of intact virus particles at near-atomic resolution. These studies provide detailed information regarding coat protein folding, capsid architecture, molecular interactions between protein subunits, and plausible sites of receptor recognition. Such learning is pivotal in designing strategies for combating infections due to viruses in plants, animals and humans. India is the largest producer of Banana in the world. Banana is an important fruit crop of many tropical and subtropical regions of India, Tamil Nadu, Maharashtra, Gujarat, Andhra Pradesh and Karnataka being the main banana growing states. Bunchy Top disease of Banana is one of the most devastating diseases of Banana that is caused by a virus namely Banana Bunchy Top Virus (BBTV). The disease results in a significant loss of yield, stunting and bunchy appearance of leaves. While a large number of isolates of BBTV from various regions of India have been characterized by various groups, no structural study exists for this important virus either from India or from elsewhere. Hence, it is proposed to undertake purification, crystallization and structural studies on BBTV through X-ray crystallography. As the yield of native BBTV is too less for crystallographic studies, it is proposed to clone BBTV coat protein (CP) gene and express the same in bacterial system. Native BBTV would be obtained from National Research Center for Banana (NRCB), Tiruchirapalli and total nucleic acids would be extracted from infected sample using CTAB method. The CP gene would be PCR amplified using known primers, cloned in pQE-30 Xa expression vector and purified as a fusion protein with hexahistidine tag using Ni-NTA resin column following the protocol established by Abdelkader et al., 2004. The final recombinant CP sample would be checked for purity using SDS-PAGE and its concentration would be determined using spectrophotometer. After release of hexahistidine tag from the fusion protein, crystallization trials would be carried out using hanging drop vapour diffusion method. Once crystals are procured, collection of X-ray diffraction data would be carried out at IISc, Bengaluru. Following the collection of X-ray diffraction data, structure solution and analysis would be carried out at the mentor Institute. It is also proposed to undertake in parallel homology modeling studies of CP and in silico reconstruction of BBTV capsid. The proposed study is of paramount significance as it would shed light into the intricacies of capsid architecture and assembly and thereby help in designing strategies for curbing the infection and spread of BBTV in the farms.

Funding Agency: SERB EMR
(Sanctioned Amount: Rs 32.50 Lacs)

"Identification of cgamp specific phoshodiesterase from Liesnmania donavani and its role in virulence"

Dr. Krishna Murari Sinha
Amity Institute of Biotechnology

ABSTRACT

Cyclic dinucleotides are signaling molecules that act as secondary messengers and regulate various physiological processes. 2′, 3′ cGAMP is very recently discovered signaling molecule in mammals which induces type I interferon response through STING-dependent pathway during microbial infection to regulate innate immunity. 2′, 3′ cGAMP synthase (cGAS) synthesizes cGAMP on detecting DNA in the cytosol. The cellular concentration of cGAMP should be regulated tightly like any other signaling molecule. It is very likely that cGAMP phosphodiesterase(s) (PDE) plays a role in this regulation. So far there is no report of any such PDE. This proposal aims to identify and characterize for the first time cGAMP specific PDE and other cGAMP interacting proteins from Leishmania donovani, a protozoan parasite that causes fatal 'visceral leishmaniais' in the Indian subcontinent and Sudan (Africa). Better understanding of this pathway will help in elucidating the strategy taken by the microbes to establish infection. These pathways could be potential drug targets.

Funding Agency: Department of Atomic Energy-CSR Indore
(Sanctioned Amount: Rs 13.15 Lacs)

"Development of Nanophosphors for Solid State Lighting: Electronic Structure and Luminescence related study"

Dr. Ankush Vij
Department of Physics, ASAS

ABSTRACT

Solid state lighting has a very bright future in various lighting applications because of their high energy efficiency and cost effectiveness compared to incandescent bulbs, thus such materials are important from energy saving point of view. A very effective way to produce white light from UV/blue light emitting diode (LED) is by coating suitable phosphors excitable by LED light, so that white light is produced either by mixing of basic colors or complementary colors. With respect to the presently used phosphors in white light LED systems, most of them do not meet the optimum requirements of white-light LEDs. Phosphors based on wide band gap nanoparticles or quantum dots offer advantages compared to conventional powder phosphors in many ways including negligible optical backscattering due to the small diameter of the dots.Owing to its remarkable properties as a host material, we propose here to synthesize SrZnO2based nanophosphors using combustion and chemical co-precipitation technique by choosing appropriate rare earth ions and/or transition metal ions as dopant and co-dopant.

Funding Agency: Department of Science Technology, SERB
(Sanctioned Amount: Rs 11.00 Lacs)

"Development of multiferroic magnetoelectric materials for multifunctional applications"

Dr. Shalendra Kumar
Department of Physics, ASAS

ABSTRACT

Magnetoelectric multiferroic materials present a model system for exploring and manipulating the coupling between the electric and magnetic orders. In recent years magnetoelectric multiferroic materials have revolutionized the world of science and have been declared a thrust area from fundamental as well as application point of view. The coupling in such materials allows the electric field control of magnetic polarization and magnetic control of electric polarization and can lead to novel devices which can utilized in the information technology with higher speed, higher density and lower power consumption. In a broder vision, magnetoelectric effect include not only the coupling between the order parameters, but also involve related phenomena such as an electrically controlled exchange bias, electrically controlled magnetocrystalline anisotropy, and the effect of ferroelectricity on spin transport.The objective of the project is to understand mainly the challenges in growth of multiferroic materials (such as design of new material, thin film growth, effect of doping and strain) and then study their properties like magnetization and polarization switching phenomena, the dynamics of the domain wall motion, implication of these physical phenomena on the actual use of multiferroic and magneto-electrics in memory devices. In addition, understanding the origin of ferromagnetism in dilute magnetic semiconductors would also be one of the important tasks in the proposed work.

RESEARCH MOBILIZATION

Funding Agency: Department of Science and Technology
(Sanctioned Amount: Rs 26.31 Lacs)

"Novel Potential Antifungal drugs active against multidrug resistant yeasts from the Candida genes."

Dr. Rajendra Prasad
Amity Institute of Biotechnology

ABSTRACT

Commonly used azoles are fungi statics rather than fungicidal to Candida cells. As a result this tolerance to azoles contribute to the development frequently encountered resistance in the clinical isolates in immunocompromised patients. (25;37;39;41) ;Prasad et. Al in pathogenic fungi: Cellular and Molecular Biology Eds Giocoda San-Blas and Richard Calderona, Horizon Scientific Press, U.S.A, (2003). Therefore efficacy of azoles is threatened by shifting population of pathogenic fungi towards the intrinsically tolerant spices since the cells are allowed to persist and the immune function is not sufficient to clear the residuals fungal cells.

Our main focus is to explore and develop new inhibitors from various sources, which could block growth of Candida cells. It is planned to screen the conjugates of inhibitors of GlcN-6-P synthase developed by Polish Group. These Compounds, including a Glutamine analog known as FMDP, which exhibits antifungal activity albeit, low potency due to its poor uptake by fungal cells. On the other hands, its antifungal in vitro activity was enhanced as its di-and trepeptides conjugates. It is proposed to evaluate FMDP –oligopeptides conjugates for there antifungal activities against Candia Spices. The novel strategy is based on conjugates of FMDP with Hydrophobic nanocarriers other than oligopeptides, stable in serum, ensuring efficient internalization in fugal cells and release of FMDP inside the cells.

Funding Agency: Department of Science and Technology, Water Research Initiative
(Sanctioned Amount: Rs 32.20 Lacs)

"Developing rapid, sensitive, high throughput, user-friendly kit for routine detection of androgens and antiandrogens in water"

Dr. Gargi Bagchi Bhattacharjee
Amity Institute of Biotechnology

ABSTRACT

Water quality is an overwhelming problem India and worldwide. Since rivers and other water bodies act as the ultimate sink for all Industrial and household wastes, hence the water quality is poor and often dangerous for flora and fauna growing in these, and those who consume them. Many studies have demonstrated that the pollutants in the water cause hormonal changes or 'endocrine disruption' in the aquatic organisms. Our project aims to develop reporter assays that can identify the presence of such endocrine disruptive chemicals in water, especially those that can cause disruption in male hormone signaling. Currently, no such assay is available for checking water quality in India and the successful completion of this project would allow us to develop sensitive, high throughput, user-friendly tests for routine detection of androgens and antiandrogens in water.

RESEARCH MOBILIZATION

Funding Agency: Government Of India, Ministry Of Science & Technology, Department Of Biotechnology
(Sanctioned Amount: Rs 74.72 Lacs)

"Insight into the mechanism of drug transport mediated by multidrug transporters of Candida"

Dr. Rajendra Prasad
Amity Institute of Biotechnology

ABSTRACT

Both CRR1 & MDR 1 are major multidrug transporter involved in clinical drug resistance. The exposure of Candida Cells to antifungal therapy resoling over expression of their encoding genus, leading to repaid drugs efflux and multidrug resistance population in the current project, the structure and function of these efflux pumps protein will be determined to understand the basic mechanism of drug export to develop novel inhibitor, which could block the extrusion to re-sensitize the cells..

Funding Agency: Government Of India, Ministry Of Science & Technology, Department Of Biotechnology
(Sanctioned Amount: Rs 54.54 Lacs)

"Unraveling the Role of mTORC2 in Regulation of Sphingolipid Biosynthesis in Breast Cancer Progression"

Dr. Ujjaini Das Gupta
Amity Institute of Bitechnology

Dr. Rajendra Prasad
Amity Institute of Biotechnology

ABSTRACT

mTORC2 pathway and sphingolipid biosynthesis play significant role in pathogenesis of cancer and therefore appears to be closely linked. In yeast TORC2 regulates sphingolipid biosynthesis, and this proposal will attempt to answer mTORC2 mediated regulation in mammalian cells. The sphingolipid profile in breast cancer cells in conditions where mTORC2 will be inhibited as compared to control will reveal its effect on sphingolipid biosynthesis. The corresponding effect on enzymes of the sphingolipid biosynthetic pathway will be determined and the effect of the alterations will be assessed on breast cancer invasion and metastasis byin vitro assays. Pharmacological/ genetic manipulations of the candidate sphingolipids will be done to mimic the effect of mTORC2 inhibition and re-evaluate its potential to improve cancer cell invasion and migration. This proposal thus specifically targets sphingolipid mediated mTORC2 specific therapeutic window to combat breast cancer progression.

Funding Agency: Early Career Research Award, Serb, Dst
(Sanctioned Amount: Rs 47.15 Lacs)

"Comparative Sphingolipid Profiling of Breast Cancer Cell and Tissue Types for Identification of Potential Metastatic Biomarkers"

Dr. Ujjaini Das Gupta
Amity Institute of Bitechnology

ABSTRACT

Breast Cancer is rapidly becoming a leading cause of mortality among females due to poor prognosis, partial response to chemotherapy and lack of targeted therapies. We propose to do comprehensive sphingolipid profiling of breast cancer cell subtypes to identify key sphingolipids dysregulated in different subtypes. Pharmacological and genetic approaches modulating these key sphingolipids will ascertain their role and effect on cell proliferation, migration and invasion, unraveling their co-relation to metastasis. To establish a clinical co-relation, stage specific sphingolipid profiles will be determined from cancerous and normal breast tissue from patients screened and categorized into different subtypes. This will provide sphingolipid signatures and identify corresponding target enzymes from primary tumors of each stage and type playing a pivotal role in metastasis and highlight their relationship with the signatures obtained from in vitro studies. This insight will provide novel sphingolipid based therapeutic leads for different breast cancer subtypes targeting metastasis. Clinical data obtained from patient samples will be also compared with sphingolipid gene signatures from The Cancer genome Atlas (TCGA) breast carcinoma datasets. This will help us to conclude general stage- and type-specific regulation of sphingolipids in different breast cancer types and identify probable biomarkers for prognosis, and potential therapeutic targets. Bioinformatic analysis of sphingolipid signatures from the datasets will give a prognostic value of the signatures and a predictive view of metastatic tumor recurrence and patient survival.

Funding Agency: Department Of Biotechnology
(Sanctioned Amount : 29.88 Lacs)

"Identify disease gene association using Text mining approach"

Dr Alok Srivastava
Amity Insttute of Biotechnology

ABSTRACT

Text mining is a flexible technology, that has been addressed in number of articles, specially in context of Big Data. Whereas, in the domain of life science, this big data is stored in structure form, and freely accessible through PubMed, which motivated us to address the problem of finding the underlying relationship between genes and disease phenotypes. Though several attempts have been made in this direction, but all of them are having lots of redundancy and false positives and are lacking in defining the relationships with some weighted schema. To address this problem, we are proposing an automated text mining tool based on machine learning and sentiment analysis that aids in the extraction of human disease gene associations form PubMed literature and further categorize them in three class positive, negative and neutral associations. We believe that this application will provide the robust results that will be useful for scientists working in the area of disease modeling.

Funding Agency: DST-SERB (Department of Science and Technology - Science and Engineering Research Board)
(Sanctioned Amount: Rs 33.30 Lacs)

"Monitoring Pollutants, Toxins and Microbial Community in the Chambal River to predict its Environmental and Social Consequences"

Mentor- Dr Shaili Srivastava
Associate Professor
Amity School of Earth and Environmental Sciences

PI-Dr. Purnima Khanna
(Young Scientist)
Start Up Research Grant
Amity School of Earth and Environmental Sciences

ABSTRACT

In recent years, pollution of water has become one of the most significant environmental problems in the world. Today there is a great concern for rapidly deteriorating quality of water in Chambal river due to human activities. Industrialization, storage, extraction and diversion of water for irrigation, sand mining, fishing and riparian cultivation. Microbiological methods can be applied in predicting the impact of pollutants in aquatic ecosystem.Project attempts to investigate the factors for degradation of Chambal River and suggest the measure to ensure sustainable utilization of Chambal river water.

Funding Agency: Ministry Of Ayush
(Sanctioned Amount: 47.90 Lacs)

"Evaluation of antimycobacterial potential of Unani Drugs Qurs-e-Sartan Kafoori and Sharbat-e-Ejaz - A Mechanistic Approach"

Dr. Zeeshan Fatima
Amity Institute of Biotechnology

Dr. Saif Hameed
Amity Institute of Biotechnology

ABSTRACT

Tuberculosis (TB) remains global emergency particularly affecting poor and developing countries with 8 to 10 million new cases, clamming around 2 million lives annually. Multidrug resistance (MDR) and the highly lethal extensively drug-resistant (XDR) TB are adding new challenges to present therapeutics. Antimycobacterial therapy has become less effective with tremendous side effects rendering researchers struggle hard to find novel approaches to tackle this ever-growing problem. The failure of present therapeutic regiments renders the search for novel compounds capable of serving novel therapeutic option. Present era need is to look for natural alternative to be used either as drugs or adjunct to the drugs. Considering the importance of Ayurvedic, Unani, Homeopathy and other alternative system of medicines in current scenario, it is significant to re- connect it with modern medicine for the management of TB.

Funding Agency: National Board for Higher Mathematics (NBHM),
Department of Atomic Energy, Government of India
(Sanctioned Amount: Rs 15.50 Lacs)

"Computational study to design novel algorithms for solving advection-dominated time-dependent advection diffusion problems"

Dr N. M. Chaddha
Deptt of Mathematics, ASAS

ABSTRACT

The time dependent advection diffusion problem is quite fundamental to models which has applications in the fields of environmental fluid dynamics, chemical engineering, bio-medical engineering, and physiological fluid dynamics, see, e.g., (1; 2). Standard numerical methods may not produce acceptable results in a case when a problem is advection dominated, whereas schemes designed for the advection dominated case are usually suboptimal if the processes are mainly diffusive (12). We study such a model problem in Chadha & Madden (6) and Chadha & Madden (8). In Chadha & Madden (6), the authors have proposed and analyzed a twoweight scheme in terms of stability, monotonicity and other desired properties. The scheme with optimal values of the weights has been shown to be more accurate than other commonly used numerical schemes. In Chadha & Madden (8), we have extended the analysis to incorporate an optimal time step selection algorithm for the method. The aim of the project is to extend the analysis to more general cases, such as variable coefficients case e.g., $a = a(t)$, $\varepsilon = \varepsilon(t)$ and to higher dimensional analogous problems via standard time splitting methods such as Locally One Dimensional (LOD) and Alternating Direction Implicit (ADI) methods and compare the results against other conventional methods. At the first instance, it seems very natural and convenient to extend any analysis developed for a one dimensional problem to a two dimensional analogous problem. However, in certain cases it may not be so obvious, e.g., if the problem is strongly advection dominated in one direction, or the problem in one direction is reduced to a purely diffusion problem. Such problems warrant special numerical techniques to capture their physical phenomenon.

Funding Agency: DST-SERB (Department of Science and Technology - Science and Engineering Research Board)
(Sanctioned Amount: Rs 29.00 Lacs)

"Synaptic plasticity underlying alcohol-induced behavior: An approach towards understanding the molecular basis of ethanol sensitivity"

Dr. Avani Shukla
Amity Institute of Biotechnology

ABSTRACT

The project is meant to address the big societal issue in India and all over the world - alcohol addiction. This will be a molecular neurobiology project which will utilize the model system of Drosophila melanogaster (fruit fly). Using behavioral assays and molecular analysis in flies, this project aims at linking alcohol sensitivity with synapse number plasticity. The outcome of this project will bring us a step closer to understanding the molecular basis of alcohol sensitivity and how it can altered for potential therapy of alcohol abuse disorders.

Funding Agency: DBT (Department of Biotechnology)
(Budget: Rs 3 Crore)
(Amity Share: 50.2 Lacs)

"Study of in-depth genetic heterogeneity with respect to resistome and compensatory adaption of MDR Mtb clinical strains inside BM- Mesenchymal stem cells circulating in the North East Region" Multi-consortium project

Prof. Rajendra Prasad
Dean & Director
Amity University Haryana

Prof. Rakesh Bhatnagar
School of Biotechnology
JNU New Delhi

Dr. Bikul Das
IIT-Guwahti

Dr. Sanjukta Patra
Biotechnology Dept.
IIT Guwahti

Dr. Shankar Prasad
Kanaujia
IIT, Guwahti

ABSTRACT

Tuberculosis remains a major health concern in Northeastern (NE) region. In depth analysis of M. tuberculosis (Mtb) strains prevalent in NE region could provide vital information towards its diagnosis and prognosis. We have found presence of dormant Mtb in the sputum samples and bone marrow mesenchymal stem cells (BM-MSCs) in the NE region patients. In this proposal, we aim to perform whole genome sequencing studies on Mtb from sputum samples and BM-MSCs to discover novel mutations in Mtb strains prevalent in the region as well as to explore stem cell niche for MDR Mtb. Using these datasets, we will carry out resistome identification, characterization and drug screening for novel downstream targets involved in drug resistance, and compensatory mutations of Mtb strains identified in the NE region for therapeutic application. This study will provide novel therapeutic insights for MDR-Mtb in NE and the role of BM-MSCs in MDR evolution and novel ways to target it.

Funding Agency: DBT (Department of Biotechnology)
(Sanctioned Amount: 9.46 Cr.)
(Amity Share: Rs 67.00 Lacs)

"Comprehensive Omics studies to understand the biology of drug resistant Mycobacterium tuberculosis clinical isolates from Arunachal Pradesh"

Multi-consortium project

North-East Collaborator
Dr. Moi Nyori
DDHS(TB) cum State TB Officer
Health & Family Welfare
Naharlagun, Arunachal Pradesh

Dr. Sarman Singh
Head, Division of Clinical Microbiology & Molecular Medicine/ Laboratory Medicine
Institute/University
AIIMS, New Delhi

Dr. Pawan Malhotra
Group Leader
Malaria Biology Group
ICGEB, New Delhi

Dr. Zeeshan Fatima
Amity University Haryana
Amity Education Valley, Gurgaon, Haryana

ABSTRACT

Poor understanding of the basic biology of Mycobacterium tuberculosis (MTB), the etiological agent of tuberculosis, hampers development of much-needed drugs, vaccines, and diagnostic tests. High-throughput "omics" techniques have been applied to the study of MTB biology in recent years to address questions at the systems level. Genomic studies are increasing our understanding of MTB evolution and the development of drug resistance, while proteomics and lipidomics have enhanced our understanding of the real-time physiological status of bacilli in the host. Hence, understanding the mechanism of pathogenesis, virulence and persistence associated with drug resistance MTB strains is essential to design new tuberculosis strategies.

Funding Agency: Department of Science Technology, SERB (Sanctioned Amount: Rs 44.00 Lacs)

"Fabrication of high performance thermally, wind and sound driven flexible nanogenerator for a wide range applications"

Dr Brijesh Kumar
Centre for Nano Science & Technology,
Amity School of Engineering & Technology

ABSTRACT

In recent years, with the surge of wireless microelectromechanical systems and nanoelectromechanical system devices, there is increasing demand for clean and efficient power generation for the self-powering of these devices from ambient energy sources, such as thermal gradient, solar, mechanical vibration, bio-fluid and noises. Power generation through ambient energies harvesting has several potentials, such as in sensor network devices that observe an environment and assemble useful data about the environment. These are employed in situations where human interactions are impossible. Hundreds, even thousands of tiny devices should be placed in some locations, such as an office building or the ocean floor, or even within a living organism, to monitor certain variables. Depending on the situations in which these networks are placed, supplying power for these devices might be an incredibly difficult task. Nanogenerators are very promising and offer the possibility of performing this incredible task of supplying power for these wireless devices. Moreover, flexible nanogenerators are useful in areas that require a foldable or flexible power source, such as implanted biosensors in the muscle or joint, and have the potential of directly converting biomechanical or hydraulic energy in the human body, such as flow of body fluid, blood flow, heartbeat, and contraction of blood vessels, muscle stretching or eye blinking, into electricity to power body-implanted devices. Hence, high performance thermally, winds and sound driven flexible nanogenerator will be fabricated for self-powered electronics and sensing applications. This device will generate electricity through harvesting waste mechanical energy, mechanical vibration in the form of noise, sound, wind and thermal energy present in the ambient for self-powered electronics.

Funding Agency: Department of Science Technology, SERB (Sanctioned Amount: Rs 41.00 Lacs)

"Development of an Immunosensor for Detection of Infectious Disease by NanoWire Field Effect Transistor coupled with Nanoparticles"

Dr.Ranjita Ghosh Moulick
Amity Institute of Biotechnology

ABSTRACT

Infectious Diseases are generally caused by organisms like bacteria, viruses, parasites and even fungi. Several complex factors can trigger a wide spread of the disease, classified as epidemic (if outbreak occurs at one location) or pandemic (if spreading occurs to other counties or continents). A great deal of emphasis is given on the research, development and application of these techniques in the diagnosis of infectious diseases in the laboratories of developing countries. To prevent emergence/reemergence of infectious diseases agents a rapid identification is necessary. Biosensors based on nano-scale electronic devices have the potential to achieve exquisite sensitivity for the direct detection of biomolecular interactions. In the current proposal a modest attempt is taken to develop a new NanoWire Field Effect Transistor (NWFET) based antigen sensor for monitoring infection level using Nanoparticle (NP) for detection of Infectious Diseases.

