

**Amity Academic Staff College**

**Organizes**

**Five days Faculty Development Program**

***“Advances in Teaching and Research in the Field of Disaster Resilience and Green Technology for Sustainable Development Goals”***

**(Under GURU-DAKSHTA Faculty Induction Programme)**

*(Environmental Consciousness and Sustainable Development Goals)*

**Date: 6<sup>TH</sup> to 10<sup>TH</sup> June 2022**

**PROGRAMME SCHEDULE**



## PROGRAMME SCHEDULE

<i>Day 1: 06/06/2022 (Monday)</i> <b>Inaugural Ceremony</b>	
10:15am-10:20am	Lighting of Lamp & Saraswati Vandana
10:25am-10:35am	Welcome and introduction by <i>Dr. Renu Dhupper, Joint coordinator, AIES, AUUP</i>
10:35am -10:45am	Few words by Prof. Tanu Jindal, Gp. Additional Pro Vice Chancellor (R&D), Amity University Uttar Pradesh
10:45am-10:55am	<b>Address by Prof. D. K. Bandyopadhyay</b> Chief Advisor FPO / Chairman, Amity Law School, Mentor, Amity Institute of Environmental Sciences, Amity University Uttar Pradesh, India
10:55am -11:05am	<b>Address by Prof (Dr.) Balvinder Shukla</b> Vice Chancellor, Amity University Uttar Pradesh, India
11:10am-11:20am	<b>Special Address by Shri Taj Hassan</b> Executive Director, NIDM
11:20am-11:35am	<b>Address by Guest of Honour Dr. Anisur Rahman</b> Professor & Director, UGC-Human Resource Development Centre, Jamia Millia Islamia, New Delhi
11:35am-11:55am	<b>Address by Guest of Honour Dr Manoj Kumar Patariya,</b> Association President: Society for Information Sciences, President: International Science Writers, Association Chair: AASSA Special Committee on SHARE (Science, Health, Agriculture, Risk & Environment), Former Advisor and Head, National Council of Science and Technology Communication, DST, New Delhi, India
11:55am-12:10pm	<b>Address by Chief Guest Prof. S. S. Bhakri,</b> Founder & Director, Institute of UN & UNESCO. Studies, New Delhi
12:10pm- 12:15pm	Vote of Thanks by Dr. Richa Dave Nagar, AIES AUUP
12:15pm-01:25pm	<b>LUNCH</b>

### **Program Coordinators:**

1. Dr. Renu Dhupper, Joint Coordinator, AIES, [rdhupper@amity.edu](mailto:rdhupper@amity.edu) 9810804964
2. Dr. Ambrina Sardar Khan AP-II, AIES, [askhan@amity.edu](mailto:askhan@amity.edu); 8586069760

### **Inaugural Session:**

The Five Days On-Line Faculty Development Programme On “Advances in Teaching and Research in the Field of Disaster Resilience and Green Technology and UN Sustainable Development Goals” (Under GURU-DAKSHTA Faculty Induction Programme (Module 9: Environmental Consciousness and Sustainable Development Goals) was started from June 6, 2022. Total 269 people have registered for the event and 171 attended the event on the first day.





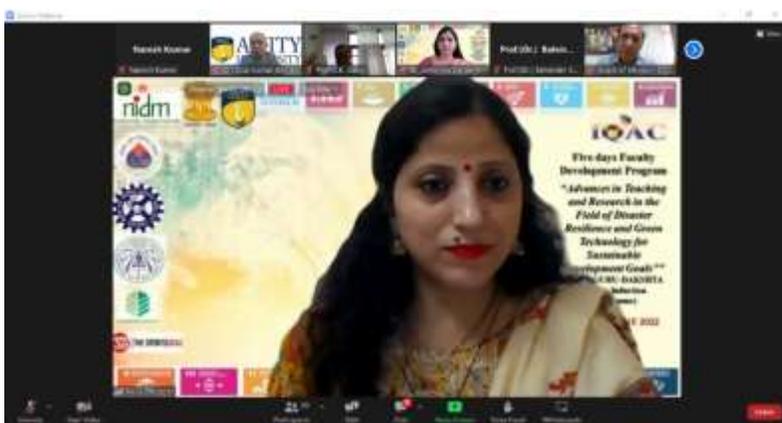
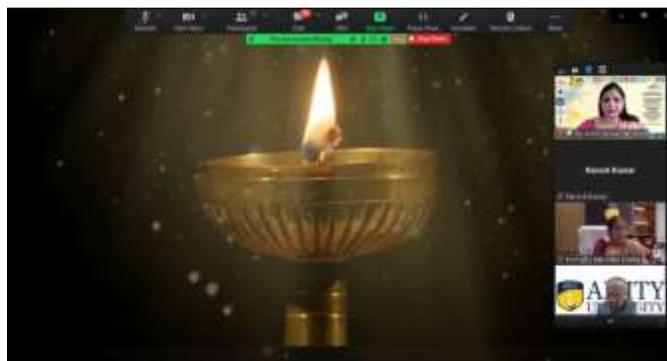
**Welcome Address:** Presiding the inaugural of the Faculty Development Programme, Dr. Ambrina Sardar Khan, Assistant Professor, Amity Institute of Environmental Sciences, AUUP on behalf of Hon'ble Founder President Sir, Hon'ble Chancellor Sir and Hon'ble Vice Chancellor, welcomed all the respected dignitaries and the participants of the Faculty Development Programme. She gave a brief introduction of all resource persons and about Amity University and FDP. The event started with the curtain raiser followed with the invocation of Goddess Saraswati by rendition of Saraswati Vandana and the lighting of the lamp of knowledge in virtual mode.