PROJECTS SANCTIONED = 24 | TOTAL GRANT SANCTIONED = RS 1,29,39,469/-

CONSULTANCY PROJECTS

S. No.	Year	Title of the Project	Institution	Principal Investigator	Sponsoring Agency	Sanctioned Amount (Lacs.)
1	2011	Establishment plant Health	ACMP	Dr. Vivek Ballyan. CO PI	Horticulture Mission	10.00
2	2012	Establishment plant of leaf tissue analyses lab	ACMP	Dr. Vivek Ballyan. CO PI	Horticulture Mission	6.75
3	2013	NMEICT- Train the 10k teachers project under NMEICT to host STTP on control System	ASET	Dr. Karamjit Kaur, Mr. Akshat Agrawal`	MHRD, GOI Through IIT Bombay and IIT Kharagpur	1.61
4	2013	NMEICT- Project Aakash for Empowerment of Students and faculty synchronous and asynchronous Instruction	ASET	Dr. Karamjit Kaur	MHRD, GOI Through IIT Bombay and IIT Kharagpur	2.40
5	2013	NMEICT- Project Aakash for Empowerment of Students and faculty synchronous and asynchronous Instruction	ASET	Dr. Karamjit Kaur	MHRD, GOI Through IIT Bombay and IIT Kharagpur	1.50
6	2013	Train the 10k Teachers project under NMEICT to host STTP on Analog Electronics	ASET	Dr. Karamjit Kaur, Mr. Anil Kumar	MHRD, GOI Through IIT Bombay and IIT Kharagpur	1.11
7	2013	NMEICT- Project Aakash for Empowerment of Students and faculty synchronous and asynchronous Instruction	ASET	Dr. Karamjit Kaur	MHRD, GOI Through IIT Bombay and IIT Kharagpur	1.20
8	2013	NMEICT- Train the 10K Teachers project under NMEICT to host STTP on Green Building Awareness	ASET	Dr. Karamjit Kaur, Mr. Anil Kumar	MHRD, GOI Through IIT Bombay and IIT Kharagpur	0.03
9	2013	NMEICT- Project Aakash for Empowerment of Students and faculty synchronous and asynchronous Instruction	ASET	Dr. Karamjit Kaur	MHRD, GOI Through IIT Bombay and IIT Kharagpur	1.50
10	2013	NMEICT - Train the 10k Teachers project under NMEICT to host STTP on Engineering Mechanics	ASET	Dr. Karamjit Kaur, Mr. Kuldeep Kumar	MHRD, GOI Through IIT Bombay and IIT Kharagpur	1.18
11	2014	NMEICT - Train the 10k Teachers project under NMEICT to host STTP on Computer Programming	ASET	Dr. Karamjit Kaur, Ms. Charu Jain	MHRD, GOI Through IIT Bombay and IIT Kharagpur	0.99
12	2014	NMEICT - Equipment fund for establishing an aakash server and Wi-Fi connectivity	ASET	Dr. Karamjit Kaur	MHRD, GOI Through IIT Bombay and IIT Kharagpur	1.00
13	2014	NMEICT - Train the 10k Teachers project under NMEICT to host STTP on Control Systems	ASET	Dr. karamjit Kaur, Mr. manoj Pandey	MHRD, GOI Through IIT Bombay and IIT Kharagpur	1.51
14	2015	Smart Classroom/A-View Room Set-UP	ASET	Dr. Karamjit Kaur	MHRD, GOI Through IIT	28.00

CONSULTANCY PROJECTS

					Bombay and IIT Kharagpur	
15	2015	Evaluation of the biological activity of heparin Attached to hollow fiber membrane	ASAS	PI- Dr. Anurag Sharma Co-PI- Dr. Seema R Pathak	AMT USA	1.41
16	2016	HRD For Gardeners	ACMP	Co-PI Dr. Viveak Ballyan	Haryana State Horticultural Development Agency (HSHDA)	8.50
17	2016	"Farmer Training Project"	ACMP	Dr. Viveak Ballyan	HSHDA	3.25
18	2016	Suryamitra Skills Development Training Program (Part -1)	ASAS	Prof.(Dr.) Padmakali Banerjee, Dr. Subhra Das, Ms. Reena Nigam	MNRE	12.57
19	2017	NMEICT- Train the 10k teachers project under NMEICT to host STTP on control System	ASET	Dr. Karamjit Kaur, Mr. Manoj Pandey	MHRD, GOI Through IIT Bombay and IIT Kharagpur	0.58
20	2017	NMEICT - Train the 10 K teacher project under NMEICT to host STTP on "electric Power System	ASET	Dr. Karamjit Kaur	MHRD, GOI Through IIT Bombay and IIT Kharagpur	0.60
21	2017	Suryamitra Skills Development Training Program (Part -1)	ASAS	Prof.(Dr.) Padmakali Banerjee, Dr. Subhra Das, Ms. Reena Nigam	MNRE	12.57
22	2017	Entrepreneurship Awareness Camp (EAC)	ASET	Dr. Priti Singh & Maj. Gen V. K. Narang	DST-NIMAT	0.20
23	2017	Technology based Entrepreneurship Development Programme (TEDP)	ASET	Dr. Priti Singh & Maj. Gen V. K. Narang	DST-NIMAT	3.00
24	2017	Establishment of Capacity Building Centers as a sustainable solution to raise the standards of teaching staff in Indian HEIs	ABS/ASET	PI-Dr. Bhavan Adhikari, Co-PI Dr. Vivek Jaglan	EACEA	53.11

PATENTS FILED

PATENTS FILED

S.No	School	Inventor(S)	Title	Year
1	ACMP	Dr Viveak Ballyan	A Portable Harvesting Tool For Thorny Species	2010
2	ASET	Prof. AK Raghav, Mr. Anil Chadha	A Novel Fresh Concrete mix & fillability test Device	2013
3	ASET	Prof. AK Raghav, Dr. Vivek Ballyan & Dr. RK Malik	Amla Piercing M/C for making AMLA Murabba	2013
4	ASET	Prof. AK Raghav, Dr. Vivek Ballyan & Dr. RK Malik	Sorting machine For Roundish Shaped Vegetables and Fruits	2013
5	ASET	Prof. AK Raghav, Dr. Subhra Das & Mr. Sanjeev Sharma	Electricity from Wind turbine System Using Solar Chimney Draft	2013
6	ASET	Prof. AK Raghav, Prof. AN Pathak & Mr. MS Meena	LPG Level Indicator Device for LPG Cylinder	2013
7	ASET	Prof. AK Raghav & Anil Chadha	Brick Work Joint Raking Device	2013
8	ABS	Dr. Sunil Kumar	"Recycle and management of E- waste: A case 3R Recycler PVT. Ltd." cases in management,	2014
9	ABS	Dr. Sunil Kumar	Occupational Interest Schedule (OIS)	2014
10	ASET	Prof. AK Raghav, Prof. JR Luthra & Dr. Shiv Sharma	A Novel Electronic LPG Cylinder Gas Weighing Machine	2014
11	ASET	Prof. AK Raghav, Prof. PF Sharma, Ankit Tiwari, Bhavya Bhasin & Yash Raghav	Electricity Generator Using Magnetic Rotor	2014
12	ASET	Prof. PB Sharma & Prof. AK Raghav	Aqua Splitting Hydrogen for continuous Ignition in International Combustion Hydrogen Engine	2014
13	ASET	Prof. AK Raghav, Prof. PB Sharma, Gautam Parjapati, Pavleen Singh Bali & Rishabh Aswal	Gyroscopic Multi-Movement Ducted Propeller For Aircraft	2014
14	ASET	Prof. Ashok K Raghav & Dr. VLS Prasad Burr	Automated Precast Gel Preparatiion and Vending Device	2015
15	ASET	Prof. Ashok K Raghav, Ganesh Gupta, Dr. Shailendra Narain Singh, Vivek Jalan	Security software system for tracking vehicular movement in specific area	2015
16	ASET	Mr. Rupesh Aggarwal (Aerospace engineering Studnent)	Carbon-Super Allowy Composite for Aircraft Engines	2015
17	ASET	Mr. Rupesh Aggarwal (Aerospace engineering Studnent)	Levitation Thruster	2015
18	ASET	Maj. Gen (Dr.) Mahavir Singh Along with Prof. AK Raghav , Dr. Harish. K. Satia & Puneeta Ajmera	Foot Overpronation Detecting Device	2015
19	ASET	Prof. AK Raghav AN Pathak Yash Raghav	Alarm-Cum-Shut-Off Device for LPG Cylinder Leakage	2015
20	ASET	Prof. Ashok Kumar Raghav, Ganesh Gupta Pavleen Singh Bali, Rishabh Aswal,	Intellignent Traffic Montroning system	2015
21	ASET	Prof. AK Raghav, Anil Chadha	Brick Work Equi Thickness Layering Device	2015
22	ASAS	Prof. Joydeep Dutta	A wounf care product	2015
23	AMS	Dr Luxita Sharma	Mineral rich biscuits - A remedy for Iron and Calcium deficiency diseases and boon for children and pregnant women	2015
24	ASET	Prof. AK Raghav Nadeem Khalil AMU Dr. Sundera Rajan CPRI	Energy Efficient Boiler System for Thermal Power plant and Industry	2016
25	ASET	Mr. Rupesh Aggarwal & Mr. Aysh	Multi-Bladed Ducted Fan With Thrust	2016

PATENTS FILED

		Gupta (Aerospace engineering Studnent)	Vectoring For Flying	
26	ASET	Mr. Rupesh Aggarwal (Aerospace engineering Studnent)	Twin Layered Solar Array Blanket	2016
27	AMS	Dr Luxita Sharma	Nutritional quality and organoleptic properties of Low cost - Iron and Calcium rich chikki prepared from rice flake flour and nuts	2016
28	AMS	Dr Luxita Sharma	Nutritional Composition and sensory Evaluation of Noodles Developed from Ipomoea, Batatas, Oryza Sativa and Cicer Arietnum Flour	2016
29	AINT	Dr. Brijesh Kumar & Dr. Sanjeev Sharma	Low cost, Light weight, extremely durable and mechanically strong nanostructured aluminium/soft metal for safety helmet	2016
30	ASEES	Dr. Shali Shrivastava	Novel use of biosurfectant produce by bacillus sp. Isolated from free air CO2 (FACE) enriched soil microbial community.	2016
31	ABS	Prof. Padmakali Benerjee	TRADE MARK REGSTERED Peroma Has been registered under the provisions of the Trade Marks ACT for imparting Counselling, Education and Training Schedule amongst the organizations and general public to improve life, abilities, energies and positive thought process	2016
32	ASET+AINT	Dr. Sanjeev Sharma & Dr. Brijesh Kumar	3D augmented Reality Haptic Two-Factor	2016
33	ACOAST	Prof. Dr. P.C.S. Devara	Transient Analysis of Air Quality Drivers	2017
34	AMS	Prof. Monica Chaudhary	Simulated dark room retinoscopy goggle	2017
35	AMS	Prof. Monica Chaudhary	Affordable rapid tester for near vision correction	2017
36	AINT	Dr. Brijesh Kumar	A system and method for induced bandgap in graphene	2017
37	ASAS	Prof. Subhra Das, Dr Sudip Majumder and Ms. Nisha Yadav	CoolB- An Absorbent for Vapour Absorption Refrigeration system (CRN2723)	2017
38	ASET	Prof. AK Raghav	Flexible Sandwiched Insulation layer for Plane and Curved Interior Surfaces for Vehicles, Cold Storages, Offices and Houses	2017
39	ASET	Prof. AK Raghav	Efficeint Low-Cost Light-Weight Illuminating Horizontal-Axis Wind-Turbine	2017
40	AMS	Dr. Mahavir Singh & Dr. Luxita Sharma	A Method of preparing Apple Sugar	2017
41	ASAS	Prof. Seema R Pathak, Ms. Manisha Mann, SK Shukla	SOS (Sequence of Strokes) Kit	2017

FACULTY CITATIONS

FACULTY CITATIONS

Sr. No	Name of Deptt.	Name	Citations	h-index	i10-index
1	AIB	Dr.Rajendra Prasad	15535	57	362
2	ASEES	Dr. C P Kaushik	3790	28	47
3	ASAS	Dr. Joydeep Dutta	2569	16	18
4	ACOAST	Dr. P.C.S. Devara	2546	26	71
5	ASAS	Dr. Shalendra Kumar	2032	26	59
6	AIB	Dr S M Paul Khurana	1948	20	58
7	ASET	Dr. Pritam Babu Sharma	1175	20	27
8	AINT	Dr. Brijesh Kumar	970	15	18
9	ASAS	Dr. Anil K Yadav	750	16	18
10	ASEES	Dr. Parveen Kumar	530	12	13
11	ACON	Ms. Poonam Sharma	494	10	10
12	ASEES	Dr. Nitai Debnath	474	12	16
13	AIB	Dr. Sumistha Das	352	11	12
14	ASET	Dr. A K Raghav	335	7	4
15	AIB	Dr. Gargi Bagchi	326	8	8
16	ABS	Dr. Gunjan M. Sanjeev	283	9	9
17	ASAS	Dr. Ankush Vij	263	9	8
18	AINT	Dr. Debasree Ghosh	245	7	5
19	AINT	Dr. Ranjeet Brajpuriya	236	11	12
22	ASAS	Dr. Chander Shekhar	163	8	7
21	ASET	Dr Vineet Jain	141	7	6
22	AIB	Dr. Manju Sharma	139	5	3
23	ASET	Dr. RK Malik	126	6	5
24	ASAS	Dr. Ranjana Arora	123	7	5
25	ASAS	Dr. Priyanka Bolel	119	5	4
26	ASET	Dr. Rajesh Arora	107	6	4
27	ASAS	Dr.Seema R. Pathak	102	4	3
28	AIB	Dr. Ujjaini Dasgupta	100	5	2
			36828		

AWARDS & ACHIEVEMENTS IN 2017

- LEED Paltinum Certification Award for AUH by US Green Building Council
- College Search Winner of Students' Choice 2017 Award for AUH
- Higher Education Leadership Award for AUH received at World Education Summit - 2017 on 12th August, 2017
- UGC Approval for AUH letter received on 13th June, 2017
- Convenor , 35th Small Meeting on Yeast & Transport Energetics (SMYTE), Meeting held at Savoy Suites, Premium Hotel, Manesar, Gurgaon, September17-21th , 2017, Prof Rajendra Prasad
- Outstanding Teacher award—2017, ISMMP International Conference on" Plant Health for Human Welfare", 1-4 Nov,2017, Prof. S.M. Paul Khurana
- Delivered Spl. Lecture on Pl.Path.as subject: some reflections at celebrations of 7th Decades Journey of IPS, IARI, N.Delhi, Prof. S.M. Paul Khurana
- Chaired Session, 5th Rajasthan Science Congress (RSC) Amity University at Jaipur, 13-15.10.2017, Dr Manju Sharma.
- Young Scientist Award 2017, Society of Biological Chemists (INDIA), Dr Nitesh Kumar Khandelwal
- Dr Ranjeet K Brajpuriya received Prestigioous Internatinal TRIL Award from ICTP, Italy, to work as a visitng scientist for Six months
- Dr. Luxita Sharma, Dept of DAN has been honoured with the " National Ward of Nutrition and Health Education" conferred by Nutrition and Health Sciences Association on 27th December 2017 at India International Center, New Delhi.
- Maj Gen PK Sharma (Retd), Director ALS was Core-Committee Member for National Law Day Conference, organised by Law Commission of India, New Delhi from 25-26 Nov 2017. The Conference was inaugurated by the Hon'ble President of India and the Valedictory Ceremony was chaired by the Hon'ble Prime Minister of India.
- Dr. SK Tripathi, Associate Professor, Published a Book Titled 'Crucial Years of Higher Education In Modern India' – Year of publication- 2017, Publisher – Prasangik Publishers and Distributors, Karawal Nagar Roard, Delhi, ISBN – 978-93-81129-16-6.
- Dr. Bhuvnesh Yadav, ASAS received Young Scientist award from the SARC Society in ICIAST 2017 June 19-23, 2017, Nanyang Technological University, Singapore
- Mr. Kunal Anand, Assistant Professor, Korean felicitated for his contribution to Korean Studies, at the hands of His Excellency, Mr. Cho Hyun, Honourable Ambassador of Republic of Korea to India, by JNU.
- Dr. Ni Putu Tirka Widanti has been appointed as Adjunct (International) Faculty in ASL.
- 3 Korean Language Students Participated in the 10th All India Korean Language Speech Contest on 14th November 2017 at University of Delhi won Rs.7000 each.
- Shubha Arora of B.A.(Hons.) French (first year) of Amity School of Languages, Amity University Gurgaon had participated in "POEGRAMS" which is a "French Poem Writing Competition" on Instagram organized by "La Salle des Profs: Institut Français en Inde" in collaboration with French Embassy in India, Institut Français en Inde and CIEP (Dedicated to Education and to French Language Worldwide) and won 3rd prize.
- Secured First Position in Robothon'17 competition organised by Amity University, Haryana, 2017, Gangesh Tripathi
- Won Gold Medal for best event Organizer in department, 2017, Gangesh Tripathi
- Certified as Exhibitor in IIT BHU TechNex in February 2017, Gangesh Tripathi
- Certified as Entrepreneur in GD Goenka in March 2017, Gangesh Tripathi
- Certificate of Completion of training on C# .Net with cloud Computing from MSIT at Amity University Haryana., 2017, Gangesh Tripathi
- Organized 24x7 Cultural Fest "KALANJALI" from ASET, Amity University Haryana, February 2017, Gangesh Tripathi
- Participation in NASA Rover 2017-Moonrover competion, Albama,USA,2017, Sneh Nehra
- Organized India first Ameturr Rocketry Competion, Rohtak,2017, Sneh Nehra
- Participated in 19th World Youth festival, Sochi, Russia,2017, Sneh Nehra

AWARDS/ACHIVEMENTS OF FACULTY & STUDENTS

- III (prize) Best Oral presentation, Paper presented in session -Bioagents "Endophytic microoragnisms : Prospects as biocontrol in family Brassicaceae" Anand Agricultural University (AAU), India, Anand – 388 110 Gujrat, Special Symposium on Microbial Antagonists and Their Role in Biological Control of Plant Diseases & West Zone Meet of IPS -5 to 7 Oct 2017, Dr. Manju Sharma
- 1st prize in – "Voice for Biotechnology" 2017, North India Inter-collegiate public speaking contest – "Voice for Biotechnology" 2017 held at AUUP, Noida, Shreya Pal
- 2nd prize for research work presentation-Strain improvement of Bacillus amyloliquefaciens for biocontrol of Bacterial wilt disease of tomato caused by Ralstonia solanacaerum, In Symp on ''Microbial Antagonists And Their Role In Biological Control Of Plant Disease And West
- Zone Meet'' Of Ips(2017) Dt 5-7 Oct,2017 held at Dept Of Plant Pathology,Ba College Of Agriculture Anand Agriculture University Anand, 5-7 October,2017, Dhanjay Kumar Yadav
- Certificate of Excellence, Women Entrepreneurship Empowerment, WEE – 2017, IIT Delhi supported by Department of Science and Technology, Government of India. 29 March, 2017, Amrita Singh.
- Selected for Internship 2018 in Biocon Foundation, Biocon Foundation provides learning opportunity for health micro insurance; database management; preventive health education; capacity building at the community level, At Biocon Foundation Bangalore – 560 100, Amrita Singh
- Best Poster Award 2017, Paper "Harvesting Spirulina under Photo-bioreactor Prototype to sequester the room CO2"., National seminar on "Biotechnology: Resource Management" at Dr B R Ambedkar University, Agra, 22 - 23th, April, 2017, Bhupender Yadav
- Ms. Kashika Wadhwa - a BTTM first semester student of 2017-21 batch. On 13 September 2017, she participated in National Level Power Point Presentation Competition bearing name "Research Point" held at DAV Centenary College, Faridabad & won third position in the competition along with one trophy & 500 Rs/- cash.
- Mr. Siddharth Kohli - is a BHMCT third semester student of 2016-20 batch. On 04 September 2017, he participated in Healthy Recipe Competition bearing name "Healthy Chatkare" held at Manav Rachna International University, Faridabad & won second prize for making "Lettuce Roll"
- Mr. Ashish Pathak, Assistant Professor 1, obtained Certificate of Appreciation in a National Workshop on "The Laws Relating To Cruelty In India", organised by Bharati Vidyapeeth Deemed University, NEW LAW COLLEGE, PUNE (INDIA) on 26 Sep 2017.
- Young Researcher and Scholar Icon-2017, Dr. Naveen BP
- Young Educator and Scholar Award, Dr. Naveen BP
- Excellence Review Certificate 2017, Dr. Naveen BP
- Mr. Khushpreet Singh - is a BHMCT third semester student of 2016-20 batch. On 04 September 2017, he participated in Healthy Recipe Competition bearing name "Healthy Chatkare" held at Manav Rachna International University, Faridabad & won special prize for making gluten & sugar-free cookies.
- Dr. Suvro Parui, Assistant Professor, Chinese awarded Ph.D degree in 2017 from Vishva Bharati, Shantiniketan. The title of his thesis is Analysis of Wang Meng's Literary Creation.
- Ms. Kumari Mansi, Assistant Professor, French submitted her Ph.D in 2017 in Canadian Studeis at Jawaharlal Nehru University. The title of her thesis is Canadian Foreign Policy,2006-2015.
- Mr. Sumit Gupta, Assistant Professor, Spanish submitted his Ph.D in 2017 in Spanish Studies at Jawaharlal Nehru University. The title of his thesis is Leer la Globalizacion en Narrativas Literarias de Tres Espacios: Espana, America Latina e India(Reading Globalization in the Literary Narrative of Three Spaces: Spain, Latin America and India).
- Mr. Vishal Kr. Sinha, Assistant Professor, Russian submitted his Ph.D in 2017 in Russian Studies at Jawaharlal Nehru University. The title of his thesis is Транскультурная идентичность в художественных произведениях русской диаспоры: Андрея Макина, Владимира Каминера и Гэри Штейнгарта (Trans-cultural identities in Contemporary Russian Diasporic Writings: Works of Andrei Makine, Wladimir Kaminer and Gary Shteyngart)

MoU's

MoU's

S.No.	Partners
1	MOU between AUH & Russian State University for Humanities Moscow – 25th April, 2017
2	MOU between AUH & Fortis Healthcare Limited - 19th April, 2017
3	MOU between AUH & Global Health Private Limited – 28th April 2017
4	University of Texas, Arlington, USA
5	Yunnan Agricultural University, Kunming, Yunnan, China
6	Teikyo University, Tokyo, Japan
7	University of Iowa, USA
8	Sacred Heart University, USA
9	Carnegie Mellon University – Australia Campus (yet to be signed by Amity)
10	Artemis Hospital
11	India Vision Institute(IVI)
12	Rubber Skill Development Council
13	Titan Industries Limited
14	Center for Sight
15	ALPS Hospital
16	National Entrepreneurship Network
17	Johnson & Johnson Pvt. Ltd.
18	Dr. Lal Pathlabs Pvt. Ltd.
19	Max Healthcare
20	Rutgers, The State University of New Jersey USA
21	Louisiana State University and A&M college
22	University of Massachusetts Lowell
23	Universite de Franche- Comte Besancon France
24	TAFE South Australia, Heraud Education Trust
25	Harare Institute of Technology (Zimbabwe)
26	Mahatma Gandhi Institute for Rural Industrialization, Wardha
27	British Council
28	National Skill Development Cooperation (NSDC)
29	ALPS Hospital Ltd.
30	Fortis Healthcare Limited
31	Artemis Medicare Services Limited
32	Vidya Sagar Kaushalya Devi Memorial Health centre
33	Venu Eye Institute & Research Centre
34	Indian Council of Agricultural Research and ICMR, New Delhi
35	Life Sciences Sector Skill Development Council
36	Electric Sector Skill Council of India
37	Apparel Made-Ups & Home Furnishing sector Skill Council
38	Security Sector Skill Development Council
39	Agriculture Sector Skill Council of India

INTERNATIONAL VISITS

INTERNATIONAL VISIT SPONSORED BY AUH

S. No	Name	Department	Event Title	National / International	Event Dates
1	Ms. Silky Luthra	AMS	"The 5th Chongqing International Neurology Forum"	International Chongqing, China	18th October, 2013
2	Mr. Vijay Kumar Bhardwaj	ASAS	"Computational Mathematics , Computational Geometry& Statistics (CMCGS)2014	International, Singapore	3rd & 4th Feb, 2014
3	Dr. Shaili Srivastava	AIEES	In Connection with collaborative reasearch between both University	International Murdoch University , Perth, Australia	25th to 29th August ,2014
4	Dr. Ranjeet Brajpuria	ASAS	"Advances in Materials & Processing Technologies"	International, Atlantis The Palm , Dubai	16th to 20th Nov, 2014
5	Mr. Yashil Handa	ASET	"3rd International Confrence on Nano Technology & Bio Medical Engineering"	International, Dubai, UAE	11th & 12 th Jan,2014
6	Dr. Soundaram Arul	ASL	Workshop	International Center for pedagogic Studies,Severes, Paris, France.	16th to 27 Feb , 2015
7	Dr. M. Nidhin	ASAS	Golden Jubilee Chemistry Conference	Singapore	6 Aug & 8 Aug,2015
8	Mr. Vikas Nirmal	ASAP	4th World Conf. on Applied Science, Engineering & Tecnology	Kumamoto University , Japan	24 Oct & 26 Oct,2015
9	Ms. Debanjana Chatterjee	ASAP	4th World Conf. on Applied Science, Engineering & Tecnology	Kumamoto University , Japan	25 Oct & 26 Oct,2015
10	Mr. R.S. Sethi	ASAP	4th World Conf. on Applied Science, Engineering & Tecnology	Kumamoto University , Japan	26 Oct & 26 Oct,2015
11	Dr. Monika Vats	ASAS	Global Advanced Material and Surface Forums	Dubai	07 Dec & 09 Dec, 2015
12	Mr. Rajni Kant Rajhans	ABS	World Finance & Banking Symporium	Hanol, Vietnam	17 Dec & 18 Dec ,2015
13	Dr. Ashutosh Kumar	ABS	Corporate Social Responsibility & Sustainable Development	Kualalumpur, Malaysia	30th May to 31st May, 2016
14	Dr. Sunil Kumar	ABS	International Conference at Atlanta	Georgia , USA	17th June to 20th June,2016
15	Dr. Sangeeta Kumari	AIB	3rd International Conference on Biotechnology, Bio Informatics, Bio Medical Sciences & Stem Cell Applications	Nanyang Technological University, Singapore	1st July to 2nd July,2016
16	Dr. Deependra Sharma	ABS	International Conference at University Kualalumpur	Kualalumpur, Malaysia	3rd Aug to 5th Aug,2016

INTERNATIONAL VISITS

17	Dr. Ranjit K Brajpuriya	ASAS	International Conference & Workshop on "Advanced Reconfigurable Instrumentation for Scientific Applications" at Bangi, Selanor, Malaysia	Malaysia	14th Nov to 25th Nov, 2016
18	Dr. Surender Khatodia	AIB	International Seminar on "Sustainable Resource Management towards food, energy, environment & livelihood" at Goettingen, Germany	Germany	27th Nov to 29th Nov, 2016
19	Dr. Sanjeev Sharma	ASET	ISAMR 2017	Seoul. South Korea	March 17 to March 19, 2017
20	Dr. Prof Resha Patil	ASAP	Architecture & Urban Design	Zurich	July 27 to July 28, 2017
21	Mr. Kunal Anand	ASL	Building Connection & Strengthening ties through education	Tanzania	May 25 to May 27, 2017
22	Ms. Kumari Mansi	ASL	Building Connection & Strengthening ties through education	Tanzania	May 25 to May 27, 2017
23	Mr. Amit Sharma	ASAS	Innovative Research in Eng. & Sciences	Bangkok, Thailand	June 16 to June 17, 2017
24	Mr. Vijay Kumar Bhardwaj	ASAS	Innovative Research in Eng. & Sciences	Bangkok, Thailand	June 16 to June 17, 2017
25	Dr. Machiavelli	AIB	Sustainable intensification of Agriculture tgrough Resource Management	Germany	July 07 to July 09, 2017

TOP TEN HIGH IMPACT PUBLICATIONS

Nanoscale

PAPER

View Article Online
View Journal

CrossMark

Cite this: DOI: 10.1039/c5nr06705g

Surface energy and wettability of van der Waals structures†

Meenakshi Annamalai,[a] Kalon Gopinadhan,*[a,b] Sang A. Han,[c,d] Surajit Saha,[a,e] Hye Jeong Park,[c] Eun Bi Cho,[c] Brijesh Kumar,‡[a] Abhijeet Patra,[a,f] Sang-Woo Kim*[c,d] and T. Venkatesan*[a,b,e,f,g]

The wetting behaviour of surfaces is believed to be affected by van der Waals (vdW) forces; however, there is no clear demonstration of this. With the isolation of two-dimensional vdW layered materials it is possible to test this hypothesis. In this paper, we report the wetting behaviour of vdW heterostructures which include chemical vapor deposition (CVD) grown graphene, molybdenum disulfide (MoS_2) and tungsten disulfide (WS_2) on few layers of hexagon boron nitride (h-BN) and SiO_2/Si. Our study clearly shows that while this class of two-dimensional materials are not completely wetting transparent, there seems to be a significant amount of influence on their wetting properties by the underlying substrate due to dominant vdW forces. Contact angle measurements indicate that graphene and graphene-like layered transitional metal dichalcogenides invariably have intrinsically dispersive surfaces with a dominating London–vdW force-mediated wettability.

Received 28th September 2015,
Accepted 11th February 2016

DOI: 10.1039/c5nr06705g

www.rsc.org/nanoscale

Introduction

The isolation of graphene[1] has provided an insight and excitement to explore other two-dimensional (2D) materials that go beyond graphene which include h-BN and transition metal dichalcogenides (TMDCs) such as MoS_2, WS_2, and WSe_2.[2,3] The advent of such materials with intriguing properties has opened many avenues for their use in various applications such as transparent electrodes, sensors, flexible and stretchable transistors, logic circuits, light emitting diodes (LEDs), energy storage and energy conversion devices to name a few.[4–7] These layered materials are held together by vdW forces making it possible to isolate/synthesize atomic layers as well as create unique hybrids. Although there is significant and continued progress in understanding the electronic, optoelectronic, spintronic and mechanical properties of these materials, interactions of such materials with the surroundings remain less explored.[2,3,8–15] In this study, we explore the wetting properties of vdW based single and hybrid structures which are extremely crucial from both fundamental and application perspectives for example in conformal coatings, filtration membranes, energy storage devices, gas barriers, bio-sensors *etc.*[4,6,10,16–20]

In the past, attempts have been made to understand the surface wettability of graphene. Shin *et al.* performed water contact angle (WCA) measurements on epitaxial graphene grown on the SiC substrate and showed that graphene is hydrophobic with a water contact angle of 92° when compared to hydrophilic SiC with a WCA of 69°. Shin *et al.* also reported a thickness independent contact angle from the measurements done on mono, bi, multi-layered and highly ordered pyrolytic graphite (HOPG).[21] The WCA of graphene transferred from copper and nickel to SiO_2 was reported by Kim *et al.* as 93.4° ad 90.4° respectively.[22] Rafiee *et al.* demonstrated that graphene is indeed wetting transparent to copper, gold and silicon and such systems are dominated by vdW forces whereas it is non-transparent to glass due to short range chemical bonding.[23] It was also demonstrated that the contact angle of ~6 layers of graphene and above on copper approaches the bulk graphite value.[23] The debate on the intrin-

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†Electronic supplementary information (ESI) available. See DOI: 10.1039/c5nr06705g

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www.nature.com/scientificreports

SCIENTIFIC REPORTS

OPEN

The global regulator Ncb2 escapes from the core promoter and impacts transcription in response to drug stress in *Candida albicans*

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Accepted: 10 March 2017
Published: 06 April 2017

Mohd Shariq[1,2], Sanjiveeni Dhamgaye[3], Remya Nair[1,4], Neha Goyal[1], Vaibhav Jain[1], Arnab Mukhopadhyay[1], Alok K. Mondal[1], Gauranga Mukhopadhyay[2] & Rajendra Prasad[5]

Ncb2, the β subunit of NC2 complex, a heterodimeric regulator of transcription was earlier shown to be involved in the activated transcription of *CDR1* gene in azole resistant isolate (AR) of *Candida albicans*. This study examines its genome-wide role by profiling Ncb2 occupancy between genetically matched pair of azole sensitive (AS) and AR clinical isolates. A comparison of Ncb2 recruitment between the two isolates displayed that 29 genes had higher promoter occupancy of Ncb2 in the AR isolate. Additionally, a host of genes exhibited exclusive occupancy of Ncb2 at promoters of either AR or AS isolate. The analysis also divulged new actors of multi-drug resistance, whose transcription was activated owing to the differential occupancy of Ncb2. The conditional, sequence-specific positional escape of Ncb2 from the core promoter in AS isolate and its preferential recruitment to the core promoter of certain genes in AR isolates was most noteworthy means of transcription regulation. Together, we show that positional rearrangement of Ncb2 resulting in either activation or repression of gene expression in response to drug-induced stress, represents a novel regulatory mechanism that opens new opportunities for therapeutic intervention to prevent development of drug tolerance in *C. albicans* cells.

The commensal *Candida albicans* turns into a life threatening pathogen in immunocompromised individuals. For this lethality, *C. albicans* has an array of important traits, including yeast to hyphae transition, secretion of adhesion molecules and phenotypic switching[1–3]. Candidiasis caused by *C. albicans* is the fourth most common infections in hospitals which on several occasions are systemic and fatal[3,4]. Most commonly used antifungal drugs target unique components of fungal cells, which include either plasma membrane or cell wall (CW). For example, polyenes and azoles target ergosterol, a major unique component of fungal cell membrane while echinocandins target typical CW components. Fluconazole (FLC) is the most common azole which is widely used in clinics due to its low toxicity and easy oral administration[5]. However, the prolonged use of fungistatic FLC results in the development of tolerance towards the drug.

The *Candida* cells employ several strategies to acquire resistance not only to the drug in use but also display collateral resistance to other unrelated drugs. Among various mechanisms which contribute in acquiring multi-drug resistance (MDR), enhanced drug export represents an important strategy adopted by the pathogen[6–10]. Thus, most of the clinical MDR isolates of *C. albicans* are shown to over-express *CDR1*, *CDR2* or *MDR1* drug efflux pump protein-encoding genes. Cdr1 and Cdr2 belong to the ATP binding cassette (ABC) super-family of transporter proteins and use energy derived from ATP hydrolysis to expel drugs to the cell exterior. Mdr1 on the other hand is an H^+/drug antiporter which belongs to the super-family of major facilitators (MFS)[11–13]. Notably, both ABC and MFS family of transporters contribute to MDR in *Candida*; the regulatory circuits which control their gene expression are different[13–15].

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SCIENTIFIC REPORTS

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Nanostructured Boron Nitride With High Water Dispersibility For Boron Neutron Capture Therapy

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Bikramjeet Singh[1], Gurpreet Kaur[2], Paviter Singh[1], Kulwinder Singh[1], Baban Kumar[3], Ankush Vij[3], Manjeet Kumar[4], Rajni Bala[5], Ramovatar Meena[5], Ajay Singh[7], Anup Thakur[8] & Akshay Kumar[1]

Highly water dispersible boron based compounds are innovative and advanced materials which can be used in Boron Neutron Capture Therapy for cancer treatment (BNCT). Present study deals with the synthesis of highly water dispersible nanostructured Boron Nitride (BN). Unique and relatively low temperature synthesis route is the soul of present study. The morphological examinations (Scanning/transmission electron microscopy) of synthesized nanostructures showed that they are in transient phase from two dimensional hexagonal sheets to nanotubes. It is also supported by dual energy band gap of these materials calculated from UV- visible spectrum of the material. The theoretically calculated band gap also supports the same (calculated by virtual nano lab Software). X-ray diffraction (XRD) analysis shows that the synthesized material has deformed structure which is further supported by Raman spectroscopy. The structural aspect of high water disperse ability of BN is also studied. The ultra-high disperse ability which is a result of structural deformation make these nanostructures very useful in BNCT. Cytotoxicity studies on various cell lines (Hela(cervical cancer), human embryonic kidney (HEK-293) and human breast adenocarcinoma (MCF-7)) show that the synthesized nanostructures can be used for BNCT.

Boron nitride (BN) exists in cubic, rhombohedral and hexagonal forms similar to carbon materials. Cubic is analogous to diamond with similar hardness. Rhombohedral exists rarely as in case of carbon[1] and hexagonal boron Nitride is equivalent to graphite[2]. Hexagonal boron nitride is one of the old powder metallurgical product shows outstanding electrical and thermal properties[3]. This material also wraps itself to form nanotubes. These nanotubes have improved properties as compared to carbon nanotubes in respect of their band gap. Band gap of BN nanotubes is independent of tube diameter[4]. Hexagonal BN exhibit a good resistance to corrosion, low density, higher melting point and excellent chemical stability[5] which renders this material as a prominent candidate for Boron Neutron Capture Therapy (BNCT)[6] in cancer treatment. Various *in vitro* and *in vivo* studies confirmed that Boron Nitride materials have shown better biocompatibility and lower cytotoxicity than their carbon counterparts[7–11]. One of the main challenges in respect to integration of nanostructures of BN into various biological systems was their poor suspension/hydroxylation in various biological solutions[12–14]. Various methods were tried to improve suspension ability/hydroxylation of these materials like surface functionalization[15,16] and wrapping by other molecules or interactions[17–25]. But these methods were unable to give desired results. One of the other major reasons for lacking of research on this material was synthesis conditions which include relatively very high temperature (1400 °C). Research on nanotubes of boron nitride and carbon started on the same year[24], but these tough synthesis conditions leave the research behind as compared to carbon[25]. Two different atom in the BN structure with electro negativity difference of about one unit make this material partial polar in nature more useful as compare to carbon based materials[26,27]. This structural variation can be exploited for many remarkable applications. Till

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Hydroxychavicol: A phytochemical targeting cutaneous fungal infections

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The present study was designed to investigate the potency of hydroxychavicol on selected cutaneous human pathogenic fungi by the use of *in vitro* and *in vivo* assays and mechanistic characterization along with toxicological effects. Hydroxychavicol consistently displayed a fungicidal effect against all fungal species tested. Inoculum concentrations over the range of 10^4 to 10^7 CFU/ml did not significantly alter its antifungal potential and time–kill curve results revealed concentration–dependent killing. It also inhibited the growth of biofilm generated by *Trichophyton mentagrophytes* and *Candida parapsilosis* and reduced the preformed biofilms. Hydroxychavicol was highly effective in the treatment, and mycological eradication of an experimentally induced topical infection model of dermatophytosis (tinea corporis) and cutaneous candidiasis in guinea pigs, respectively. The mode of action of hydroxychavicol appears to originate from the disruption of cell membrane integrity. Administration of hydroxychavicol in mice at 500 mg per kg of body weight by orally produced no overt toxicity. The retention capacity of hydroxychavicol *in vitro*, in the presence of keratin has attributed to its *in vivo* effectiveness in the guinea pig model of topical infections. Furthermore, it is suggestive of its potential use as phytochemical for topical use in cutaneous fungal infections.

Superficial cutaneous fungal infections are one of the most common infectious diseases affecting 20–25% of the general human population worldwide[1]. They are caused by yeasts (e.g., *Candida* species and *Malassezia* species), dermatophytes, and non–dermatophyte species of filamentous fungi (dermatomycoses), which are very common dermatologic conditions and are often resistant to current antifungal treatments, leading to recurrence[2]. This constitutes an important global public health problem as yet unresolved. These infections are caused primarily by a group of filamentous keratinophilic fungi known as dermatophytes that use keratin as a source of nutrient during skin, hair, and nail infection in both immunocompetent as well as immunocompromised individuals, and they also cause invasive infections in immunocompromised patients[3]. Although, it does not cause mortality, however, it does cause significant morbidity and poses a major public health problem especially in the tropical and subtropical regions of countries like India, due to the hot and humid climate[4]. Dermatophytes account for the leading (90%) cases of onychomycosis (fungal nail infections) in the United States and Europe[5] as well as in India[6]. Onychomycosis (also known as tinea unguium) is a chronic and progressively recurrent fungal infection of the nail designated by nail discoloration, thickening, destruction and deformity[7]. It can be caused by dermatophytes, non–dermatophytes, and yeast[8] and represents up to 50% of all nail problems and 30% of all cases of dermatophytoses[9], and the species' prevalence in fungal nail infections varies with geographical location, climate, and migration[6, 9], as well as other epidemiological factors (i.e., age, sex). Cutaneous candidiasis is an infection of the skin that is generally caused by *Candida albicans* and that can be either acute or chronic in nature[10]. However, infections due to non–*albicans Candida* species have emerged over the past two decades, and a shift from *C. albicans* to other species such as *C. parapsilosis*, *C. glabrata*, *C. guilliermondii* and *C. tropicalis* has occurred[11]. Recently, it is also reported that *C. parapsilosis* to be an emergent cause of nail infections[11]. *C. parapsilosis* is the most frequently isolated yeast in the subungual space of the skin of hand in healthy subjects and has been

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ACS APPLIED MATERIALS & INTERFACES

Letter

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Chitosan, Carbon Quantum Dot, and Silica Nanoparticle Mediated dsRNA Delivery for Gene Silencing in *Aedes aegypti*: A Comparative Analysis

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Supporting Information

ABSTRACT: In spite of devastating impact of mosquito borne pathogens on humans, widespread resistance to chemical insecticides and environmental concerns from residual toxicity limit mosquito control strategies. We tested three nanoparticles, chitosan, carbon quantum dot (CQD), and silica complexed with dsRNA, to target two mosquito genes (*SNF7* and *SRC*) for controlling *Aedes aegypti* larvae. Relative mRNA levels were quantified using qRT-PCR to evaluate knockdown efficiency in nanoparticle-dsRNA treated larvae. The knockdown efficiency of target genes correlated with dsRNA mediated larval mortality. Among the three nanoparticles tested, CQD was the most efficient carrier for dsRNA retention, delivery, and thereby causing gene silencing and mortality in *Ae. aegypti*.

KEYWORDS: *RNAi, dsRNA, mosquito, SRC, SNF7, CQD, Chitosan*

Mosquitoes transmit pathogens that cause deadly diseases including malaria, yellow fever, chickungunya, dengue, lymphatic filariasis, encephalitis etc. posing a major threat to human population worldwide.[1,2] The popular strategies of mosquito control include insecticides sprays, repellents, and insecticide-treated nets for adult control, and use of insecticides for larval control. However, these methods are gradually losing their effectiveness due to the development of widespread resistance to chemical insecticides[3,4] by mosquitoes and growing environmental concerns from residual toxicity. Use of bacterial proteins as larvicides are found to be effective but they are not highly used because of unpredictable efficacy under different environmental conditions.[5,6]

In this context, RNA interference (RNAi) technology is a promising environmental friendly method to control insects by double-stranded RNA (dsRNA) or small interfering RNA (siRNA) triggered post-transcriptional gene silencing. The ability of dsRNA to silence genes was discovered in the nematode, *Caenorhabditis elegans*.[7] RNAi technologies are being developed to apply this method in crop improvement, pest control and therapeutics.[8−16] Three general strategies have been elucidated for RNAi in insects: microinjection, soaking, and feeding of dsRNA.[17] dsRNA feeding is perhaps the most convenient and cost-effective RNAi approach for insect control. Delivery of dsRNA by expressing them in plants as well as direct feeding are being developed.[9,18] As the efficiency of RNAi in insects (especially those belonging to Lepidoptera, Hemiptera, and Diptera) is low because of dsRNA lower hydrophilicity and net negative charge, poor delivery and uptake efficiency, and sensitivity to nuclease degradation, there are only a few examples on insect control applications of RNAi.[19] The main challenge in widespread use of this technology is to develop inexpensive and reliable dsRNA production and delivery methods. Moreover, the success of RNAi technology largely depends on the stability of dsRNA or siRNA during and/or after delivery. The half-life of naked siRNA in serum ranges from several minutes to about 1 h.[20,21] Such a short half-life of the nucleic acids will not lead to an adequate RNAi response in an organism unless a high dose of dsRNA or siRNA is applied. Another determinant for successful RNAi in *Aedes aegypti* is lack of dsRNA transporter genes preventing robust systemic RNAi response.[22]

In this context, a carrier system is pertinent for delivering dsRNA to target site. Liposomes are being used as a delivery agents to knockdown target genes (e.g., EphA2, FAK, neuropilin-2, or IL-8) in mouse models of cancer diseases.[23] Another class of nanoparticles (NPs), broadly termed as polymeric NPs are a group of solid, biodegradable, colloidal systems that are widely used as drug or gene carrier.[24] During the past few years, NP mediated RNAi is being developed as an

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Data Article

Data on RDM16 and STA1 regulate differential usage of exon/intron in RNA directed DNA Methylation pathway

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ABSTRACT

This article contains data on *RDM16* and *STA1* regulate differential usage of exon/intron in RNA directed DNA Methylation pathway (RdDM) (Sharma et al., 2016) [5]. This data include expression profiles of top 100 genes that has at least one exon or intron differentially expressed in three different contrast, i.e., WT (Wild type) *vs RDM16*, WT *vs STA1*, and *RDM16 vs STA1*. Also we included the alignment of *MORC6* protein to the ATPase-C family members that have conserved three ATP binding sites and conserved Mg2+ binding sites in the spliced exon.

Specifications Table

Subject area	*Bioinformatics, Genomics*
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Article

TRANSPARENT PROCESS

THE EMBO JOURNAL

Calcium-permeable AMPA receptors and silent synapses in cocaine-conditioned place preference

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Abstract

Exposure to cocaine generates silent synapses in the nucleus accumbens (NAc), whose eventual unsilencing/maturation by recruitment of calcium-permeable AMPA-type glutamate receptors (CP-AMPARs) after drug withdrawal results in profound remodeling of NAc neuro-circuits. Silent synapse-based NAc remodeling was shown to be critical for several drug-induced behaviors, but its role in acquisition and retention of the association between drug rewarding effects and drug-associated contexts has remained unclear. Here, we find that the postsynaptic proteins PSD-93, PSD-95, and SAP102 differentially regulate excitatory synapse properties in the NAc. Mice deficient for either of these scaffold proteins exhibit distinct maturation patterns of silent synapses and thus provided instructive animal models to examine the role of NAc silent synapse maturation in cocaine-conditioned place preference (CPP). Wild-type and knockout mice alike all acquired cocaine-CPP and exhibited increased levels of silent synapses after drug-context conditioning. However, the mice differed in CPP retention and CP-AMPAR incorporation. Collectively, our results indicate that CP-AMPAR-mediated maturation of silent synapses in the NAc is a signature of drug-context association, but this maturation is not required for establishing or retaining cocaine-CPP.

Keywords AMPA receptor; cocaine; conditioned place preference; nucleus accumbens; silent synapse
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Introduction

Silent synapses are excitatory synapses expressing stable NMDA-type glutamate receptor (NMDAR)-mediated responses, while AMPA-type glutamate receptors (AMPAR) are either absent or highly labile (Isaac *et al*, 1995; Liao *et al*, 1995; Xiao *et al*, 2004). Enriched in the newborn brain, silent synapses are thought to be initial synaptic contacts, mediating synapse formation, and neural circuit development. Recently, we and others demonstrated that exposure to cocaine generates silent synapses in the nucleus accumbens (NAc), which may initiate a remodeling of NAc neurocircuits (Huang *et al*, 2009; Brown *et al*, 2011; Koya *et al*, 2012). After withdrawal from cocaine self-administration, some of these NAc silent synapses become unsilenced by recruiting calcium-permeable AMPARs (CP-AMPARs; Lee *et al*, 2013). Consequently, this maturation process may lead to additionally remodeled NAc neurocircuits. Silent synapse-based NAc remodeling has been critically implicated in a large repertoire of drug-induced behaviors, ranging from the development of cocaine-induced locomotor sensitization to cue-induced cocaine seeking after drug withdrawal (Conrad *et al*, 2008; Brown *et al*, 2011; Lee *et al*, 2013; Ma *et al*, 2014). However, the role of silent synapses in cocaine-conditioned place preference (CPP), an important and widely used model testing the acquisition and retention of the association between drug rewarding effects and drug-associated contexts, remains unclear.

Cocaine-induced silent synapses resemble nascent synapses, partly by expressing GluN2B-containing NMDARs (Huang *et al*, 2009; Brown *et al*, 2011), such that preferential blockade of GluN2B prevented the development of cocaine-induced locomotor sensitization, suggesting a mechanism involving GluN2B-mediated silent synapse signaling. In mice lacking the signaling scaffold protein PSD-95, the number of silent synapses is elevated, which may serve

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Non-heat shock responsive roles of HSF1 in *Candida albicans* are essential under iron deprivation and drug defense

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ABSTRACT

Recently, we have reported that the conditional mutant of the heat shock factor-1 (*HSF1*) in *Candida albicans* displays enhanced susceptibility not only towards a plant alkaloid, berberine, but also to diverse antifungal drugs. The present study attempts to identify additional phenotypes highlighting the non-heat shock responsive roles of *HSF1* that could be correlated with the enhanced drug susceptibility. We uncover an intricate relationship between cellular iron and *HSF1* mediated drug susceptibility of *C. albicans*. Interestingly, at 30 °C, the conditional deletion of *HSF1* while presented no growth defect, exhibited low intracellular iron. Notably, exogenous supplementation of iron reversed growth defects of *HSF1* mutant when grown at 37 °C. We provide evidence that the *HSF1* mutant presents interesting phenotypes at basal conditions and are implicated in enhanced drug susceptibilities, dysfunctional mitochondria, decreased resistance towards oxidative stress and compromised cell wall integrity, all of which could be fully reversed upon iron supplementation. The *HSF1* mutant also displayed defective filamentation at basal conditions under various solid hypha inducing media. Further, chelation of iron of *HSF1* mutant cells led to severe growth defects and apparently triggers an iron starvation signal in the cell thus, demonstrating that *HSF1* is essential for *C. albicans* cells to tolerate the iron deprivation stress. Together, apart from the well-established roles of *HSF1* in reciprocation of thermal stress, this study extends its role under basal conditions and provides molecular insights into the role of *HSF1* in iron deprivation and drug defense of *C. albicans*.

1. Introduction

Pathogenic organisms rely on the nutrient resources in the host for their survival. Acquisition of essential nutrients, predominantly iron, from the host is a critical attribute of pathogenicity. Apart from being an essential nutrient and cofactor, iron is required for myriad of biochemical and metabolic processes comprising cellular respiration, metabolism, drug resistance, oxygen transport, DNA synthesis, for growth and proliferation and also for the biosynthesis of amino acids, proteins, sterols, etc. [1]. It is generally present intracellularly while being scarcely available in blood or extracellular fluids, where it is tightly bound to proteins like lactoferrin and transferrin. The host tightly sequesters iron within itself as an antimicrobial defense mechanism, thereby, only furnishing trace amount of the metal that is freely accessible to the invading pathogens. Therefore, in order to survive, the pathogens must evolve robust and elaborate tactics to acquire iron [2].

The commensal-pathogenic yeast, *Candida albicans* (*C. albicans*) survives in diverse host niches like bloodstream and mammalian gastrointestinal tract, which are known to vary in concentrations of available iron [3]. It is able to do so as it is endowed with tightly regulated and resilient iron sensing and acquisition machinery. By coherent sensing and inducing the relevant cascade of transcription factors, it activates iron uptake machinery upon entry into the iron-depleted bloodstream, while efficiently restricts iron utilization genes in the iron toxic environment of the gut [4].

Studies regarding iron metabolism have gained attention in the recent times due to the links between MDR (Multi drug resistance) and iron homeostasis [5–7]. In *Escherichia coli*, it is reported that inactivation of a principal transcriptional regulator of iron homeostasis (Fur), promotes the development of ciprofloxacin resistance by modulating iron uptake and storage [8]. Also, in the parasitic protozoan, *Leishmania*

Abbreviations: MDR1, Multi drug resistance-1; BPS, Bathophenanthroline disulfonate; DOX, Doxycycline.

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Measurement of Hubble constant: non-Gaussian errors in HST Key Project data

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Abstract. Assuming the Central Limit Theorem, experimental uncertainties in any data set are expected to follow the Gaussian distribution with zero mean. We propose an elegant method based on Kolmogorov-Smirnov statistic to test the above; and apply it on the measurement of Hubble constant which determines the expansion rate of the Universe. The measurements were made using Hubble Space Telescope. Our analysis shows that the uncertainties in the above measurement are non-Gaussian.

Keywords: cosmic flows, cosmological parameters from LSS, supernovas

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High-rate fermentative hydrogen production from beverage wastewater

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HIGHLIGHTS

- Hybrid immobilized-bacterial cells show stable operation over 175 days.
- Low HRT of 1.5 h shows peak hydrogen production rate of 55 L/L-d.
- Electricity generation is 9024 kW-d from 55 L/L-d hydrogen using beverage wastewater.
- Granular sludge formed only at 2–3 h HRT with presence of *Selenomonas* sp.

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ABSTRACT

Hydrogen production from beverage industry wastewater (20 $g/L_{hexose\ equivalent}$) using an immobilized cell reactor with a continuous mode of operation was studied at various hydraulic retention times (HRT, 8–1.5 h). Maximum hydrogen production rate (HPR) of 55 L/L-d was obtained at HRT 1.5 h (an organic loading of 320 $g/L\text{-}d_{hexose\ equivalent}$). This HPR value is much higher than those of other industrial wastewaters employed in fermentative hydrogen production. The cell biomass concentration peaked at 3 h HRT with a volatile suspended solids (VSS) concentration of 6.31 g/L (with presence of self-flocculating *Selenomonas* sp.), but it dropped to 3.54 gVSS/L at 1.5 h HRT. With the shortening of HRT, lactate concentration increased but the concentration of the dominant metabolite butyrate did not vary significantly. The *Clostridium* species dynamics was not significantly affected, but total microbial community structure changed with respect to HRT variation as evident from PCR-DGGE analyses. Analysis of energy production rate suggests that beverage wastewater is a high energy yielding feedstock, and can replace 24% of electricity consumption in a model beverage industry.

1. Introduction

Hydrogen is a good energy carrier and is well considered as a substitute to the fossil fuels due to its high energy content and non-polluting nature during combustion. In recent years, fermentative hydrogen production is given more attention than other biological production methods like photofermentation and biophotolysis due to its less-energy requirement and higher volumetric hydrogen production rate (HPR) [1]. There are many factors affecting the usage of dark fermentative biohydrogen production for energy purpose, such as feedstock availability, feedstock amount, feedstock cost, reactor configuration, reactor operation mode and hydrogen conversion rate. Organic wastes/wastewaters are ideal feedstock for green bioenergy production due to having both environment protection and energy production advantages. Most investigations on continuous hydrogen production from industrial wastewaters have been conducted in continuously stirred-tank reactors (CSTRs) [1]. Nevertheless, bacterial cells washout under short hydraulic retention time (HRT) is a major problem associated with the CSTR, that leads to the process instability and inefficient hydrogen production [2]. To overcome this drawback of CSTRs, immobilization technologies have been extensively researched in the last decade [3]. Immobilized cells reactors are able to retain high cell mass concentration under shorter HRT, and capable of improving the operational stability and production rates of hydrogen fermentation [3].

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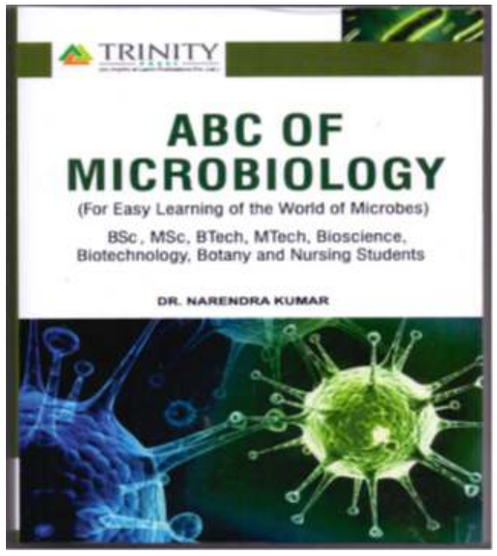

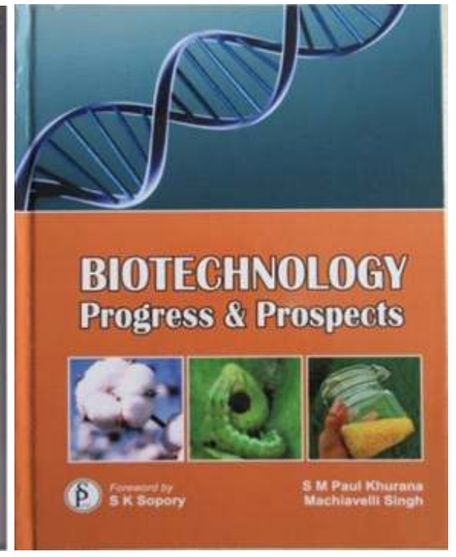

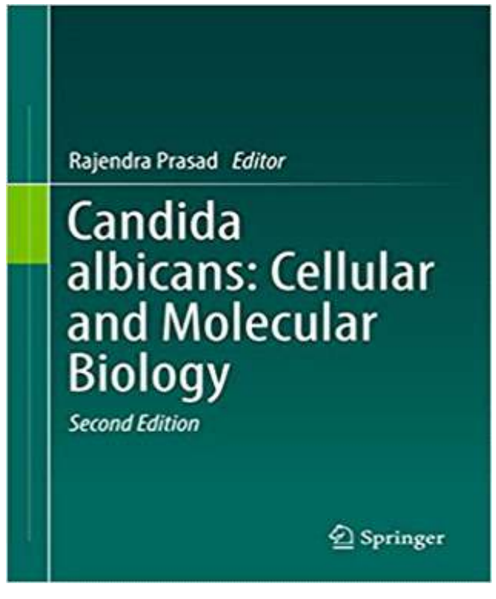

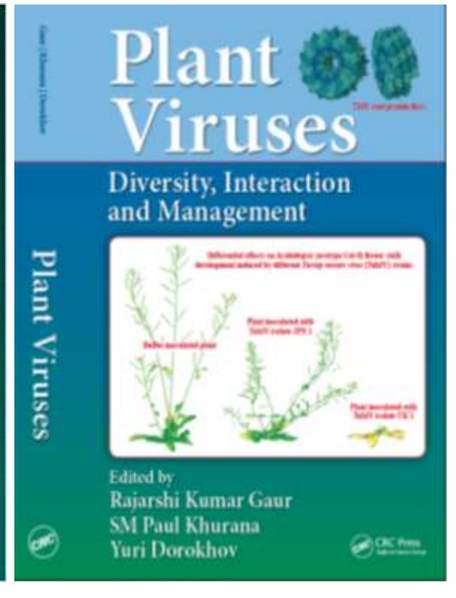

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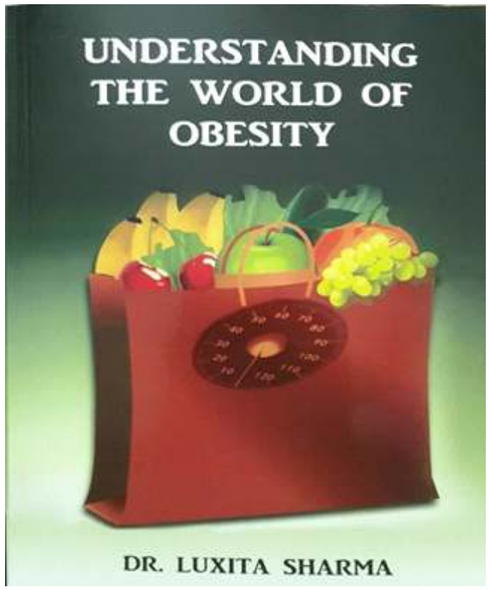

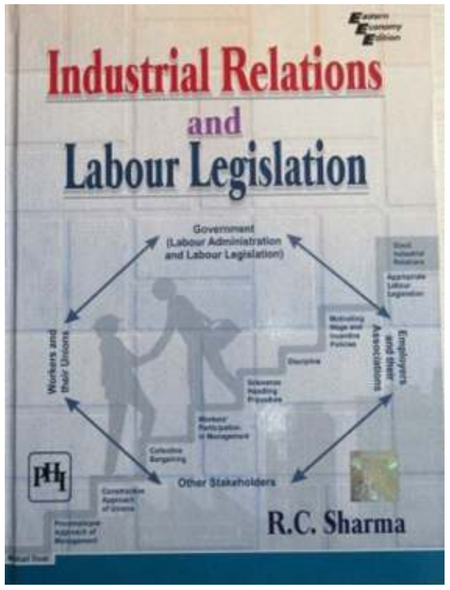

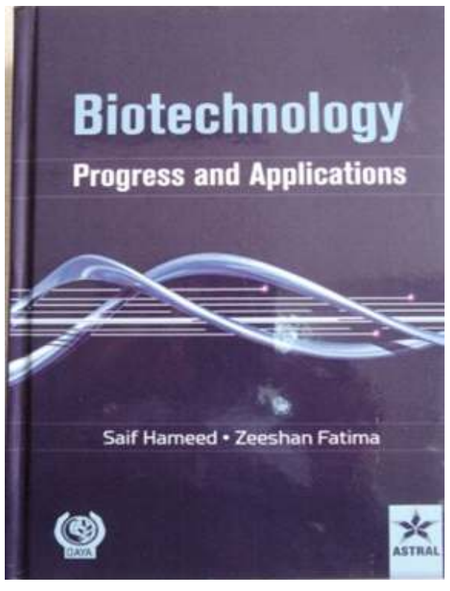

BOOKS/CHAPTER DETAILS

S.No.	Author Details		Book Details			
	Deptt.	Author	Title of Book/Chaptor	Book/Chapter	,Year	Publisher
1	ASLA	Dr. Roshni Sengupta	Roadmap to sustainable cities	Environment Chronicles: the best of TerraGreen	2011	TERI Press
2	ASLA	Dr. Roshni Sengupta	Stolen from within: human organ trade in India	Environment Chronicles: the best of TerraGreen	2011	TERI Press
3	ASLA	Dr. Roshni Sengupta	Rural India shining	Environment Chronicles: the best of TerraGreen	2011	TERI Press
4	ASET	Dr. Priti Singh	Advancement in Convergence of Technologies	Book (Conference Proceeding)	2011	Allied Publishers
5	ASET	Dr. Priti Singh	Making Innovation Happen	Book (Conference Proceeding)	2011	Allied Publishers
6	ASAS	Dr. Sunita Kumawat	A Graph Theoretic Approach : Petri Net" (Modeling, Analysis and Applications)	Chapter	2011	Book, Lambert Academic Publishing, GmbH & Co. KG, Germany
7	ASAS	Dr. Seema R.Pathak	Work Book of Chemistry Tutorial		2011	
8	AIBAS	Dr. Rishipal	Juvenile Delinquency		2011	
9	AIBAS	Dr. Anu Dandona	Study of Job Involvement of Private and Public Sector Managers	Handbook of Management and Behavioral Sciences	2011	
10	AIBAS	Dr. Anu Dandona	Spirituality and Well-Being	Positive Psychology	2011	
11	AIBAS	Dr. Rishipal	Psychological Scale development and publication for Agreeableness		2012	
12	AIBAS	Dr. Rishipal	Organizational Behaviour		2012	
13	AIBAS	Dr. Sanjay Kumar	Cognitive Neuroscience: Alcohol and Social Cognition		2012	
14	ASAS	Dr. Sunita Kumawat	A Graph Theoretic Approach : Petri Net" (Modeling, Analysis and Applications)	Chapter	2012	Book, Lambert Academic Publishing, GmbH & Co. KG, Germany
15	ASET	Dr. Vikas Thada	Java Programming	Book	2012	CBC Publishers
16	ASET	Neeraj Gupta	Introduction to Microprocessors and interfacing with applications	Book	2012	Katson
17	ASET	Neeraj Gupta	Comparative analysis of various cmos based VCO	e-Book	2012	Lambert Publishing House, Germeny
18	ASAS	Dr .Subhra Das	Thermal Sciences & Engineering	Chapter	2012	Book,Institution of Engineers
19	ASCO	Dr Pooja Rana	(ed) Media in the Swirl	Book	2012	Pentagon Press
20	ASCO	Dr Pooja Rana	Advertising and Publicity Management	Book	2012	Vikas Publishing House

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21	ASCO	Dr Pooja Rana	(ed) Media in the Swirl	Chapter 'Emergence of Supplement Journalism in India: A Critique	2012	Pentagon Press
22	ASLA	Dr. Jyoti Tabita Hermit	"Feministic Aspects of Recent Indian Fiction with special reference to Bharati Mukherjee's Jasmine"	"Women Empowerment: Dimension, Direction and Future"	2012	Dr. Umesh Pratap Singh, Dr. V.K. Nigam, Dr. Rajesh Nigam
23	ASET	Mahender Singh Meena	Antenna and Wave Progagation	Book	2012	College Book Center Jaipur
24	ASET	Ms. Dilpreet Kaur	Pulse oximeter using aduc842 microcontroller	E-Book	2012	Lambert Academic Publishing House, Germany
25	ASET	Mahender Singh Meena	Antenna and Wave Propagation(Revised edition)	Book	2013	College Book Center, Jaipur
26	ASLA	Dr. Roshni Sengupta	The Islamist Terrorist in Popular Hindi Cinema: Crisis of Perspective in New York and Kurbaan?	Book Monograph, part of the series titled Perspectives in Indian Development	2013	Nehru Memorial Museum and Library
27	ASEES	Dr. Shruti	Book Title : Climate Change and Himalaya-Natural Hazards and Mountain Resources	Estimating Glacier Changes in the Ravi Basin (1972-2006) through Remote Sensing Techniques.	2013,	Scientific Publishers, New Delhi
28	ABS	Dr. Bhavana Adhikari	Case Studies in Management	Book	2013	Excel Publishers
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30	ABS	Ms. Shraddha Awasthi	Integrated spirituality & organinational leadership	Book	2013	
31	ABS	Ms. Shraddha Awasthi	Labour Unrest: A case study on Indian Industries	Book	2013	
32	ABS	Dr.Bhavana Adhikari	Case Studies in Management	Book	2013	Excel Publishers
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36	AIB	Prof(Dr)SM Paul KHURANA	Environomics: The Omics approaches for environmental sustainability.	Book	2013	CRC Press, Taylor & Francis Group Eds Barh D , Zambare V, Azevedi, V
37	AIB	Dr. Urvashi Kumar Kohli	Antimicrobial Potential of Natural Phenolic Compounds against Human Pathogens.	Chapter in book titled "Recent Developments in Biotechnology.	2013	Studium press LLC, USA. Ed: J.N. Govil. (in press)
38	AIB	Dr. Urvashi Kumar Kohli	Bioremediation of Dioxins: A Persistent Environmental Pollutant.	Book Chapter in book titled "Recent Developments in Biotechnology.	2013	Studium press LLC, USA. Ed: J.N. Govil. (in press.

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39	AIB	Mr. Sarika Chaturvedi	Bioremediation of Dioxins: A Persistent Environmental Pollutant	Book chapter in Multi volume set on Recent Developments in Biotechnology	2013	
40	AIB	Dr. Zeeshan Fatima	Natural Phenolic Compounds: A Potential Antifungal Agent.	Chapter	2013	Formatex Research Center, Spain
41	AIB	Dr. Zeeshan Fatima	Lipid Molecule: A key player in human patho-physiology	Chapter	2013	Jaya Publishing House, Delhi.
42	AIB	Dr. Neelam Yadav	Environomics: Omics for the Environment; In OMICS: Applications in Biomedical, Agricultural, and Environmental Sciences		2013	Eds) Debmalya Barh, V. Zambare& V. Azevedo. CRC Press- Taylor & Francis Group, USA
43	AIBAS	Dr. Kamini C. Tanwar	Improvement of Emotional Mental Health	New Perspec -tives of Mental disorders	2013	
44	AIBAS	Dr. Nadeem Luqman	Improvement of Emotional Mental Health	New Perspec -tives of Mental disorders	2013	
45	ASAS	Dr. Aaradhana Khare	Bioremediation of Dioxins: A Persistent Environmental Pollutant	Chapter	2013	Recent Development in Biotechnology, Studium Press LLC, USA
46	ABS	Dr. Ashutosh Kumar	Global performance	Book	2014	Excel
47	ABS	Dr. Bhavana Adhikari	Management of Multinational Corporations	Book	2014	
48	ABS	Dr. Bhavana Adhikari	Introduction to Corporate Communication	Book	2014	Vikas Publications, New Delhi
49	ABS	Dr. Bhavana Adhikari	Foundation Course in English	Book	2014	Vikas Publications, New Delhi
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52	AIB	Dr. Neelam Yadav	Vaccines: Present Status and Application.; Animal biotechnology: Models in Discovery and translation.		2014	Eds Verma AS & Singh A. Academic Press, Elsevier USA.
53	AIB	Dr. Neelam Yadav	Molecular Farming in the Decades of Omics. ;		2014	OMICS Applications in Crop Science. (Eds) Debmalya Barh.
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55	AIB	Dr. Neelam Yadav	Plant Secretomics; PLANT OMICS.		2014	PLANT OMICS. Ed(s) Debmalya Barh. Springer-Verlag GmbH Berlin
56	AIB	Dr. Neelam Yadav	Plant Glycomics: Advances and Applications; Plant Omics		2014	Plant Omics (Eds) Debmalya Barh.

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58	AIB	Dr. Neelam Yadav	Plant Secretomics; PLANT OMICS.	Book	2014	PLANT OMICS. Ed(s) Debmalya Barh. Springer-Verlag GmbH Berlin
59	AIB	Dr. Saif Hameed	Lipidomics: Tool to redefine lipids." Book Chapter in book titled "Biotechnology: Progress and Prospects	Chapter	2014	Studium press LLC, USA
60	AIB	Dr. Saif Hameed	Antimicrobial Potential of Natural Phenolic Compounds against Human Pathogens	Chapter	2014	Studium press LLC, USA.
61	AIB	Mr Sarika Chaturvedi	Plant Glycomics: Advances and Applications; Plant OMICS.		2014	(Plant OMICS. Barh D (Ed). CRC Press-Taylor & Francis Group, USA.)
62	AIBAS	Dr. Meeta Malhotra	Mental Health of Women	Rethinking Gender	2014	
63	AIBAS	Dr. Anupama Srivastava	Mental Health of Women	Rethinking Gender	2014	
64	ASAS	Sarika Jain	Microprocessor and Interfacing Devices		2014	CBS
65	ASAS	Dr. M Nidhin	Industrially Relevant Nanoparticles Hematite:its synthesis, functionalization and Applications		2014	CRC press, Canada
66	ASCO	Prof(Dr) Sushma Gandhi	The Dictionary of Electronic Media	Book	2014	Gandhi Earth Vision Foundation, Gurgaon
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68	ASCO	Prof(Dr) Sushma Gandhi	The Report of ICSSR Major Research Project " Utilization of Multimedia and Higher Education"	Report	2014	ICSSR, New Delhi
69	ASCO	Prof(Dr) Sushma Gandhi	Media and Global Society	Report	2014	ASCO Research Programme Series
70	ASCO	Dr Pooja Rana	Advertising & Media Management	Book	2014	Vikas Publishing House
71	ASCO	Dr Pooja Rana	Book- Advertising & Public Relations	Book	2014	Vikas Publishing House ISBN-978-93-259-8160-7
72	ASFA	Ranjan Kumar Mallik	Analytical & Artistic Glimps of Jain Iconography	Chapter	2014	ABD Publisher
73	ASLA	Dr. Jyoti Tabita Hermit	Global, Economic and Moral Changes in Post-Modern India: A Critique of Arvind Adiga's Last Man in Tower	Current trends in Indian English Literature	2014	Saikat Banerjee
74	ASLA	Dr. Jyoti Tabita Hermit	Deconstructing Hegemony: Women's Entrapment and Liberation in Bharati Mukherjee's Fiction	Indian Women's Writings: From Shadow to Revolt	2014	Sandeep Sheoran

75	ASLA	Dr. Archana Singh	Alienationa & Estrangemant in the novels of		2014	
76	ASLA	Dr. Archana Singh	Dynamics of progression: A critical over law of womens's writing in English		2014	
77	ASLA	Dr. Roshni Sengupta	Fault lines of Memory and Remembrance: The Dynamics of "Escaping the Past" in Jhumpa Lahiri's The Lowland	Dynamics of Progression: A Critical Overview of Indian Women's Writing in English(Edited Book)	2014	Excel Publishing
78	ASLA	Dr. Parul Yadav	Indian Women's writing: From Shadow To	Chapter The Changing Phase: Emergent Identity	2014	Omega Publication
79	ASEES	Dr. Shruti	Book Title : Management of Water, Energy & Bio Resources in the era of Climate Change	Glacier Mass Balance and Its Significance on the Water Resource Management in the Western Himalayas	2014	Springer, The Netherlands, (Jointly with Capital Publishing Company, New Delhi),
80	ASET	Ms Ulya Sabeel	ADLS: Attack Detection and Localization Scheme in WSN	E-Book	2014	Lambert Academic Publishing House, Germany
81	ASET	Ms Yojna Arora	Applications of Data Mining in Education	E-Book	2014	Lambert Academic Publishing House, Germany
82	ASET	Avantika Singh	Computational Analysis of Heat Stress in Plants	E-Book	2014	Lambert Academic Publishing House, Germany
83	ASET	Dr. Vikas Thada	Fundamentals of Computer Programming	Book	2014	CBC Publishers
84	ASET	Anuj Kumar Singh	An Innovative Approach to Comprehension	Book	2015	College Book Center, Jaipur
85	ACC	Harsha Sharma	Corporate Social Responsibility, Governance and Organisational Behaviour	Book	2015	Dormant Publishing House
86	ASET	Charu Jain	Innovations in Computing and Information Technology	Book (Conference Proceeding)	2015	College Book Center, Jaipur
87	ABS	Dr . R C Sharma	Industrial Relations and Labour Legislations	Book	2016	PHI Learning Private Limited , Delhi
88	ABS	Dr. Sunil kumar	International Edition Series on Emerging Global	Chapter	2015	Orange Books International Delhi
89	ABS	Rajni Kant Rajhans	International Edition Series on Emerging Global	Chapter	2015	Orange Books International Delhi
90	ABS	Dr. Bhavana Adhikari, Dr. Padmakali Banerjee	"Innovative Practives at Facebook - Balancing Growth and Corporate Culture"	Chapter- Making Innovations Happens	2015	

91	ABS	Dr. Bhavana Adhikari, Dr. Padmakali Banerjee	"Sustainable Eco Fashion-Kharakapas: A Case Study"	Chapter - Making Innovations happen	2015	
92	ABS	Dr. Bhavana Adhikari, Dr. Padmakali Banerjee	Ashmeet Says ' Organic"	Chapter- Making Innovations Happens	2015	
93	ABS	Dr. Hemant Sharma	"Sudoku of Perceived Service Quality and Service Loyalty	Chapter- Innovative Strategies for Competitiveness and Sustainability in Global Business Environment	2015	
94	ASEES	Dr. Shaili Srivastava	Bioremediation technology: A greener and sustainable approach for restoration of environmental pollution	Applied Environmental Biotechnology: Present Scenario and Future Trends	2015	
95	AIB	Dr.Narendra Kumar	ABC of Microbiology	Book	2015	Laxmi publications
96	AIB	Dr.Narendra Kumar	book Chapter-Infectious microbes and their biotechnological applications	Chapter	2015	submitted to Dr Saif a editorial member
97	AIB	Dr.Narendra Kumar	Trends and applications of Biotechnology in Downstream processing	Book	2015	Studium press
98	AIB	Dr. S.M. Paul Khurana	Nanotechnology: Size does matter	Chapter	2015	
99	AIB	Dr. Narendra Kumar	Health of shisham in north Eastern Uttar Pradesh	Book	2015	
100	AIB	Dr. S.M. Paul Khurana	ICAR-National Research Centre for Integrated Pest Management, New Delhi	Integrated management in potato viral diseases in Winter School on Recent Advance in Integrated Pest Management,(ppt on 4th March,2015)	2015	ICAR
101	AIB	Sarika Yadav, Dinesh Yadav, Neelam Yadav, S.M. Paul Khurana	Plant Omics: The Omics of Plant Science Edr. D. Barh etal.	Plant Glycomics: Advances and Applications	2015	Springer
102	AIB	Neelam Yadav, S.M. Paul Khurana, Dinesh Yadav	Plant Omics: The Omics of Plant Science Edr. D. Barh etal.	Plant Secretomics: Unique Initiatives	2015	Springer
103	AIB	Ms SarikaChaturvedi	Bioremediation of Dioxins: A Persisitent Environmental Pollutant	Chapter	2015	Studium Press LLC,USA

104	ASAP	Neha Saha	Regional Dynamics:Promoting the growth of a Small Town	Book	2015	Lambert Academic Publishing
105	ASAP	Debanjana Chatterjee	Environmental Guidelines for Planning and Siting of an Aerotropolis	Book	2015	Lambert Academic Publishing
106	ASAS	Rakesh Kumar, Dr. Seema R Pathak	Biological Singnificance of Coumarin Derivatives	Chapter	2015	Springer
107	ASLA	Dr. Archana Singh	An Innovative Apporach to Comprehension and Compostion	Book	2015	CBC Publisher
108	ASEES	Dr. Kushagra Rajendra	Understanding hydrogeochemical process governing Arsenic Contamination and Seasonal Variation in groundwater of Buxar Distric of Bihar, India	Book Chapter in safe and Sustainable Use of Arsenic – contaminated Aquifers in the Gangetic Plain A Multidisciplinary Approach.	2015	Co- Published by Springer internatnational Publishing, Cham, Switzerland, With Capital Publishing Company, New Delhi, Indian
109	ASAS	Shruti Dutta	Glacier mass balance and its significance on the water resource management in the Western Himalayas	Management of Water, Energy and Bio-resources in the Era of Climate Change: Emerging Issues and Challenges	2015	
110	ASAS	Dr. Joy Deep Dutta	Plant glycomics: Advances and applications	PlantOmics: The Omics of Plant Science	2015	
111	ASAS	Dr. Joy Deep Dutta	Isolation, purification, and nanotechnological applications of Chitosan	Polysaccharides: Bioactivity and Biotechnology	2015	
112	ASAS	Dr. Joy Deep Dutta	Bioremediation technology: A greener and sustainable approach for restoration of environmental pollution	Applied Environmental Biotechnology: Present Scenario and Future Trends	2015	
113	AIB	Dr.Narendra Kumar	Plant virus detection and diagnosis: Progress and challenges	Frontier Discoveries and Innovations in Interdisciplinary Microbiology	2016	Daya Publishing House, New Delhi
114	AIB	Dr. Manju Sharma	Plant secretomics: Unique initiatives	PlantOmics: The Omics of Plant Science	2016	Daya Publishing House, New Delhi
115	AIB	Dr. S.M. Paul Khurana	Chitosan: A promising substrate for regenerative medicine in drug formulation	Chitin and Chitosan for Regenerative Medicine	2016	Daya Publishing House, New Delhi
116	AIB	Dr. S.M. Paul Khurana	Chitosan: A potential therapeutic dressing material for wound healing	Chitin and Chitosan for Regenerative Medicine	2016	Published in NAAS, New Delhi
117	AIB	Dr.Narendra Kumar	Elements of Environmental Science	Book	2016	Studium Press(INDIA)Pvt Ltd

118	ABS	Ms. Shraddha Awasthi	spirit at work - a Paradigm for spiritual Organisation/ Compendium on Integrating spirituality and Organizational Leadership	Book-chapter	2016	ISOL Publications
119	ABS	Dr.Bhavana Adhikari	Business Communication	Book	2016	Prescribed for MBA Executive-102 School of Distance Education
120	ABS	Dr.Bhavana Adhikari	English Compulsory-1	Book	2016	Priscribed for BA (English), Institute of Distance Education, Rajiv Gandhi University, Arunachal Pradesh
121	AMS	Mr. Vikas Choudhary	Methdological research the CLESE Scale	Book	2016	Lambert Academic Publishing, Germney Lambert
122	AIB	Dr. Anil Kumar	Stem Cells of Skin and Hair Follicle and their Clinical Application	Chapter	2016	Daya Publishing House ® A Division of AstralInternational Pvt. Ltd. – ISO 9001:2008 Certified Company – 4760-61/23, Ansari Road, Darya Ganj New Delhi-110 002
123	AIB	Dr. S.M. Paul Khurana	Plant molecular biology Tools to develop transgenics	Applied Molecular Biotechnology	2016	CRC Press Taylor & Francis Group
124	AIB	Dr. S.M. Paul Khurana	Cell- free biosystems	Applied Molecular Biotechnology	2016	CRC Press Taylor & Francis Group
125	ASLA	Dr. Archana Singh	Theorizing Cultural Contemporaneity: A Paradigmatic Approach to Populat Fiction And Films	Book	2016	Excel Publilshers New Delhi
126	ASLA	Dr. Parul Yadav	Trends and Change in Approach of	Book	2016	24X7
127	ASLA	Ms Himani Kapoor	Shakespeare and Kalidasa	Chapter-Performing shakespeare in India	2016	Sage Publications pvt Ltd
128	AIB	Dr. Manju Sharma	Applied molecular biotechnology:-The next generation of genetic engineering	Cell free biosystems-	2016	Taylor and Francsis/CRC press ,USA
129	ASET	Amit Wadhwa	Analysis of Selection Techniques in Genetic Algorithm	E-Book	2016	Lambert Academic Publishing
130	ASEES	Dr. Puja Singh	Challenges and possibility of Indian Education System Towards Environmental Sustainability	Chapter	2016	New delhi publishers
131	ASET	Ruchi Kamra	Analysis of Object oriented Design Metrics	E-Book	2016	Lambert Publication, germany
132	ASET	Dr. Priti Singh	Revision Plan and Details for Basic Electronics 2e	Book	2016	Mc Graw Hill Education
133	ASET	Shalini Bajaj	ActiveSync design for Pocket PC	E-Book	2017	Lambert Academic Publishing

134	ASET	Shivali Dhaka	A Key to Image Enhancement	E-Book	2017	Lambert Academic Publishing
135	ASET	Neeraj Gupta	A Systematic Study of Current Conveyor and its Applications in Filters	E-Book	2017	Lambert Academic Publishing
136	ASET	Jagandeep	FIR Filter Using Adders Based On SPST Technique	E-Book	2017	Lambert Academic Publishing
137	ASET	Shruti	Analysis of Biomedical Signal (ECG) Using Wavelet Transform	E-Book	2017	Lambert Academic Publishing
138	ASET	Jagandeep	Performance Enhancement of DES Algorithm Using Irrational Number	E-Book	2017	Lambert Academic Publishing
139	AIB	Dr. Machiavelli Singh	BIOTECHNOLOGY: Walking with The Lion under Make in India Plan.	Make in India	2017	Singapore Publishers
140	AIB	Dr. Rajendra Prasad	IRON acquisition in the pathobiology of candida albicans	Chapter	2017	Springer Publishers
141	ACOAST	Prof. Dr. P.C.S. Devara	Remote Sensing for Environmental and Climate Diagnostics	Chapter	2017	Studium Press LLC, USA,
142	ACOAST	Prof. Dr. P.C.S. Devara	Environmental Science and Engineering,	Book	2017	Studium Press LLC, USA,
143	ALS	Dr. S.K. Tripathi	Crucial Years of Higher Education in Modern India (1854-1920)	Book	3/1/2017	NA
144	ABS	Mr. Ankit Dhamija	Chapter Name- The New Digital Age: Reshaping Strategies for Business Organizations	Book Name- A study of UPI penetration among indian smartphone Users	2017	Excel India Publishers
145	ABS	Mr. Ankit Dhamija	Technological Advancements in Payments: From Cash to Digital through Unified Payments Interface(UPI)	Chapter	2017	IGI Global USA
146	AIB	Dr. Surender Khatodia	Biotechnology and Bioscience Perspectives	Book	2017	Agrobios (International) Publishers, Jodhpur India
147	AIB	Dr. Surender Khatodia	Common siRNAs for plant mediated RNAi of Helicoverpa in chickpea and pigeonpea	Chapter	2017	Agrobios (International) Publishers, Jodhpur India
148	AIB	Dr. Surender Khatodia	Post-translational modifications in plant proteins under abiotic stress for crop improvment	Chapter	2017	Agrobios (International) Publishers, Jodhpur India
149	AINT	Dr. Birjesh Kumar	Energy Saving using Memorization: A Novel Energy Efficient and Fault Tolerant Algorithm for WSN	Chapter	2017	Springer Book
150	AUH	Dr. Pritam B. Sharma	Path to Excellence	Book	2017	Nirala Series Publications

BOOK/CHAPTERS PUBLISHED

151	AIB	Dr. Manju Sharma	Chapter-"Crop Improvement through Microbial Biotechnology"	Endophytic Microorganisms: Their Role in Plant Growth and Crop Improvement	2017	Elsevier, USA.
152	ASAP	Vibhore Bakshi	Assessing Accessibility for Metro Stations of Faridabad, India	Book	2017	Lap Lambert Academic Publishing
153	ASET	Ms Rashmi	Measurement of Software Quality Factors using CK Metrics	Book	2017	Lambert Academic Publishing
154	AIB	Dr. Machiavelli Singh	Make in India for Industrial Growth - Initiatives and Challenges (2017) - Editors: Yashmin Sofat Vinayak, Sanjeev Kumar & Arun Kumar Singla	Biotechnnology - Walking with Lion under Make in India Plan	2017	Lambert Academic Publishing
155	ASFDT	Ms. Suniti Sood	Effectiveness of Human Resource Management Policies on Employee Work Performance.	Book	2017	Lulu Book Publication, USA
156	ACC	Dr. Vidhi Bhargava	Compensation management	10 chapters	2017	MHRD
157	AIB	Dr.Narendra Kumar	Elements Of Environmental Science	Book	2017	Studium Press (India) Pvt. Ltd.
158	ASEES	Dr. Kushagra Rajendra	Legal Dimensions of Environment	Book (Proceeding)	2017	Eklavya Publication
159	ASEES	Dr. Kushagra Rajendra	Flying Colours	BooK	2017	Amity University Haryana Publications
160	ASEES	Dr. Kushagra Rajendra	Chapter - Religious Tourism: The Begnning of New Era with Special Reference to India	Relgious Toursm in Asia, Ed: Raaz Raj & Cabin Griffin/CABi Publishing United Kingdom	2017	New delhi publishers
161	ABS	Dr. Hemant Sharma	Warehouse Management	e-Book	2017	Bookrix.com
162	ABS	Dr. Hemant Sharma	Developing A Regression Model	e-Book	2017	Bookrix.com
163	ABS	Dr. Hemant Sharma	High Volume Standardized Products	e-Book	2017	Bookrix.com
164	AMS	Dr Luxita Sharma	Understanding the World of Obesity	Book	2017	Edu Creation
165	AIB	Dr.SMP Khurana	Plant Viruses	Book	2018	CRC Press, Taylor & Fransis Group
166	ABS	Debasis Bhattacharya	GST and its Aftermath – Is Consumer Really the King?	Book	2018	SAGE Publications

DOCTORAL DEGREE AWARDED/SUBMITTED

Scholar Name - Prabuddha Banerjee
Guide Name - Prof. (Dr) Padmakali Banerjee
Thesis Title - Identifying Customers Expectation from Retail Bankers at Delhi
Status - Awarded

Scholar Name - Yogesh Kumar Patter
Guide Name - Prof. (Dr) Padmakali Banerjee
Thesis Title - Empirical Research on the role of higher education institutions in building competencies and enhancing employability
Status - Awarded

Scholar Name - Sarika Chaturvedi
Guide Name - Prof.(Dr) S M Paul Khurana
Thesis Title - Cellulase free Xylanase production by bacterial isolates from different agro-residue
Status - Awarded

Scholar Name - Shikha Khandelwal
Guide Name - Prof.(Dr) S M Pau Khurana
Thesis Title - Characterization and In Silico Analysis of Anti Microbial Peptides in Selected Medicinal Plants
Status - Awarded

Scholar Name - Shruti Godara
Guide Name - Prof. (Dr) S M Pau Khurana
Thesis Title - Biological diverssity studies on Begomo viruse associated with ctton leafcurl disease in Northernindia
Status - Awarded

Scholar Name - Madhupriya
Guide Name - Prof. (Dr) S M Pau Khurana
Thesis Title - Molecular characterization of Phytoplasmas associated with important ornamental plant species in Northe India
Status - Awarded

Scholar Name - Priyanka Singh
Guide Name - Prof. (Dr) Priti Singh
Thesis Title - Development of image Compression Algorithms using Progressive Coefficients Significance Method
Status - Awarded

Scholar Name - Suman Lata Gupta
Guide Name - Prof. S K Dube & D Kushagra
Thesis Title - Some Applications satellite data and products for monitorir prediction of thunderstorms and tropic cyclones, and products for monitoring ar prediction of thunderstorms and tropic cyclones
Status - Awarded

Scholar Name - Pallavi Tiwari (Sharma)
Guide Name - Prof S K Gupta
Thesis Title - Sustainable Planning of a Rural Settlement A Case of Village Panchgaon, Gurgaon
Status - Awarded

Scholar Name - Sunita Malik
Guide Name - Prof. (Dr) S M Pau Khurana
Thesis Title - Genome-Wide search for nuclear-encoded RNA maturrases using bioinformatical approach and expression studies of NMAT genes
Status - Awarded

DOCTORAL DEGREE AWARDED/SUBMITTED

Scholar Name - Jyotsana Thakur
Guide Name - Dr. Sushma Gandhi
Thesis Title - Efficacy of Social Media in Brand Awareness and Consumer Satisfaction. A study of Communication Strategies for Corporate Reputation
Status - Submitted

Scholar Name - Kanika Bankhad
Guide Name - Prof. (Dr) Vikas Madhukar
Thesis Title - Regional Integration and FDI: A Study of India's
Satus - Submitted

Scholar Name - Anil Kumar
Guide Name - Prof. (Dr) Priti Singh
Thesis Title - Preparation and Characterization of Nanostructured Co and Co/Semiconductor Interface
Satus - Submitted

Scholar Name - Anupam Vyas
Guide Name - Dr Ranjeet Kr. Brajpuria
Thesis Title - Study of soft Magnetic Bulk and multilayer system
Satus - Submitted

Scholar Name - Nishant Nathani
Guide Name - Prof. S K Gupta
Thesis Title - Sustainable Transport System in Indian Cities considering population growth fron 3 lakh grade to 10 lakhs by 2060 AD A case study of Muzaffarpur city Bihar, India
Satus - Submitted

Scholar Name - Mohd. Farhan Fazil
Guide Name - Prof. S K Gupta
Thesis Title - Challenges to conserve the Architectural Heritage with Urban Planning and Development of Aligarh Muslim University.
Satus - Submitted

Scholar Name - Mohd Khalid Hasan
Guide Name - Prof. S K Gupta
Thesis Title - Leadership Role o Uraban Design in Quality Education
Satus - Submitted

Scholar Name - Charu Jain
Guide Name - Prof. Priti Singh
Thesis Title - Development of a robust verification system using Statistical Methods
Satus - Submitted

Scholar Name - Richa Rai
Guide Name - Prof. (Dr) S M Pau Khurana
Thesis Title - Molecular Characterization and development immunobased detection of Grapevine leaf roll associated viru-4 in Grapes, India.
Satus - Submitted

Scholar Name - Shraddha Awasthi
Guide Name - Prof. (Dr.) RC Sharma
Thesis Title - Role of Competency mapping in employee development.
Satus - Submitted

RESEARCH SCHOLARS

RESEARCH SCHOLARS

S.No.	Name of Scholar	Programme	Batch (Year)	Supervisor (Name, Designation & Institution/Department)	Co-Supervisor (Name,Designation & Institution/Department)
1	Vinay Mishra	Finance	AUG 2011-14	Dr. Vikas Madhukar, Professor, Amity Business School	Not Yet alloted
2	Kuldeep Kumar	Marketing	AUG 2011-14	Dr. Vikas Madhukar, Professor, Amity Business School	Not Yet alloted
3	Satyam Aggarwal	HR	AUG 2012-15	Dr. R C Sharma, Professor Emeritus, Amity Business School	Not Yet alloted
4	Sunil Kumar Singh	Marketing	AUG 2012-15	Dr. Vikas Madhukar, Professor, Amity Business School	Dr Anil Chandhok, Professor, Maharshi Markandeswar University Ambala Haryana
5	Rima Bajaj	Finance	AUG 2012-15	Dr. Vikas Madhukar, Professor, Amity Business School	Dr Sumati Verma, Associate Professor, Sri Aurbindo College (E), DU
6	Shraddha Awasthi	HR	AUG 2012-15	Dr. R C Sharma, Professor Emeritus, Amity Business School	Dr Jaya ,Associate Professor ,Amity BusinessSchool ,AUUP
7	Deepika Chhikara	HR	AUG 2012-15	Dr. R C Sharma, Professor Emeritus, Amity Business School	Dr. B.K Punia. Professor HBS,Guru Jambeshwar University,Hisar
8	Monika Sharma	Finance	AUG 2012-15	Dr. Vikas Madhukar, Professor, Amity Business School	Not Yet alloted
9	Sanchita Raghav	HR	JAN 2014-17	Dr. Bhavana Adhikari, Professor, Amity Business School	Not Yet alloted
10	Nazia Saeed	HR	JAN 2014-17	Dr. Bhavana Adhikari, Professor, Amity Business School	Not Yet alloted
11	Ravi Kumar	Operations	JAN 2014-17	Dr. Padmakali Banerjee, Professor, Amity Business School	Not Yet alloted
12	Kanika Bankhad	Finance	JAN 2014-16	Dr. Vikas Madhukar, Professor, Amity Business School	Dr Sumati Verma, Associate Professor, Sri Aurbindo College (E), DU
13	Kanwarpreet Singh	Marketing	JAN 2015-18	Dr. Ashutosh Kumar, Professor, Amity Business School	Not Yet alloted
14	Amit Kumar Gupta	Marketing	JAN 2016-19	Dr. Hemant Sharma, Professor, Amity Business School	Not Yet alloted
15	Sonam Yadav	HR	JAN 2015-18	Dr. Bhavana Adhikari, Professor, Amity Business School	Not Yet alloted
16	Samir Kumar Jha	Operations	JAN 2015-18	Dr. Hemant Sharma, Professor, Amity Business School	Not Yet alloted
17	Nipun Sharma	Marketing	JAN 2015-18	Dr. Padmakali Banerjee, Professor, Amity Business School	Dr M K Jain, Professor of Business Administration, Department of Business Administration, School of Business, Kenyatta University, Nairobi-Kenya
18	Sulabh Sharma	HR	AUG 2014-17	Dr. Vikas Madhukar, Professor, Amity Business School	Prof (Dr) H L Verma, VC Jagan Nath University, Bahadurgarh (Haryana)
19	Seema Kataria	HR	JAN 2015-18	Dr. Bhavana Adhikari, Professor, Amity Business School	Not Yet alloted
20	Gayatri Bakshi	Managerial Finance	JAN 2016-19	Dr. Gunjam M Sanjeev, Professor, Amity Business School, Professor, Amity Business School	Dr Rajeev Sharma, Director, RBS Management Technical Campus, Khandari Farm, Agra
21	Satish Kumar	Marketing	JAN 2016-19	Dr. Padmakali Banerjee, Professor, Amity Business School	Dr.S K Dube, Professor, Jaipur University
22	Jaseena C J	Marketing	JAN 2015-17	Dr. Ashutosh Kumar, Professor, Amity Business School	Dr Preeti Vadhwa, Associate Professor, Bharati Vidyapeeth Deemed University
23	Shikha Sharma	Marketing	JAN 2014-17	Dr. Ashutosh Kumar, Professor, Amity Business School	Yet to be decided
24	Krishan Kumar	Management	JAN 2015-17	Dr. Hemant Sharma, Professor, Amity Business School	Yet to be decided
25	Vivek Jain	Management	JAN 2015-18	Dr. Hemant Sharma, Professor, Amity Business School	Not Yet alloted

RESEARCH SCHOLARS

26	Reena Nigam	Management	JAN 2016-19	Dr. Padmakali Banerjee, Professor, Amity Business School	Dr. Roopak Vasishth
27	Vivek Birla	Management	AUG 2015-18	Dr. Deependra Sharma, Associate Professor, Amity Business School	Not Yet alloted
28	Satish Kumar	Management	AUG 2015-18	To be realocated	Yet to be decided
29	Sudhir Kumar	Management	JAN 2015-18	Dr. Ashutosh Kumar, Professor, Amity Business School	Not Yet alloted
30	Atul Kumar Yadav	HR	AUG-2015-19	Dr. Bhavana Adhikari, Professor, Amity Business School	Not Yet alloted
31	Anil Samota	Management	AUG-2015-19	Dr. Vikas Madhukar, Professor, Amity Business School	Not Yet alloted
32	Sumit Bhargava	Marketing	AUG-2015-19	Dr. Ashutosh Kumar, Professor, Amity Business School	Dr D K Batra, Prof- marketing, IMI, New Delhi
33	Ram Krishna Khatiwada	Finance	AUG-2015-19	Dr. Gunjam M Sanjeev, Professor, Amity Business School	Not Yet alloted
34	Avnish Rana	Marketing	AUG 2015-17	Dr. Ashutosh Kumar, Professor, Amity Business School	Not Yet alloted
35	Hanseswar Ghosh	Finance	AUG-2015-19	Dr. Vikas Madhukar, Professor, Amity Business School	CA. Kaushik Dutta
36	Mukesh Chandra Pandya	Management	AUG-2015-19	Dr. Deependra Sharma, Associate Professor, Amity Business School	Not Yet alloted
37	Sandeep Chaudhary	Management	AUG-2015-19	Dr. R C Sharma, Professor Emeritus, Amity Business School	Not Yet alloted
38	Rajshekhar Inglay	Management	AUG-2015-19	Dr. Hemant Sharma, Professor, Amity Business School	Not Yet allotted
39	Mohit Notta	Management	AUG-2015-19	Dr. Ashutosh Kumar, Professor, Amity Business School	Not Yet allotted
40	Duvvuri Ravishankar	Management	AUG-2015-19	Dr. Bhavana Adhikari, Professor, Amity Business School	Not Yet allotted
41	Kamal	Management	AUG-2015-19	Dr. Vikas Madhukar, Professor, Amity Business School	Dr Shakti Kumar Gupta, Medical Superintendent, AIIMS
42	Nrip Kumar Mehta	Management	JAN 2016-19	Dr. Rumki Bandyopadhyay, Associate Professor, Amity Business School	Not Yet allotted
43	Narender	Management	JAN 2016-19	Dr. Rumki Bandyopadhyay, Associate Professor, Amity Business School	Not Yet allotted
44	Sapna Sood	Management	JAN 2016-19	Dr. Deependra Sharma, Associate Professor, Amity Business School	Not Yet allotted
45	Satyam Gupta	Management	JAN 2016-19	Dr. Deependra Sharma, Associate Professor, Amity Business School	Not Yet allotted
46	Anita Kumari	Management	JAN 2016-18	Dr. Rumki Bandyopadhyay, Associate Professor, Amity Business School	Not Yet allotted
47	Amarnath Ghosh Dastidar	Management	JAN 2016-18	Dr. Padmakali Banerjee, Professor, Amity Business School	Not Yet allotted
48	Tejpal	Management	JAN 2016-19	Dr. Rumki Bandyopadhyay, Associate Professor, Amity Business School	Not Yet allotted
49	Navneet Kumar	Management	JAN 2016-19	Dr. Deependra Sharma, Associate Professor, Amity Business School	Not Yet allotted
50	Gaurav Sharma	Management	JAN 2016-19	Dr. R C Sharma, Professor Emeritus, Amity Business School	Not Yet allotted
51	Shalini Singh	Management	JAN 2016-19	Dr. Ashutosh Kumar, Professor, Amity Business School	Not Yet allotted
52	Viswanatha Venkata Krishana Mohan Khasunaveesu	Management	JAN 2016-19	Dr. Rumki Bandyopadhyay, Associate Professor, Amity Business School	Not Yet allotted
53	Koh Kee Lee	Management	AUG 2016-20	Dr. Bhavana Adhikari, Professor, Amity Business School	Dr K S Raghuram, Amity Global Business School, Singapore
54	Suresh Kumar Gupta	Management	JAN 2016-19	Dr. Hemant Sharma, Professor, Amity Business School	Not Yet allotted
55	Alok Kumar	Marketing	AUG 2016-20	Dr. Deependra Sharma, Associate Professor, Amity Business School	Not Yet allotted
56	Chetanprakash Girishandra Dixit	Operations	AUG 2016-20	Dr. Hemant Sharma, Professor, Amity Business School	Not Yet allotted
57	Manoj Mishra	Finance	AUG 2016-20	Dr. Vikas Madhukar, Professor,	Not Yet alloted

RESEARCH SCHOLARS

				Amity Business School	
58	Vikas Kirtani	Operations	AUG 2016-20		
59	Amrita Grewal	Marketing	JAN 2017-21	Dr. Deependra Sharma, Associate Professor, Amity Business School	Not Yet allotted
60	Arjun Siddharthan Kariyal	Marketing	JAN 2017-21	Dr. Ashutosh Kumar, Professor, Amity Business School	Not Yet allotted
61	Prem Kohli	HR	JAN 2017-21	Dr. Bhavana Adhikari, Professor, Amity Business School	Not Yet allotted
62	Rohit Singh	Marketing	JAN 2017-21	Dr. Prabuddha Banerjee, Associate Professor, Amity Business School	Not Yet allotted
63	Sreenivasa Reddy Sunkara	Marketing	JAN 2017-21	Not Yet alloted	Not Yet allotted
64	Reema Agrawal	HR	AUG 2017-21	Not Yet alloted	Not Yet allotted
65	Priya Chandra Ohja	Management	AUG 2017-21	Not Yet alloted	Not Yet allotted
66	Shafiq Ahmad Khan	Management	AUG 2017-21	Dr. Prabuddha Banerjee, Associate Professor, Amity Business School	
67	Shelendra Singh	Human Resource	AUG 2017-21	Not Yet alloted	Not Yet allotted
68	Mukta Katyal	Management	AUG 2017-21	Not Yet alloted	Not Yet allotted
69	Rakesh Kumar Singh	Marketing & Sales	AUG 2017-21	Not Yet alloted	Not Yet allotted
70	Pooja Kansal	Management	AUG 2017-21	Not Yet alloted	Not Yet allotted
71	Mayank Yadav	Management	JAN 2018-22	Not Yet alloted	Not Yet allotted
72	Supriya Khaneja	Commerce	JAN 2016-19	Dr. Vidhi Bhargava, Assistant Professor, Amity Commerce College	Dr. Lalit Gupta, Dean FCMS, Jai Narayan Vihar University Jhodpur
73	Puneet Ahuja	Commerce	JAN 2016-19	Dr. Vidhi Bhargava, Assistant Professor, Amity Commerce College	Dr. Lalit Gupta, Dean FCMS, Jai Narayan Vihar University Jhodpur
74	Vatsala Sharma	Commerce	AUG 2015-18	Dr. Vidhi Bhargava, Assistant Professor, Amity Commerce College	
75	Priyanka Yadav	Commerce	JAN 2016-19	Dr. Nilmani Tripathi, Assistant Professor, Amity Commerce College	Dr. Priyanka Gite, Professor, Delhi University
76	Sushma Duhan	Commerce	JAN 2016-18	Dr. Vidhi Bhargava, Assistant Professor, Amity Commerce College	Dr. Lalit Gupta, Dean FCMS, Jai Narayan Vihar University Jhodpur
77	Gaurav Sisodia	Commerce	JAN 2016-19	Dr. Nilmani Tripathi, Assistant Professor, Amity Commerce College	Dr. Priyanka Gite, Professor, Delhi University
78	Madhu Ruhil	Commerce	AUG 2016-20	Dr. Vidhi Bhargava, Assistant Professor, Amity Commerce College	Dr. Jaspreet Kaur, Associate Professor, GGSIPU
79	Anjan Kumar Ghosh	Commerce	JAN 2017-21	Dr. Nilmani Tripathi, Assistant Professor, Amity Commerce College	Dr. Priyanka Gite, Professor, Delhi University
80	Bhawna Choudhary	Commerce	JAN 2017-19	Dr. Vidhi Bhargava, Assistant Professor, Amity Commerce College	Dr. Asharam Tripathi, Professor BHU
81	Dipti Singh	Commerce	JAN 2017-19	Dr. Vidhi Bhargava, Assistant Professor, Amity Commerce College	Not Alloted
82	Sonia	Commerce	JAN 2017-19	Dr. Vidhi Bhargava, Assistant Professor, Amity Commerce College	Dr. Anupama Mahajan, Associate Professer, Delhi University
83	Priyanka Garg	Biotechnology	AUG 2012-15	Dr. S M Paul Khurana, Professor, Amity Institute Of Biotechnology	Dr R K Jain
84	Geeta Verma	Biotechnology	JAN 2014-17	Dr. Manju Sharma, Assistant Professor, Amity Institute Of Biotechnology	Dr.Kalyan Kumar Mandal, Divi. of Plant Pathology IARI, New Delhi
85	Moiz Ashraf Ansari	Biotechnology	JAN 2014-17	Dr. Saif Hameed, Associate Professor, Amity Institute Of Biotechnology	Dr. Zeeshan Fatima, Associate Professor, Amity Institute Of Biotechnology,AUH,Haryana
86	Richa Rai	Biotechnology	JAN 2014-17	Dr. S M Paul Khurana, Professor, Amity Institute Of Biotechnology	Dr. VK Baranwal, Indian Agricultural Research

RESEARCH SCHOLARS

					Institute, New Delhi
87	Kinshuk Sharma	Biotechnology	JAN 2014-17	Dr. Zeeshan Fatima, Associate Professor, Amity Institute Of Biotechnology	Dr. Saif Hameed, Associate Professor, Amity Institute Of Biotechnology ,Haryana
88	Amandeep	Biotechnology	AUG 2015-18	Dr. Manju Sharma, Assistant Professor, Amity Institute Of Biotechnology	Dr. Rekha Kansal,Principal Scientist NRC on Plant Biotceh. IARI ,New Delhi
89	Surendra Pal	Biotechnology	AUG 2015-18	Dr Dinesh Yadav(Left)	Dr. S M Paul Khurana, Professor, Amity Institute Of Biotechnology
90	Julie Pratiba singh	Biotechnology	AUG 2015-18	Dr. Gargi Bagch, Associate Professor, Amity Institute Of Biotechnology	Prof. Rakesh Tyagi, Special center for molecular medicine,JUN,New Delhi
91	Kirti Bhatotia	Biotechnology	AUG 2015-18	Dr Dinesh Yadav(Left)	Not applicable
92	Rahul Pal	Biotechnology	AUG 2015-17	Dr. Zeeshan Fatima, Associate Professor, Amity Institute Of Biotechnology	Dr. Saif Hameed, Associate Professor, Amity Institute Of Biotechnology ,Haryana
93	Sharda Sharma	Biotechnology	JAN 2015-17	Dr. Zeeshan Fatima, Associate Professor, Amity Institute Of Biotechnology	Dr. Saif Hameed, Associate Professor, Amity Institute Of Biotechnology ,Haryana
94	Manisha Dagar	Biotechnology	JAN 2015-17	Dr. Gargi Bagch, Associate Professor, Amity Institute Of Biotechnology	Dr. Rakesh Tyagi,Special center for molecular medicine,JUN,New Delhi
95	Gunjan Dagar	Biotechnology	JAN 2015-17	Dr. Gargi Bagch, Associate Professor, Amity Institute Of Biotechnology	not yet decided
96	Shweta Singh	Biotechnology	AUG 2015-17	Dr. Saif Hameed, Associate Professor, Amity Institute Of Biotechnology ,Haryana	Dr. Zeshan Fatima, Associate Professor, Amity Institute Of Biotechnology ,Haryana
97	Priyanka	Biotechnology	AUG 2015-18	Dr. Manju Sharma, Assistant Professor, Amity Institute Of Biotechnology	Dr. Anita Manna
98	Sumathy S	Biotechnology	AUG 2015-18	Dr. Rajendra Prashad, Professor, Amity Institute Of Biotechnology	Dr. Zeshan Fatima, Associate Professor, Amity Institute Of Biotechnology ,Haryana
99	Dhannajay Kumar Yadav	Biotechnology	AUG 2015-18	Dr. Narendra Kumar, Senior Lecturer, Amity Institute Of Biotechnology	Dr. Dinesh Singh,Principal Scientist, IARI,Division of plant Pathology,IARI, New Delhi
100	Garima Chaudhary	Biotechnology	AUG 2015-18	Dr. Manju Sharma, Assistant Professor, Amity Institute Of Biotechnology	Dr. Dinesh Singh,Principal Scientist, IARI,Division of plant Pathology,IARI, New Delhi
101	Sonia	Biotechnology	AUG 2015-18	Dr. Machiavelli Singh, Associate Professor, Amity Institute Of Biotechnology	Prof. Pramod Mehta,Prof. & Director,Center for Biotech.,Maharishi Dayanand University,Rohtak
102	Deepika Kulshreshtha	Biotechnology	AUG 2015-18	Dr. Narendra Kumar, Senior Lecturer, Amity Institute Of Biotechnology	Dr. Rashmi Aggarwal,Principal Scientist, Divi. Of plat pathology,IARI ,New Delhi
103	Ashok kumar	Biotechnology	AUG 2015-18	Dr. Rajendra Prashad, Professor, Amity Institute Of Biotechnology	Dr. Zeshan Fatima, Associate Professor, Amity Institute Of Biotechnology ,Haryana
104	Deepak Kumar	Biotechnology	AUG 2015-18	Dr. Sangeeta Singh,Assistant Professor, Amity Institute Of Biotechnology	Dr. Vinay Kumar , Assistant manager, Ecoproengineers,New Delhi
105	Sarvendra pratap Singh	Biotechnology	AUG 2015-18	Dr. Machiavelli Singh, Associate Professor, Amity Institute Of Biotechnology	
106	Garima Shahi	Biotechnology	JAN 2016-18	Dr. Rajendra Prashad, Professor, Amity Institute Of Biotechnology	Dr. Naseem Gaur ,Group leader,Yeast Biofule, ICGEB,New Delh
107	Sandeep Hams	Biotechnology	JAN 2016-18	Dr. Saif Hameed, Associate Professor, Amity Institute Of Biotechnology	Dr. Zeshan Fatima, Associate Professor, Amity Institute Of Biotechnology ,Haryana
108	Suman Sharma	Biotechnology	JAN 2016-19	Dr. Rajendra Prashad, Professor, Amity Institute Of Biotechnology	Dr. Alok Mandel,Professor School of Life Science Jawaharlal Nehru University New Delhi
109	Shweta Singh	Biotechnology	JAN 2016-19	Dr. Manju Sharma, Assistant	Dr. Rohini Sree vathsa<senior

RESEARCH SCHOLARS

				Professor, Amity Institute Of Biotechnology	Scientist, NRC on plant Biotechnlogy,IARI,New Delhi
110	Jagat Kumar	Biotechnology	JAN 2016-19	Dr. Narendra Kumar, Senior Lecturer, Amity Institute Of Biotechnology	Dr. Bihnu Maya Bhashyal, Div. of Plant pathology,IARI,New Delhi
111	Rahul Kumar Chandel	Biotechnology	AUG 2015-18	Dr. Manju Sharma, Assistant Professor, Amity Institute Of Biotechnology	Dr. (Ms.)chitra srivastavaEntomologyHead (entomology) at div. Of entomology IARI, New Delhi
112	Namrata Sinha	Biotechnology	AUG 2016-20	Dr. Manju Sharma, Assistant Professor, Amity Institute Of Biotechnology	Dr. Sunil Archak ,National Fellow,Division of Genomic Resources(Plant Science),NBPGR, New Delhi
113	Abhinav Kant	Biotechnology	AUG 2016-20	Dr. Munidra Ruwali, Assistant Professor, Amity Institute Of Biotechnology	Dr. Sarjana Dutt,Director R&D molecular Biology,Oncquest Labs.LTD,Adjacent safderjung Hospital, New Delhi
114	Malobi Nandi	Biotechnology	AUG 2016-20	Dr. Ravi Dutt, Assistant Professor, Amity Institute Of Biotechnology	Prof. Jaya Tyagi,Professor and Head, Department of Biotechnology, All India Institute of Medical Science, Ansari Nagar, New Delhi
115	Misheck Mudyiwa	Biotechnology	JAN 2017-21	Dr. SK Ray, Professor, Amity Institute Of Biotechnology	Prof. Collen Masimirembwa,Prof. University of Zimbamwe
116	Anu Kumar Sharma	Biotechnology	JAN 2017-21	Dr. Narendra Kumar, Senior Lecturer, Amity Institute Of Biotechnology	Not yet decided
117	Kesiraju Karthik	Biotechnology	JAN 2017-21	Dr. Surendra Kahtodia, Assisitant Professor, Amity Institute Of Biotechnology	Dr. Rohini ,Principal Scientist, NRC on plant Biotceh.IARI,New Delhi
118	Nikhil	Biotechnology	JAN 2017-21	Dr. Manju Sharma, Assistant Professor, Amity Institute Of Biotechnology	Dr. Rohini ,principal Scientist, NRC on plant Biotceh.IARI,New Delhi
119	Suraya Muzafar	Biotechnology	JAN 2017-20	Dr. Rajendra Prashad, Professor, Amity Institute Of Biotechnology	Not yet decided
120	Ankita Tripathi	Biotechnology	JAN 2017-20	Dr. Ravi Dutt, Assistant Professor, Amity Institute Of Biotechnology	Not Yet Decided
121	Sudhanshu Mudgal	Biotechnology	JAN 2017-21	Dr. Sarika Chaturvedi, Assisitant Professor, Amity Institute Of Biotechnology	Dr. AK Tiwari, Scientific Officer(seed), In-charge Div. of Pathology,Gola,Khiri,UP
122	Juhi Sharma	Biotechnology	JAN 2017-21	Dr. Rajendra Prashad, Professor, Amity Institute Of Biotechnology	Dr. Naseem Gaur ,Group leader,Yeast Biofule, ICGEB,New Delh
123	Pushpendra pratap Singh	Biotechnology	JAN 2017-21	Dr. Sarika Chaturvedi, Assisitant Professor, Amity Institute Of Biotechnology	Dr. AK Tiwari, Scientific Officer(seed), In-charge Div. of Pathology,Gola,Khiri,UP
124	Manikandan K	Integrative Biology	AUG 2016-18	Dr. Krishan Murari,Associate Professor, AIISH	Dr. Anu ,Jamia Hamdard -IMM, New Delhi
125	Ridhima Jain	Molecular Biology	JAN 2017-21	Dr. SK Ray, Professor, Amity Institute Of Biotechnology	Dr. Sangeeta chaudhery, R&D Head, Sir Ganga Ram Hospital,New Delhi
126	Mohit Kumar	Microbiology	JAN 2017-20	Dr. Rajendra Prashad, Professor, Amity Institute Of Biotechnology	Dr. Naseem Gaur ,Group leader,Yeast Biofule, ICGEB,New Delh
127	Poonam Yadav	Molecular Biology	JAN 2017-21	Dr. SK Ray, Professor, Amity Institute Of Biotechnology	Dr. Sangeeta chaudhery, R&D Head, Sir Ganga Ram Hospital,New Delhi
128	Vikram Jet Singh	Molecular Biology	AUG 2017-21	Never reported	
129	Gunjan Dutta	Biotechnology	AUG 2017-20	Dr. Saif Hameed, Associate Professor, Amity Institute Of Biotechnology	Dr. Zeshan Fatima, Associate Professor, Amity Institute Of Biotechnology ,Haryana
130	Inderjeet Yadav	Biotechnology	AUG 2017-21	Dr. Zeeshan Fatima, Associate Professor, Amity Institute Of Biotechnology	Dr.Saif Hameed. Associate Professor, Amity Institute Of Biotechnology ,Haryana
131	Shrayanee Das	Biotechnology	AUG 2017-20	Dr. Zeeshan Fatima, Associate	Dr.Saif Hameed. Associate

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				Professor, Amity Institute Of Biotechnology	Professor, Amity Institute Of Biotechnology ,Haryana
132	Amandeep Saini	Biotechnology	AUG 2017-20	Dr. Rajendra Prashad, Professor, Amity Institute Of Biotechnology	Dr. Avinash Bajaj,RCB ,Faridabad
133	Md Tausif Raza	Biotechnology	AUG 2017-20	Not yet decided	Not yet decided
134	Niti Srivastava	Biotechnology	AUG 2017-20	Dr. Kumar Gaurav, Assistant Professor, Amity Institute Of Biotechnology	not yet fixed
135	Rajesh M	Biotechnology	AUG 2017-20	Dr. Rajendra Prashad, Professor, Amity Institute Of Biotechnology	Dr. Rakesh Bhatnagar ,School of life Science , JNU, New Delhi
136	Syed Bilal Jilani	Biotechnology	AUG 2017-20	Not yet decided	Not yet decided
137	Bornali Yadav	Psychology	JAN 2014-17	Dr. Padmakali Banerjee, Professor, Amity Business School	Dr R K Yadav, Principal, RAS College of Education, Rewari, Hry.
138	Simran Bedi	Psychology	JAN 2014-17	Dr. Padmakali Banerjee, Professor, Amity Business School	Dr Aparajita Jaiswal ,Assistant Professor, Amity Medical School
139	Oladiti Olawale	Psychology	JAN 2015-17	Dr. Padmakali Banerjee, Professor, Amity Business School	Dr Aparajita Jaiswal ,Assistant Professor, Amity Medical School
140	Kalpna	Psychology	JAN 2014-17	Dr. Meeta Malhotra, Associate Professor, Amity Institute of Behavioural and Allied Science	Not Yet Decided
141	Athullya S Nair	Psychology	JAN 2016-18	Dr. Archana Shukla, Professor, Amity Institute of Behavioural and Allied Science	Not Yet Decided
142	Shiwani Nirwal	Psychology	AUG 2016-20	Dr. Rishipal, Professor, Amity Institute of Behavioural and Allied Science	Not Yet Decided
143	Parvesh Sharma	Psychology	AUG 2016-20	Dr. Nadeem Luqman, Assistant Professor, Amity Institute of Behavioural and Allied Science	Not Yet Decided
144	Jaanvi Jain	Psychology	AUG 2016-20	Dr. Kamini, Assistant Professor, Amity Institute of Behavioural and Allied Science	Not Yet Decided
145	Gagandeep Kaur	Psychology	AUG 2016-20	Dr. Rishipal, Professor, Amity Institute of Behavioural and Allied Science	Not Yet Decided
146	Akanksha Tiwari	Psychology	AUG 2016-20	Dr. Meeta Malhotra, Associate Professor, Amity Institute of Behavioural and Allied Science	Not Yet Decided
147	Sweta Saraff	Psychology	AUG 2016-20	Dr. Rishipal, Professor, Amity Institute of Behavioural and Allied Science	Not Yet Decided
148	Jyoti Sehgal	Psychology	JAN 2017-21	Dr. Anupama Srivastava, Assistant Professor, Amity Institute of Behavioural and Allied Science	Not Yet Decided
149	Nazima Saleem	Psychology	JAN 2017-21	Not Yet Decided	Not Yet Decided
150	Shagun Saxena	Psychology	AUG 2017-21	Not Yet Decided	Not Yet Decided
151	Preeti Esther Sigamani	Psychology	AUG 2017-20	Not Yet Decided	Not Yet Decided
152	Jyotika Gupta	Psychology	JAN 2018-22	Not Yet Decided	Not Yet Decided
153	Mahak Gupta	Psychology	JAN 2018-21	Not Yet Decided	Not Yet Decided
154	Mamta Thakran	Nanotech	AUG 2017-21	Not Yet Decided	Not Yet Decided
155	Aditya Thakur	Euthanasia(Criminal Law)	JAN 2015-18	Dr. Brajesh Singh	Not Yet Decided
156	Teena	Cyber Crime	JAN 2015-18	Dr. Ajay Kumar Bhatt, Associate Professor, Amity Law School	Prof(Dr) SK Singh, EX Dean Law,KNIT, Sultanpur (UP)
157	Rajesh Kumar Singh	Labour Law	JAN 2015-18	Dr. Brajesh Singh	Not Yet Decided
158	Rajesh Deoli	Law	AUG 2015-17	Dr. Brajesh Singh	Not Yet Decided
159	Priyanka	Law	AUG 2015-18	Dr. Ajay Kumar Bhatt, Associate Professor, Amity Law School	Prof(Dr) SK Singh, EX Dean Law,KNIT, Sultanpur (UP)
160	Yashpal Singh Sindhu	Law	JAN 2016-18	Dr. Ajay Kumar Bhatt, Associate Professor, Amity Law School	Prof(Dr) SK Singh, EX Dean Law,KNIT, Sultanpur (UP)
161	Monica Yadav	Law	AUG 2016-20	Dr. Ajay Kumar Bhatt, Associate Professor, Amity Law School	Prof(Dr) SK Singh, EX Dean Law,KNIT, Sultanpur (UP)
162	Govind Kumar Saxena	Law	JAN 2017-20	Dr. Ajay Kumar Bhatt, Associate Professor, Amity Law School	Hon'ble Justice SK Singh, Former Acting Chief Justice Allahabad High Court, Allahabad

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163	Anumeet Kaur	Law	AUG 2017-21	Not Yet Decided	Not Yet Decided
164	Apoorv Bhardwaj	Law	AUG 2017-20	Not Yet Decided	Not Yet Decided
165	Atul Jain	Law	AUG 2017-21	Dr. Ajay Kumar Bhatt, Associate Professor, Amity Law School	Prof(Dr) SK Singh, EX Dean Law,KNIT, Sultanpur (UP)
166	Lalsangliani	Law	AUG 2017-21	Not Yet Decided	Not Yet Decided
167	Madhav Madhusudan Singh	Hospital Administration	JAN 2015-18	Dr. Harish K. Satia, Professor, Amity Medical School	Dr. Shakti Kumar Gupta, MBBS, MHA, FNAMS, FIMSA, FIHE, FAHA, Medical Suprintenedent Dr R P Centre, AIIMS
168	Nitin Kumar	Hospital Administration	JAN 2015-18	Dr. Harish K. Satia, Professor, Amity Medical School	Not Yet alloted
169	Poonam Chaudhary	Hospital Administration	JAN 2015-18	Maj Gen(Dr.) Mahavir Singh(Retd.), Prof. & Dean, Faculty of Health & Allied Scienecs	Dr. Raman Sharma, MBBS, MHA, Dept. of Hospital Administration, Government Medical College Chandigarh
170	Sheetal Yadav	Hospital Administration	JAN 2015-18	Dr. Harish K. Satia, Professor, Amity Medical School	Not Yet alloted
171	Pardeep Srivastava	Hospital Administration	JAN 2015-18	Maj Gen(Dr.) Mahavir Singh(Retd.), Prof. & Dean, Faculty of Health & Allied Scienecs	Not Yet alloted
172	Sarvadarshi Shukla	Hospital Administration	AUG 2015-18	Dr. Harish K. Satia, Professor, Amity Medical School	Brig. Sunil Kant, VSM, MBBS, MHA, Prof. & Head, Dept. of Hospital Administartion AFMC Pune
173	Aiwerioghene Erhauyi Meshach	Hospital Administration	AUG 2015-18	Maj Gen(Dr.) Mahavir Singh(Retd.), Prof. & Dean, Faculty of Health & Allied Scienecs	Dr. Shaima Ali Miraj, PhD Health Management, Assistant Prof. College of Health Science, Saudi Electric University, Riyadh, KSA
174	Savita kataria	Dietitics & Applied Nutritiion	AUG 2015-18	Dr. Luxita Sharma, Assistant Professor, Amity Medical School	Not Yet alloted
175	Nitika Singh	Hospital Administration	AUG 2015-18	Maj Gen(Dr.) Mahavir Singh(Retd.), Prof. & Dean, Faculty of Health & Allied Scienecs	Brig. Sunil Kant, VSM, MBBS, MHA, Prof. & Head, Dept. of Hospital Administartion AFMC Pune
176	Rekha Bisht	Hospital Administration	JAN 2015-18	Dr. Harish K. Satia, Professor, Amity Medical School	Dr. Philomina Thomas, PhD Nursing, Tutor in Nursing at AIIMS college of Nursing New Delhi
177	Gaurav Kumar	Optometry & Vision Science	JAN 2015-18	Dr. Joydeep Dutta, Professor, Amity School of Applied Science	Not Yet alloted
178	Rajesh Kumar	Optometry & Vision Science	JAN 2015-18	Dr. Joydeep Dutta, Professor, Amity School of Applied Science	Not Yet alloted
179	Monica Chaudhary	Optometry & Vision Science	JAN 2015-18	Dr. Padmakali Banerjee, Professor, Amity Business School	Not Yet alloted
180	Mousumi Saikia	Optometry & Vision Science	JAN 2015-18	Dr. Joydeep Dutta, Professor, Amity School of Applied Science	Not Yet alloted
181	Nigar Sayida Naqvi	Dietitics & Applied Nutritiion	JAN 2017-21	Dr. Luxita Sharma, Assistant Professor, Amity Medical School	Not Yet alloted
182	Zarrin Ashraf	Dietitics & Applied Nutritiion	JAN 2017-21	Dr. Luxita Sharma, Assistant Professor, Amity Medical School	Dr Rachna Mishra, Asst. Prof. Dept of Home Science/Nutrition Isabella Thoburn College, Lucknow
183	Sheuli Sen	Public Health	AUG 2017-21	Dr. Smriti Arora, Professor, Amity Medical School (ACON)	Not Yet alloted
184	Richa Singh	D&AN	AUG 2017-21	Dr. Luxita Sharma, Assistant Professor, Amity Medical School	Not Yet alloted
185	Aby Ittyavira	Hospital Administration	AUG 2017-21	Dr. Puneeta Ajmera, Assistant Professor, Amity Medical School	Not Yet alloted
186	Mohd. Farhan Fazil	Planning	AUG 2013-16	Prof S K Gupta, Dean & Director, Amity School of Architecutre & Planning	Prof. Sangeeta Bagga Mehta,Associate Professor, Chandigarh College of Architecture, Chandigarh
187	Mohd Khalid Hasan	Planning	AUG 2013-16	Dr.S K Gupta, Professor, Amity School of Architecutre & Planning	Prof. Sangeeta Bagga Mehta,Associate Professor, Chandigarh College of

RESEARCH SCHOLARS

					Architecture, Chandigarh
188	Nishant Nathani	Planning	AUG 2013-16	Dr.S K Gupta, Professor, Amity School of Architecutre & Planning	Prof. Sangeeta Bagga Mehta,Associate Professor, Chandigarh College of Architecture, Chandigarh
189	Sanjay Gupta	Planning	AUG 2014-17	Dr.S K Gupta, Professor, Amity School of Architecutre & Planning	Prof. Sangeeta Bagga Mehta,Associate Professor, Chandigarh College of Architecture, Chandigarh
190	Pragnaya Prakash	Planning	JAN 2015-18	Dr.S K Gupta, Professor, Amity School of Architecutre & Planning	Prof. Sangeeta Bagga Mehta,Associate Professor, Chandigarh College of Architecture, Chandigarh
191	Simpi Mehta	Chemistry	AUG 2012-15	Dr Seema R Pathak, Professor, Amity School of Applied Science	Not Yet alloted
192	Jyoti Verma	Physics	AUG 2012-15	Dr. Sungeeta Singh, Professor, Amity School of Applied Science	Not Yet alloted
193	Anupam Vyas	Physics	AUG 2012-15	Dr Ranjeet Kr. Brajpuria, Associate Professor, Amity School of Applied Science	Not Yet alloted
194	Seema Sharma	Physics	AUG 2013-16	Dr Vijay Kumar, Associate Professor, Amity School of Applied Science	Dr Nitin Bhardwaj,
195	Deepali Suhas Sarode	Mathematics	AUG 2014-16	Dr. Sungeeta Singh, Professor, Amity School of Applied Science	Dr Renu Tuli, Assistant Professor, ASET Bijwasn
196	Pinky Yadav	Physics	AUG 2014-17	Dr. Ayana Bhaduri, Assistant Professor, Amity School of Applied Science	Dr. Ankush Vij, Assistant Professor, Amity School of Applied Science
197	Vidushi	Mathematics	AUG 2014-17	Dr. Subhra Das, Professor, Amity School of Applied Science	Dr. R K Malik, Professor,Amity School of Engnering of Technology
198	Ganaga Dhar Tiwari	Mathematics	AUG 2014-17	Dr. Raminder Gill , Assistant Professor, Amity School of Applied Science	Prof. B R K Gupta, Pfo, HOD of Applied Physics, GLA University, Mathura
199	Reeta Bhardwaj	Mathematics	AUG 2014-17	Dr. Vijay Kumar, Associate Professor, Amity School of Applied Science	Dr T P Singh
200	Kuldeep	Mathematics	AUG 2014-17	Dr. Sungeeta Singh, Professor, Amity School of Applied Science	Dr Sudhir Kumar Chauhan, Assistant Professor, ASET Bijwasn
201	Nirmla Devi	Chemistry	JAN 2015-17	Dr. Joydeep Dutta, Professor, Amity School of Applied Science	Not Yet alloted
202	Amit Kalra	Mathematics	JAN 2015-18	Dr. Sungeeta Singh, Professor, Amity School of Applied Science	Dr. Shalini Bhaskar Bajaj (HOD DoCS, GD Goenka University)
203	Hardeep Kumar	Mathematics	JAN 2015-18	Dr. Sungeeta Singh, Professor, Amity School of Applied Science	Not Yet alloted
204	Kavita Kumari	Physics	JAN 2015-18	Dr. B N Tiwari	Not Yet alloted
205	Rakesh Kumar	Chemistry	JAN 2015-18	Dr Seema R Pathak , Professor, Amity School of Applied Science	Dr. BK Singh Dept. of Chemistry, New Delhi
206	Manisha Sharma	Bio Chemistry	AUG 2015-18	Dr. Sudip Majumder, Assistant Professor, Amity School of Applied Science	Dr. Anurag Sharma, Assistant Professor, Amity School of Applied Science
207	Nisha	Mathematics	AUG 2015-17	Dr. Sunita Daniel, Assistant Professor, Amity School of Applied Science	Dr. Vivek Kumar Aggarwal, Delhi Tech. University
208	Vikasdeep Yadav	Mathematics	AUG 2015-18	Dr. Nahid Fatima, Assistant Professor, Amity School of Applied Science	Not Yet alloted
209	Chanchal	Mathematics	AUG 2015-18	Dr. Sungeeta Singh, Professor, Amity School of Applied Science	Dr Renu Tuli, Assistant Professor, ASET Bijwasn
210	Manisha Mann	Chemistry	AUG 2015-18	Dr Seema R Pathak, Professor, Amity School of Applied Science	Dr. SK Shukla Amity Unveristy Noida
211	Priyanka	Physics	JAN 2016-19	Dr. Sunita Nagi, Assistant Professor, Amity School of Applied Science	Not Yet alloted
212	Sunil Bhardwaj	Mathematics	JAN 2016-19	Dr. Vijay Kumar, Associate Professor, Amity School of Applied Science	Not Yet alloted

RESEARCH SCHOLARS

213	Anuradha	Physics	AUG 2016-20	Dr. R.K Thakur, Professor, Amity School of Applied Science	Not Yet alloted
214	Amit Kumar Gupta	Physics	JAN 2016-19	Dr. R.K Thakur, Professor, Amity School of Applied Science	Not Yet alloted
215	Birajpal Singh	Bio Chemistry	JAN 2016-19	Dr. Anurag Sharma, Assistant Professor, Amity School of Applied Science	Not Yet alloted
216	Seema	Physics	JAN 2016-19	Dr. Chander Shekhar, Senior Lecturer, Amity School Of Appiled Secince	Not Yet alloted
217	Rakhi Yadav	Mathematics	AUG 2016-20	Not Yet alloted	Not Yet alloted
218	Pratibha Sharma	Chemistry	AUG 2016-19	Not Yet alloted	Not Yet alloted
219	Monika	Mathematics	AUG 2016-19	Not Yet alloted	Not Yet alloted
220	Jack Urombo	Mathematics	JAN 2017-21	Dr. AP Gupta Head- Center for Polymer Technology, Amity School Of Appiled Secince	Not Yet alloted
221	Manisha Rathi	Physics	JAN 2017-21	Not Yet alloted	Not Yet alloted
222	Nunu Yadav	Mathematics	JAN 2017-20	Not Yet alloted	Not Yet alloted
223	Sameer	Forensic Science	JAN 2017-20	Not Yet alloted	Not Yet alloted
224	Priyanka	Chemistry	JAN 2017-20	Not Yet alloted	Not Yet alloted
225	Harish Kumar	Mathematics	JAN 2017-21	Not Yet alloted	Not Yet alloted
226	Ishfaq Ahamd Ahanger	Biochemistry	JAN 2017-20	Not Yet alloted	Not Yet alloted
227	Ravi Rathi	Chemistry	JAN 2017-21	Not Yet alloted	Not Yet alloted
228	Sakshi Gupta	Advanced Discrete Mathematics and Fuzzy systems	JAN 2017-20	Not Yet alloted	Not Yet alloted
229	Anju Kumari	Physics	JAN 2017-21	Not Yet alloted	Not Yet alloted
230	Hemant Ghandhi	Mathematics	JAN 2017-21	Not Yet alloted	Not Yet alloted
231	Preeti	Physics	JAN 2017-22	Dr. ChanderShekhar, Assistant Professor,ASAS	Not Yet alloted
232	Sujata Kumari	Chemistry	AUG 2017-20	Not Yet alloted	Not Yet alloted
233	Aarti Tomar	Forensic Science	AUG 2017-20	Not Yet alloted	Not Yet alloted
234	Rajiv	Physics	AUG 2017-20	Not Yet alloted	Not Yet alloted
235	Rinkal	Forensic Science	JAN 2018-21	Not Yet alloted	Not Yet alloted
236	Jyotsana Thakur	Mass Communication	AUG 2012-15	Dr. Sushma Gandhi, Professor, Amity School of Communication	Dr. Rachna Tripathi Ass. Professor, LSR College
237	Sonal Kundu	Mass Communication	AUG 2012-15	Dr. Sushma Gandhi, Professor, Amity School of Communication	Dr. Madhu Deep Ass.Prof. Kurukshetra University.
238	Shalini Khurana	Mass Communication	AUG 2012-15	Dr. Sushma Gandhi, Professor, Amity School of Communication	Dr. Rachna Kachaut, Asso. Professor, Hamachal University
239	Inderjit singh	Mass Communication	AUG 2013-16	Dr. Sushma Gandhi, Professor, Amity School of Communication	Dr. Ranveer
240	Manoj Kumar	Mass Communication	AUG 2013-16	Dr. Sushma Gandhi, Professor, Amity School of Communication	Dr. G.B singh, Professor Film and Television Institute of India
241	Sam Vinay Rao	Mass Communication	JAN 2014-17	Dr. Pooja Rana, Professor, Amity School of Communication	Dr Anubhuti Yadav, Associate Professor & Head, IIMC
242	Rusha Mudgal	Mass Communication	AUG 2014-17	Dr. Pooja Rana, Professor, Amity School of Communication	Dr. Ravi K Dhar
243	Rahul Kushwaha	Mass Communication	JAN 2015-18	Dr. Sushma Gandhi, Professor, Amity School of Communication	Dr. Manoj Dayal, Professor, GJU Hisar
244	Jhimli Sarkar	Journalisma	JAN 2017-21	Dr. Pramod Saran Bhatnagar , Professor, Amity School of Communication	Dr. CK Singh Assistant Professor. Amity University Mumbai
245	Mahesh Kumar	Communicatio	JAN 2017-20	Dr. Francis Arackal Thummy,	Not Yet Decided

RESEARCH SCHOLARS

		ns		Professor, Amity School of Communication	
246	Gurleen Kaur Hans	Communications	JAN 2017-21	Dr. Pooja Rana, Professor, Amity School of Communication	Not Yet Decided
247	Esha Sinha	Journalism & Mass Comm.	AUG 2017-21	NA	NA
248	Shikha Mehmi	Journalism & Mass Comm.	AUG 2017-21	NA	NA
249	Chandan Kumar	Journalism & Mass Comm.	JAN 2018-21	NA	NA
250	Aarti Dawra	Economics	JAN 2015-18	Dr. Meenal Sharma, Associate Professor. Amity School of Economics	Dr. Gurendra N Bhardwaj ,Associate Professor,NIIT University, Neemrana (RJ)
251	Shweta Nanda	Economics	AUG 2015-18	Dr. Meenal Sharma, Associate Professor. Amity School of Economics	Not alloted
252	Vipul Singh	Economics	JAN 2016-19	Dr. Meenal Sharma, Associate Professor. Amity School of Economics	Not alloted
253	Neha Goyal	Economics	JAN 2016-19	Dr. Meenal Sharma, Associate Professor. Amity School of Economics	Not alloted
254	Anuja Sharma	Economics	AUG 2016-20	Dr. Meenal Sharma, Associate Professor. Amity School of Economics	Not alloted
255	Vani Aggarwal	Economics	AUG 2016-19	Dr. Meenal Sharma, Associate Professor. Amity School of Economics	Dr. NK Ganguly, Former Director,Indian Council of Medical Research
256	Veeranna Channashettar	Agriculture Science	AUG 2014-17	Dr Shaili S Nigam, Associate Professor Amity School of Earth & Enviroment Science	Prof. Banwari Lal, HOD Environmental Biotechnology Division, Director-TERI-Research
257	Aakriti Verma	Environment	JAN 2015-18	Dr. Kushagra,Assistant Professor, Amity School of Earth & Enviroment Science	Dr. Kalpana Singh, Professor, Greater Noida Institute of Engineering & Technology
258	Sudeshna	Environment	JAN 2015-18	Dr. Kushagra,Assistant Professor, Amity School of Earth & Enviroment Science & Dr. Joydeep Dutta, Professor, Amity School of Applied Science	Not allotted
259	Neha Maheshwari	Environment	JAN 2016-18	Dr Shaili S Nigam, Associate Professor (ASEES)	Prof. I.S. Thakur, Professor, School of Environmental Science, JNU, New Delhi
260	Priyanka Yadav	Environment	AUG 2016-20	Dr. Deepika Pandey,,Assistant Professor, Amity School of Earth & Enviroment Science	Not allotted yet
261	Mahesh Kothiyal	Envirmental Science	AUG 2017-21	Dr. Parveen Kumar,Assistant Professor, Amity School of Earth & Enviroment Science	Not allotted yet
262	Sunil Kumar	Environmental Science	JAN 2017-21	Not allotted	Not allotted
263	Manoj Kumar	Environmental Science	AUG 2017-21	Dr. Sudeep Shukla, ,Assistant Professor, Amity School of Earth & Enviroment Science	Not allotted yet
264	Amit Sharma	Maths	JAN 2014-17	Dr. A K Raghav, Professor,Amity School of Engnering of Technology	Not allotted yet
265	Charu Jain	ECE	AUG 2012-15	Dr. Priti Singh , Professor,Amity School of Engnering of Technology	Dr. Ajay Rana, Professor, ASET, AUUP
266	Yogesh Junega	ECE	JAN 2012-15	Dr Rekha Aggarwal, Professor,Amity School of Engnering of Technology	NA
267	Virender Mehla	ECE	JAN 2012-15	Dr Rekha Aggarwal, Professor,Amity School of Engnering of Technology	NA
268	Neeraj Gupta	ECE	JAN 2014-17	Dr. A K Raghav l, Professor,Amity School of Engnering of Technology	Dr. Patel Janakkumar Baldevbhai, Professor,Amity School of Engnering of Technology

RESEARCH SCHOLARS

269	Anil Kumar	ECE	JAN 2014-17	Dr. Priti Singh , Professor,Amity School of Engnering of Technology	Dr. Ranjeet Brajpuria, Associate Professor, Amity School of Applied Science
270	Mahendra Singh Meena	ECE	JAN 2014-17	Dr. Priti Singh , Professor,Amity School of Engnering of Technology	Dr. Ajay Rana, Professor, ASET, AUUP
271	Ganesh Gupta	MAE	JAN 2014-17	Dr. A K Raghav l, Professor,Amity School of Engnering of Technology	Dr. Shalendra, Professor, ASET, AUUP
272	Meenu	CSE	JAN 2014-17	Dr. Vivek Jaglan, Associate Professor,Amity School of Engnering of Technology	Not yet decided
273	Rupender Singh	MAE	JAN 2014-17	Dr. A K Raghav l, Professor,Amity School of Engnering of Technology	Not yet decided
274	Akshat Agarwal	ECE	JAN 2014-17	Dr. Priti Singh , Professor,Amity School of Engnering of Technology	NA
275	Alka	CIVIL	JAN 2014-17	Dr. R K Malik, Professor,Amity School of Engnering of Technology	NA
276	Deepak Kumar	ECE	AUG 2015-18	Dr. Vivek Jaglan, Associate Professor,Amity School of Engnering of Technology	NA
277	Rikhil Nagpal	MAE	JAN 2014-17	Dr. A K Raghav l, Professor,Amity School of Engnering of Technology	Not yet decided
278	Rashmi Gupta	CSE	JAN 2014-17	Dr. Vivek Jaglan, Associate Professor,Amity School of Engnering of Technology	Not yet decided
279	Shaik Dastagiri Basha	MAE	JAN 2014-17	Dr. A K Raghav l, Professor,Amity School of Engnering of Technology	NA
280	Mr.Ved Prakash	ECE	AUG 2014-17	Dr. Priti Singh , Professor,Amity School of Engnering of Technology	Dr Sunita Kumawat, Assistant Professor, Amity School of Applied Science
281	Ms.Sonal Dahiya	ECE	AUG 2014-17	Dr. Priti Singh , Professor,Amity School of Engnering of Technology	Dr Sunita Kumawat, Assistant Professor, Amity School of Applied Science
282	Ms. Jagan deep	ECE	AUG 2014-17	Dr. Patel Janakkumar Baldevbhai, Professor,Amity School of Engnering of Technology	Not yet decided
283	Deepika	IT	JAN 2015-18	Dr. Shalini Bhasker Bajaj, Professor,Amity School of Engnering of Technology	NA
284	Abhishek Jain	ECE	AUG 2014-17	Dr. Patel Janakkumar Baldevbhai, Professor,Amity School of Engnering of Technology	Not yet decided
285	Shruti Ghand Karkra	ASET	JAN 2015-18	Dr. Patel Janakkumar Baldevbhai, Professor,Amity School of Engnering of Technology	Not yet decided
286	Varsha Bhatia	IT	JAN 2015-18	Dr. Vivek Jaglan, Associate Professor,Amity School of Engnering of Technology	Dr Sunita Kumawat, Assistant Professor, Amity School of Applied Science
287	Neha Bhateja	CSE	JAN 2015-18	Dr. Sunil Sikka,Associate Professor,Amity School of Engnering of Technology	Not yet decided
288	Manoj Kumar Pandey	ECE	JAN 2015-18	Dr. Patel Janakkumar Baldevbhai, Professor,Amity School of Engnering of Technology	Not yet decided
289	Manjeet Kaur	ECE	JAN 2015-18	Dr. Patel Janakkumar Baldevbhai, Professor,Amity School of Engnering of Technology	Not yet decided
290	Patel Nilamkumari Ranchhodbhai	IT	JAN 2015-18	Dr. Patel Janakkumar Baldevbhai, Professor,Amity School of Engnering of Technology	Not yet decided
291	Puneet kumar	CSE	JAN 2015-18	Dr. Sunil Sikka,Associate Professor,Amity School of Engnering of Technology	NA
292	Barkha Yamdagni	IT	AUG 2015-17	Dr. Parveen Kumar	NA
293	Gaurav Garg	CSE	JAN 2015-18	Dr. Sunil Sikka,Associate Professor,Amity School of Engnering of Technology	NA
294	Anand Sharma	Engineering	JAN 2015-18	Dr. Shiv Sharma, Assistant Professor,Amity School of	NA

RESEARCH SCHOLARS

				Engnering of Technology	
295	Pramneet Kaur	ECE	JAN 2015-18	Dr. Patel Janakkumar Baldevbhai, Professor,Amity School of Engnering of Technology	NA
296	R. Sathiya Narayana Sathis	ECE	AUG 2015-18	Dr. Priti Singh , Professor,Amity School of Engnering of Technology	NA
297	Priyanka Makkar	CSE	AUG 2015-18	Dr. Sunil Sikka,Associate Professor,Amity School of Engnering of Technology	Not yet decided
298	Tarun Bala	CSE	AUG 2015-18	Dr. Vivek Jaglan, Associate Professor,Amity School of Engnering of Technology	Not yet decided
299	Vikas Tomar	IT	AUG 2015-17	Dr. Vivek Jaglan, Associate Professor,Amity School of Engnering of Technology	Not yet decided
300	Archana Augustine	IT	AUG 2015-17	Dr. Vivek Jaglan, Associate Professor,Amity School of Engnering of Technology	Dr. Bura Prasad, Professor, Amity Instuite of Biotechnology
301	Mohd. Asim	IT	AUG 2015-18	No Mantion in Result	NA
302	Raja Venkatesh R	IT	AUG 2015-18	Dr. Sunil Sikka,Associate Professor,Amity School of Engnering of Technology	NA
303	Neha	IT	AUG 2015-18	Dr. Vivek Jaglan, Associate Professor,Amity School of Engnering of Technology	Prof S K Gupta, Dean & Director, Amity School of Architecutre & Planning
304	Shalini	IT	AUG 2015-18	Dr. Brijesh Kumar, Assistant Professor,Amity School of Engnering of Technology	Dr. Umang,Assistant Professor, Institute of Technology and Science, Mohan Nagar, Ghaziabad
305	Poonam	Engineering	AUG 2015-18	Dr. Patel Janakkumar Baldevbhai, Professor,Amity School of Engnering of Technology	NA
306	Nisha Charya	CSE	AUG 2015-18	Dr. Priti Singh , Professor,Amity School of Engnering of Technology	Not yet decided
307	Ankit Tiwari	Engineering	JAN 2016-18	Dr. A K Raghav , Professor,Amity School of Engnering of Technology	Not yet decided
308	Robinson	Engineering	JAN 2016-19	Dr. P.B Sharma, Professor,Amity School of Engnering of Technology	Not yet decided
309	Lucky Sharma	Engineering	JAN 2016-19	Dr. Khushboo Tripathy, Assistant Professor,Amity School of Engnering of Technology	Not yet decided
310	Jaya Prakash Swain	Engineering	JAN 2016-19	Dr. A K Raghav , Professor,Amity School of Engnering of Technology	Not yet decided
311	Ahmad Siyar Zia	Engineering	JAN 2016-19	Dr. Sunil Sikka,Associate Professor,Amity School of Engnering of Technology	NA
312	Rajesh Priyadarshi	Engineering	JAN 2015-18	Dr. A K Raghav , Professor,Amity School of Engnering of Technology	Not yet decided
313	Rohit Goel	Engineering	AUG 2016-20	Dr. Patel Janakkumar Baldevbhai, Professor,Amity School of Engnering of Technology	Not yet decided
314	Sanjay Kumar	Engineering	AUG 2016-20	Dr. Shiv Sharma, Assistant Professor,Amity School of Engnering of Technology	NA
315	Ratna Thakur	Engineering	AUG 2016-20	Dr. Priti Singh , Professor,Amity School of Engnering of Technology	Not yet decided
316	Reema	Engineering	AUG 2016-20	Dr. Brijesh Kumar, Assistant Professor,Amity School of Engnering of Technology	NA
317	Mukta Goel	Engineering	AUG 2016-20	Dr. Shalini Bhasker Bajaj, Professor,Amity School of Engnering of Technology	Not yet decided
318	Akshaya Kubba	IT	AUG 2016-19	Dr. Shalini Bhasker Bajaj, Professor,Amity School of Engnering of Technology	NA
319	Ankit Dhamija	Engineering	AUG 2016-20	Dr. Sunil Sikka,Associate Professor,Amity School of Engnering of Technology	Not yet decided

RESEARCH SCHOLARS

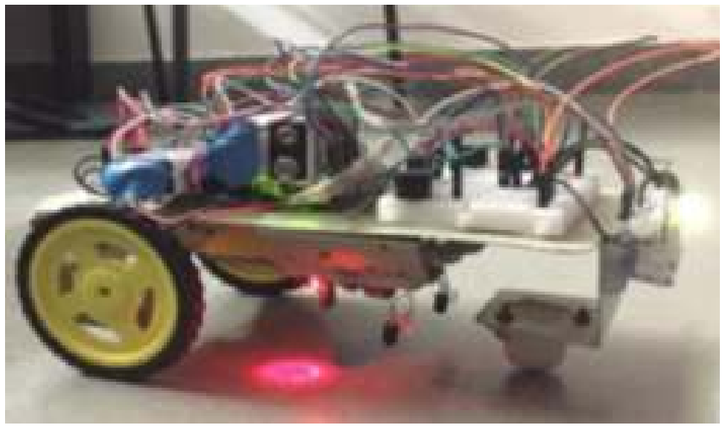
320	Geet Shandu	Engineering	AUG 2016-20	Dr. Sunil Sikka,Associate Professor,Amity School of Engnering of Technology	Not yet decided
321	Zvikomborero Lazarus Duri	Mechnical Engg.	JAN 2017-21	Dr. Shiv Sharma, Assistant Professor,Amity School of Engnering of Technology	Not yet decided
322	Prudence Kadeby	Computer Science	JAN 2017-21	Dr. Vikash Thada, Associate Professor,Amity School of Engnering of Technology	Not yet decided
323	Edmund Shingirayi Maputi	Mechnical Engg.	JAN 2017-21	Dr. Shiv Sharma, Assistant Professor,Amity School of Engnering of Technology	Not yet decided
324	Innocent Mapanga	Computer Science	JAN 2017-21	Dr. Khushboo Tripathy, Assistant Professor,Amity School of Engnering of Technology	Not yet decided
325	Kudzanayi Chiteka	Mechanical Engg.	JAN 2017-21	Dr. Shiv Sharma, Assistant Professor,Amity School of Engnering of Technology	Not yet decided
326	Fungayi Donewell Mukoko	Computer Science	JAN 2017-21	Dr. Vikash Thada, Associate Professor,Amity School of Engnering of Technology	Not yet decided
327	Rujeko Masike	Electronics & Communicatio n Engg.	JAN 2017-21	Dr. Patel Janakkumar Baldevbhai, Professor,Amity School of Engnering of Technology	Not yet decided
328	Akhil Kaushik	Engineering	JAN 2017-21	Dr. Vikash Thada, Associate Professor,Amity School of Engnering of Technology	Not yet decided
329	Satvika	Engineering	JAN 2017-21	Dr. Vikash Thada, Associate Professor,Amity School of Engnering of Technology	Not yet decided
330	Swati	Engineering	JAN 2017-21	Dr. Shalini Bhasker Bajaj, Professor,Amity School of Engnering of Technology	Not yet decided
331	Sugandhi Midha	Engineering	JAN 2017-21	Dr. Khushboo Tripathy, Assistant Professor,Amity School of Engnering of Technology	Not yet decided
332	Dilawar Singh	Engineering	JAN 2017-21	Dr. Vikash Thada, Associate Professor,Amity School of Engnering of Technology	Not yet decided
333	Anil Soharu	Engineering	JAN 2017-21	Dr. R K Malik, Professor,Amity School of Engnering of Technology	Not yet decided
334	Rojaleena Das	Mechanical Engineering	AUG 2017-20	Not Yet Decided	Not yet decided
335	Kanika Dhingra	CSE	AUG 2017-21	Dr. Shalini Bhasker Bajaj, Professor,Amity School of Engnering of Technology	Not yet decided
336	Manish Kumar Bharti	Mechanical Engineering	AUG 2017-21	Dr. A K Raghav l, Professor,Amity School of Engnering of Technology	Not yet decided
337	Sonia Chalia	Mechanical Engineering	AUG 2017-21	Dr. A K Raghav l, Professor,Amity School of Engnering of Technology	Not yet decided
338	Taufeeque Hasan	Mechanical Engineering	AUG 2017-21	Not Yet Decided	Not yet decided
339	Nishu	CSE	AUG 2017-21	Dr. Khushboo Tripathy, Assistant Professor,Amity School of Engnering of Technology	Not yet decided
340	Mardikar Sarika Arun	Engineering	JAN 2018-22	Not yet decided	Not yet decided
341	Richa	Engineering	JAN 2018-22	Not yet decided	Not yet decided
342	Swati Juneja	Engineering	JAN 2018-22	Not yet decided	Not yet decided
343	Harinder pal	Fashion Technology	AUG 2015-18	Dr. Deependra Sharma, Associate Professor, Amity Business School, Associate Professor,	Not yet decided
344	Pooja Malik	English	JAN 2014-17	Dr. Parul Yadav, Assistant Professor,Amity School of Fine Arts	Dr. Anamika, Associate Professor, Delhi University
345	Seema Sehrawat	English	JAN 2016-19	Dr. Parul Yadav, Assistant Professor,Amity School of Fine Arts	NA

RESEARCH SCHOLARS

346	Ruchika Sinha	History	AUG 2016-19	Dr. Kiran Devendra, Professor,Amity School of Fine Arts	NA
347	Garima	English	AUG 2016-20	Dr. H K Jha, Professor,Amity School of Fine Arts	NA
348	Sangeeta Tomar	History	JAN 2016-19	Dr. Kiran Devendra, Professor,Amity School of Fine Arts	NA
349	Anita Aggarwal	History	AUG 2016-20	Dr. Kiran Devendra, Professor,Amity School of Fine Arts	NA
350	Divya Bhardwaj	English	JAN 2017-20	Dr. S K Jha, Professor,Amity School of Fine Arts	NA
351	Priti Sharma	English	JAN 2017-21	Dr. S K Jha, Professor,Amity School of Fine Arts	NA
352	Savita Chaurasiya	English	JAN 2017-21	Dr. Jaishree Umale, Associate Professor,Amity School of Fine Arts	NA
353	Lalit Kumar Yadav	English	JAN 2017-20	Dr. S K Jha, Professor,Amity School of Fine Arts	NA
354	Parul	English	JAN 2017-21	Dr. H K Jha, Professor,Amity School of Fine Arts	NA
355	P. nagalatha	History	JAN 2017-21	Dr. Kiran Devendra, Professor,Amity School of Fine Arts	NA
356	Shanu Anjankumar Sahay	History	JAN 2017-20	Dr. Kiran Devendra, Professor,Amity School of Fine Arts	NA
357	Jaivinder Singh	English	AUG 2017-21	Dr. Sunil Mishra, Associate Professor,Amity School of Fine Arts	NA
358	Priyanka 'D' Rozario	English	AUG 2017-20	Dr. Sunil Mishra, Associate Professor,Amity School of Fine Arts	NA
359	Angel George	History	AUG 2017-20	Dr. Kiran Devendra, Professor,Amity School of Fine Arts	NA
360	Sushil Malik	History	AUG 2017-20	Dr. Kiran Devendra, Professor,Amity School of Fine Arts	NA
361	Neenu	Atmospheric Science and Tachnology	JAN 2018-21	Not yet decided	Not yet decided
362	Kalpana	Atmospheric Science and Tachnology	JAN 2018-21	Not yet decided	Not yet decided

HIGHLIGHTS OF STUDENTS R&D EFFORTS

VOICE CONTROLLED SMART CAR



Developed by:
Mr. Jeevesh Awal, Mr. Piyush Raj,
Mr. Arminder Singh, Ms. Ashu Rana
Computer Science Engineering & Bachelors of Computer Applications

DESCRIPTION:

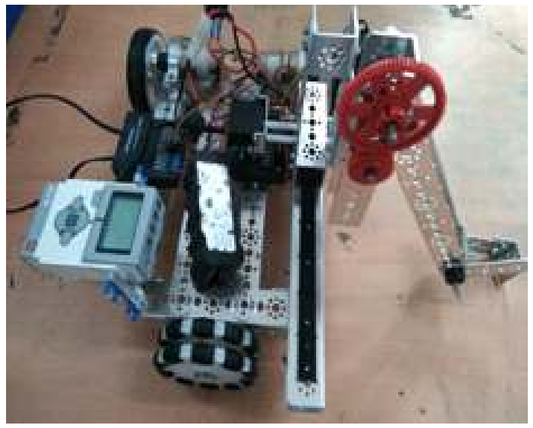
This project consists of a smart, voice controlled robot car using Arduino Uno. Voice controlled robotic system is controlled through voice commands received via android device. The integration of control unit with Bluetooth device is achieved using a Bluetooth module to capture and read the voice commands. It operates on the following voice commands such as: Forward, backward, left, right, head light on /off and so on.

The robotic vehicle operates as per the command received via android device, for this Arduino is integrated in the system. The controlling device may be any smart phone having an Android OS. The transmitter usesan android application required for transmitting the data. The receiver end reads these commands and interprets theminto controlling the robotic vehicle. The android device sends commands to move the vehicle in forward, backward, right and left directions. After receiving the commands, Arduino operates the motors in order to move the vehicle in four directions. The communication between android device and receiver is sent as serial communication data. Arduino program is designed to move the motor through a motor driver circuit as per the commands sent by android device.

APPLICATIONS:

- Features collision prevention technology, that is, it can sense objects in front of it.
- The system then reacts (either with driver assistance or automatically) to possible crash hazards.This includes priming brake systems, warning the driver and applying gentle or more aggressive braking.

ROBOTIC ARM (TETRIX)



Developed by:
GangeshTripathi
Computer Science and Engineering

Guide:
Dr. Sunil Sikka
Computer Science and Engineering

DESCRIPTION:

This report is a Robotic Arm with Tetrix and Lego kit,A Robotic arm is made by Tetrix and Lego kit and also a programmable manipulator. It is important that the final robot design be easy to reproduce and mirror. This is facilitated by using TETRIX components whenever possible. TETRIX is a component system originally designed for use in high school robotics competitions. The system consists of a variety of prefabricated aluminum components that are designed to be easily modified and connected to one another. Also includes high torque DC gear motors, servos, and motor drivers. These components are compatible with the LEGO Mind storms system. The LEGO system not only includes components for building robots, peripherals in addition to a controller and programming environment. Together these systems allow a designer to quickly build robot prototypes with little or no fabrication. Robotic arm is controlled by Ev3 microcontroller that control the arm and motor.

APPLICATIONS:

- Access unevenly placed parts (for scanning, selecting...)
- Pick and place (most industries, a lot for food industry)
- Third hand: the arm carries the object and the operator can work on it easily

HIGHLIGHTS OF STUDENTS R&D EFFORTS

AMBULATORY QUADCOPTER

Developed by:
Vatsala Singh, Drishti Nanda, Ananya Mathur
Department of Biomedical Engineering

Guide:
Mr. YashilHanda, Department of Biomedical Engineering
Mr. Manish Kumar Bharti, Department of Aerospace Engineering

DESCRIPTION:

Advances in technology have led to the increased use of drone for medical applications in the field of telemetry, drug delivery and sample collection. A drone or an unmanned aerial vehicle is essentially a small sized aircraft without a human aboard. A drone is operated either under remote control by a human operator or fully or semi-automated by an on-board computer. The aim of this project is to develop a quadcopter that provides first aid to the accident victims in a remote location. The quadcopter will be a global positioning system (GPS) guided surveillance device used by primary healthcare providers of particular location. It will carry supplies such as water, pain killers and a first-aid kit. The quadcopter will be semi-autonomous vehicle controlled by an emergency healthcare provider from a distant location. There will also an integrated camera, speaker and a microphone for patient-operator communication. The objective fulfilled by the quadcopter is reducing the panic factor for the patient to a certain extent, provide first aid and calling for help. The use of such ambulatory quadcopters in healthcare delivery will be a new phase in the area of telemedicine.

APPLICATIONS:

- First-aid quadcopter providing immediate help to accident victims or people trapped in otherwise inaccessible locations
- Minimum reach time to affected person or area as compared to ambulances
- Can be equipped with audio-video conferencing systems for telemedicine services
- Can be equipped with GPS tracking for precise location
- Can transport medical kits, blood samples and medical equipment like defibrillator, etc.
- Capable of landing in adverse and hostile conditions as it does not need any proper launching and landing pads
- Can also be utilized in surveillance, security, monitoring, etc.
- Radio controlled vehicle hence no threat to pilots in hostile areas.
- Easy construction, utilization, maintenance and repair.

RODIO CONTROLLED AIRCRAFT

Developed by:
Deepak Deshwal, Suraj Pratap Singh (B. Tech. (AE), 8th Semester)
Guide:
Mr.Manish K. Bharti & Ms. Sonia Chalia

DESCRIPTION:

The area of RC aircraft and Unmanned Drones is one of the most preferred areas amongst the aerospace enthusiasts and hobbyists. The project facilitated the students to actually learn and gain hands-on experience about the designing, construction and working of RC planes along with the functioning of various avionics systems and instruments.

Designing and simulation software are extensively utilized to initially design the RC aircraft and the prepared design had served as a foundation of structural molding of the plane. The basic structure of the plane was then industrially molded based on the design.

TECHNICAL SPECIFICATIONS

S. No	Parameter	Details/Remarks
1	Aircraft Scale-down Model	Cessna 150
2	Wingspan	127 cm
3	Length	89 cm
4	Structural Material	Expanded Polypropylene (EPP) Foam
5	Structural Weight	1100 g
6	Battery Weight	190 g
7	Gross Take-off Weight	1290 g
8	Thrust Generated (@ 7500 rpm)	1400 g
9	Endurance (fully charged battery)	12-15 minutes
10	Main Wing Type	Shoulder wing, Detachable
11	Landing Gear	Tricycle Arrangement with Nose Landing Gear, Detachable

MAIN FEATURES:

- Controlled by a radio transmitter up to a range of 250-300 m.
- Fly for duration of 12-15 minutes
- Perform aerobatics

HIGHLIGHTS OF STUDENTS R&D EFFORTS

GESTURE BASED WHEEL CHAIR WITH OBSTACLE DETECTION AND EMERGENCY RESPONSE

Developed by:
Lone Aamir Manzoor
Department of Biomedical Engineering

Guide:
Ms. SakshiSethi
Department of Biomedical Engineering

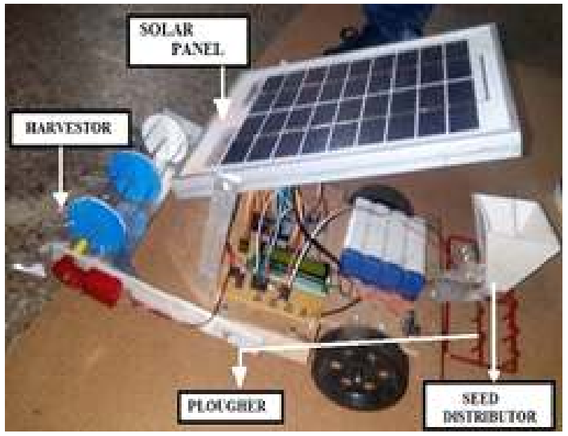
DESCRIPTION:

This prototype aims to develop a wheel chair control which is useful to the physically disabled person with their hand gesture recognition using Acceleration technology. Tremendous leaps have been made in the field of wheelchair technology. However, even these significant advances haven't been able to help quadriplegics navigate wheelchair unassisted. It is wheelchair which can be controlled by simple hand gestures. It employs a sensor which controls the wheelchair hand gestures made by the user and interprets the motion intended by user and moves accordingly. In Acceleration, we have Acceleration sensor. When we change the direction, the sensor registers values are changed and that values are given to microcontroller. Depending on the direction of the Acceleration, microcontroller controls the wheel chair directions like LEFT, RIGHT, FRONT, and BACK. Apart from that the project can help in obstacle detection to avoid any injury to the person using ultrasonic sensors; it also consists of an emergency beep button which can raise an alarm in case of an emergency.

FEATURES:

- **Accelerometer Technology:** Some patients that cannot manipulate the wheelchair with their arms due to a lack of force or psychomotor problems in the superior members require electric wheelchair. The wheelchair is operated with the help of accelerometer, which in turn controls the wheelchair with the help of hand gesture. The wheelchair moves front, back, right and left. Due to which disabled and partially paralyzed patient can freely move.
- **Obstacle Detection:** In order to avoid accidents and injuries to the patient, ultrasonic sensors are mounted on the front side to avoid collision with the obstacles at a certain range.
- **Emergency Stop:** In any case if the person dismounts from the wheel chair, or the wheel got tilted the accelerometer will abruptly stop working so that the gesture enabled system will come to a halt.
- **Alarm:** It can raise an alarm in case of emergencies, for that a buzzer is mounted on it so that the people nearby can hear the same and come to the rescue.

AGRO-BOT: AN AUTONOMOUS ROBOT



Developed by:
Mr. GangeshTripathi, Mr. Shubham, Mr. Sagar Ms. Neha Kaushik
Electrical and Electronics Engineering

Guide:
Mr. Manoj Pandey
Electronics and Communication Engineering

DESCRIPTION:

AGRO-BOT is an advance agriculture robot. The working of an autonomous robot is based on field parameters i.e. length and width. Prototype of an autonomous AGRO-BOT is presented which is designed for multitasking such as seed sowing, ploughing and harvesting. It is a four-wheeled vehicle which is controlled by ATMEGA328 microcontroller (Arduino) as master controller, power supply is provided by solar panel which is eco-friendly to the environment. It will also help in decreasing the use of non-renewable sources of energy and will not pollute the environment. Other accessories are slaves performing specific operations. Its working is based on the precision agriculture which enables efficient seed sowing at optimum depth and distances between crops and their rows.

APPLICATIONS:

- Crop scouting – Accurate and timely data can be collected in an inexpensive manner with the presence of automated systems in the crop having sensors to evaluate health and status of the crop.
- Weed mapping - It is a method used for recording the density and position of various weed species using the automated machines.
- Robotic weeding -Several methods can be employed to kill the weeds. For example, the interface between the soil and the root is broken by tillage and wilting of weed plants.
- Micro spraying – In this, care should be taken not to damage the crop or disturb the soil while killing the weeds. This can be achieved using micro spray that releases very small amount of herbicide directly on the weed leaf. Automated machines can locate the position of an individual weed plant and spray the herbicide through a set of nozzles.
- Robotic irrigation – Water can be applied at variable rates over the predefined areas using a robotic irrigator developed in the form of a mechatronic sprinkler.

HIGHLIGHTS OF STUDENTS R&D EFFORTS

HMOS-HEAD CONTROLLED MOUSE FOR PERSON WITH DISABILITY

Developed by:
Ms Aditi Bhalla, Mr. Deepanshu, Ms. Shraddha
Mr. Madhavendra, Mr. Sujeet Kumar
Electrical and Electronics Engineering

Guide:
Mr. Arun Kumar, Ms. NishaCharaya
Electronics and Communication Engineering

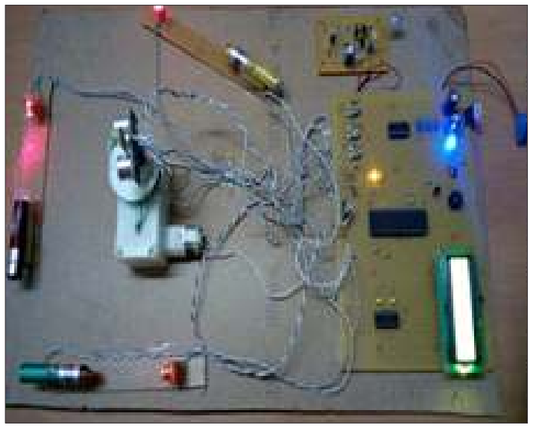
DESCRIPTION:

This project HMOS (Head Controlled Mouse for Person with Disabilities) is a human machine interface emulating function of a mouse for disabled or paralyzed and is basically for those people who cannot move their hand to access the computer screen. In our proposed method, there are two units one is transmitter unit which is placed on the user's head and second one is receiver unit which can be laptop or computer, the transmitter unit consists of the head-tilt sensor and an air blow/humidity sensor. The head tilt sensor uses an accelerometer ADXL 335 to detect the movement of the head. When the head of the user is tilted up/down or left/right, the reading from the accelerometer is subtracted from the value of a pre-defined reference point. The difference of the calculated reading determines the level of head tilt, the output of both the sensors is given to the ADC inputs of the microcontroller. After the signals are interpreted by the microcontroller, mouse instructions are sent to the computers. The processed digital information is transmitted to the PC through the USB port using a USB to TTL module.

APPLICATIONS:

- Paralyzed person just needs to wear the headset on which the sensors are mounted and they can easily start operating the computer.
- The interactive applications like gaming, swapping, page scrolling, can be done.

BORDER SECURITY SYSTEM



Developed by:
Mr. Lakshya, Mr. Bittu, Mr. Nitin, Mr. Prashant
Electrical and Electronics Engineering

Guide:
Mr. Neeraj Gupta & Ms. Manjeet Kaur
Electronics and Communication Engineering

DESCRIPTION:

This project presents an idea to secure the border in a simple and more reliable way, The proposed idea has a simple design and has a very high range, it covers a very large border area securing the border area from illegal entries, smuggling, illegal movement of weapon without much involvement of security forces near border. In this project, our propose was building a security system that can be implemented by using advance feature like obstacle detection, obstacle identification, distance sensing and activity tracking, and quick communication between the source area and control room. If obstacle enters the border it automatically detects the obstacle give warnings and send the record of activity to control room. Also it eliminates the enemy in more efficient and better way.

FEATURES:

- Long range (> 100km).
- Provides three layer protection
- Low power loss and low power consumption
- Quick communication between border and control room.
- Underground protection.

HIGHLIGHTS OF STUDENTS R&D EFFORTS

SOLENOID DC ENGINE

Developed by :
Prashant Panwar, Akshay Sharma, Gaurav Sharma
Dheeraj Thakran,Ashutosh Rana
Department of Mechanical Engineering

Guide:
Mr. Hardial Singh,
Department of Mechanical Engineering

DESCRIPTION:

A solenoid engine is based on electromagnetic field concept which is used to produce magnetic force to run the piston and that force is transferred to the connecting rod and ultimately it rotates crank shaft and that is how the engine delivers the required power. Electric current running in the solenoid induces magnetic field creating an electromagnet which attracts iron piston, hence creating reciprocating motion of piston. It can be used as an automobile engine like in an electric car, the maintenance cost would be less as compared to piston cylinder or motor based engine as solenoid has a less complicated working and less moving parts, almost negligible requirement of lubricants in engine. Amount of power developed is constant which not the case with fuel engines. Electric and hybrid vehicles are being sought as a substitute of conventional diesel or gasoline based vehicles in big cities as there is a growing concern over pollution and increased cost of petroleum based fuels.

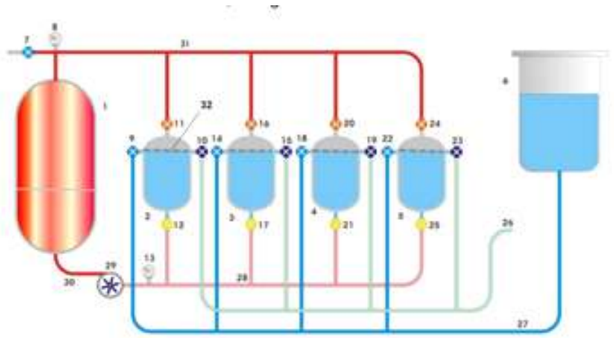
COMPONENT

- Solenoid coils (dc coil)
- DC Motor (12-18V), RPM (75-100)
- Bearing
- Crank shaft
- Chain and sprocket (440 mm and 28 Teeth)
- Wheel
- Wheel shaft
- Body frame (wooden)

FEATURES:

- Less running cost than an Engine
- Produce much more power & running capacity than battery car & bikes.
- It takes less amount of charge from battery in every revolution of crank shaft for few fractions of seconds.

ENERGY EFFICIENT BOILER SYSTEM



Patent No: 201611028618
Developed by:
Dr. A K Raghav, Amity University Haryana
Dr. Nadeem Khalil, Aligarh Muslim University

DESCRIPTION:

A novel low-cost low-maintenance industrial boiler system is disclosed. The disclosed boiler system is adapted to reduce the energy requirements as compared to the traditionally used of boiler systems. The disclosed boiler system employs a plurality of auxiliary feed tanks to supply the water to a main boiler unit through the low pressure water feed pump. Further, the small quantity of steam from the boiler unit is fed back into the plurality of auxiliary feedtanks to form a closed loop heat saving mechanism. A plurality of control valves is placed to control the flow of the water in the said disclosed boiler system. The water feed to the boiler unit is controlled by the plurality of automated control valves of the plurality of auxiliary tanks, making it a make-before- break-after water feeding system loop.

APPLICATIONS:

- It can be used to produce very high amount of steam.
- The steams generated by this boiler can be used to produce electricity.
- Steams can be used to drive mechanical engines which are based on steam and then energy produced by those engines can be used in many ways and can be converted to another form.
- It can to drive large turbines.

HIGHLIGHTS OF STUDENTS R&D EFFORTS

COMPRESSOR LESS PORTABLE REFRIGERATOR

Developed by:
Prateek, Partho, Shubham, Rishabh, Prem
Department of Mechanical Engineering

Guide:
Mr. AvinashDholiwal, Mr. Nitin Shyam
Department of Mechanical Engineering

DESCRIPTION:

This aim of the project is to design an apparatus which enables a simple Semiconductor Chip (also known as Peltier Chip) to cool the inner compartment of the box while getting hotter on the other side, but if the voltage terminals are reversed the cooling device can also be used as heating device.

The goal of this project is to make a portable cooling device which can cool things like water bottles, soft drinks etc. without the use of large refrigerator with compressor. This project also aims at providing a stable environment to chemical and other things that need not be stored in a refrigerator with compressor. We believe this project will be applicable for some useful operation and provide some advancement in technology.

APPLICATIONS:

- Domestic Household Refrigerator.
- Commercial Cold Storage.
- Cooling Tower of Nuclear Power Plant.
- Small Size ice boxes in vehicles.








RESEARCH GALLERY














RESEARCH GALLERY





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