## Welcome and Introduction of the FDP

### Dr. Renu Dhupper, Joint Coordinator, AIES:

Addressing to more than 170 participants are attending the FDP from all over the country Dr. Dhupper welcomed all the dignitaries, participants for having spared their time and thanked the revered guides & experts, colleague from connected institution. She has emphasized how important these sustainable development goals are and how we can achieve them with the help of the knowledge we gain from these five days FDP program.



She explained about the Objectives, Expected Learning Outcomes and Themes/Focus Areas of the FDP. She mentioned the importance of FDP that how it will help the participants to build sensitivity and develop awareness on Green Technology and Sustainable Development Goals (SDG) among participants, to foster skills in thinking, reasoning, enquiring, and making decisions about the environment and world around them, to promote critical evaluation of the status and future potential of India about SDG. At the end of the module participants will be able to: Appreciate the role of Environmental Consciousness and SDG for a future society., Identify their critical role in the march of nation towards attaining SDG., realize this role by appropriately integrating SDG into their teaching and research.

### Prof. Tanu Jindal, Group Additional Pro- Vice Chancellor (R&D), Amity University Uttar Pradesh:

She addressed the gathering and welcomed all the dignitaries and participants. She gave a presentation about green technology for sustainable development. Going green means developing a new technology. She spoke about circular economy and sustainable development, Emerging Green Technologies (EGTs), with respect to Circular Economy and Sustainability, about industry leaders in key sectors like cars, aviation, consumer goods, food and drink, household products clothing etc. She also gave examples of the different companies related to key sectors like BMW-Germany, Electrolux, Nestle- Switzerland, H & M and Levi Strauss and company. She also appreciated the entire team of FDP.

**Prof. D. K. Bandyopadhyay, Chief Advisor FPO / Chairman, Amity Law School, Mentor, Amity Institute of Environmental Sciences, Amity University Uttar Pradesh**



He said that UGC came up with the 11-quality mandate. One of the quality mandates is GURU-DAKSHTA. What are the activities to be done in those mandates and manifestation is that we are successfully implemented it and all thanks and credit goes to our Hon'ble Vice Chancellor.

This is all due to tremendous amount based on Hon'ble Founder President and Hon'ble

Chancellor. He has given definition of Sustainable development Goal by giving examples. He said Development states that Humanity could make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs. He talked about the definition of Sustainable development most provided from "Brundtland Report". Brundtland Report: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.". The Board of Sustainable Development of US, National Science of Academic. The basic aim of the report was to clear the definition of sustainable goals by four basic points: what should we sustain, what should we develop, and how long should it all take. He also Introduced the four pillars of sustainability: Human, Social, Economic and Environmental. He appreciated and congratulated all the team of FDP. He also shows desire of having more FDPs.



**Prof (Dr.) Balvinder Shukla, Hon'ble Vice Chancellor, Amity University Uttar Pradesh:**

She appreciated and congratulated all the team for organizing such important and professional program for the faculty development. She said that the real sustainable goal is the mandate which we all contribute for attaining the sustainable development goals. She has

talked about how the environmental shift is happening and its need immediate attention of researchers and

academicians. She was hopeful that the five days FDP will give more ideas of research and green technologies in the coming time. She has congratulated the entire team of AIES and wished to see many more event like this in future.

**Address by Guest of Honor-Dr. Anisur Rahman, Professor & Director, UGC-Human Resource Development Centre, Jamia Millia Islamia, New Delhi**



He was the Guest of Honour for the FDP. He talked about the importance of education in HE. He said that in order to comprehend the importance of education in general, and higher education in particular, in Indian and worldwide contexts. He also emphasizes that to develop and improve basic teaching abilities, as well as the use of ICT in the

teaching-learning process and be up to date on the most recent advancements in their field. To improve online teaching skills and reach out to students all around the world while overcoming geographic and time constraints. To enhance one's personality and creativity while also serving as an inspirational role model for students. We will need to approach, promote green technology and ecofriendly culture not only as a luxury or fashion or self-appreciation, but the green technology, eco friendliness and environmental safeguards is needed to be promoted as a basic requirement of human sustenance and sustainability.

**Address by Guest of Honour Dr Manoj Kumar Patariya, Former Advisor and Head, National Council of Science and Technology Communication, DST, New Delhi, India**



He was the Guest of Honour of FDP. He emphasized that the world focus is now shifting from physical resources systems to data and communication resources systems. India because of her diverse dividends has been data and communication resources rich. He shared that

Amity Institute of Science Communication can be created to harness, nurture, and orchestrate this vast resource

with enormous and multiple applications in various sectors, i.e., health, agriculture, risk and disaster, research, innovation, education, and industry, etc. He also shared a very interesting sciencetoons to communicate the science to common people.

**Address by Chief Guest Prof. S. S. Bhakri, Founder & Director, Institute of UN & UNESCO. Studies, New Delhi**



He talked about the role of United Nation in attaining SDGs. He talked about how the United Nations approved the Sustainable Development Goals (SDGs), also known as the Global Goals, in 2015 as a universal call to action to end poverty, safeguard the environment, and ensure that by 2030, everyone

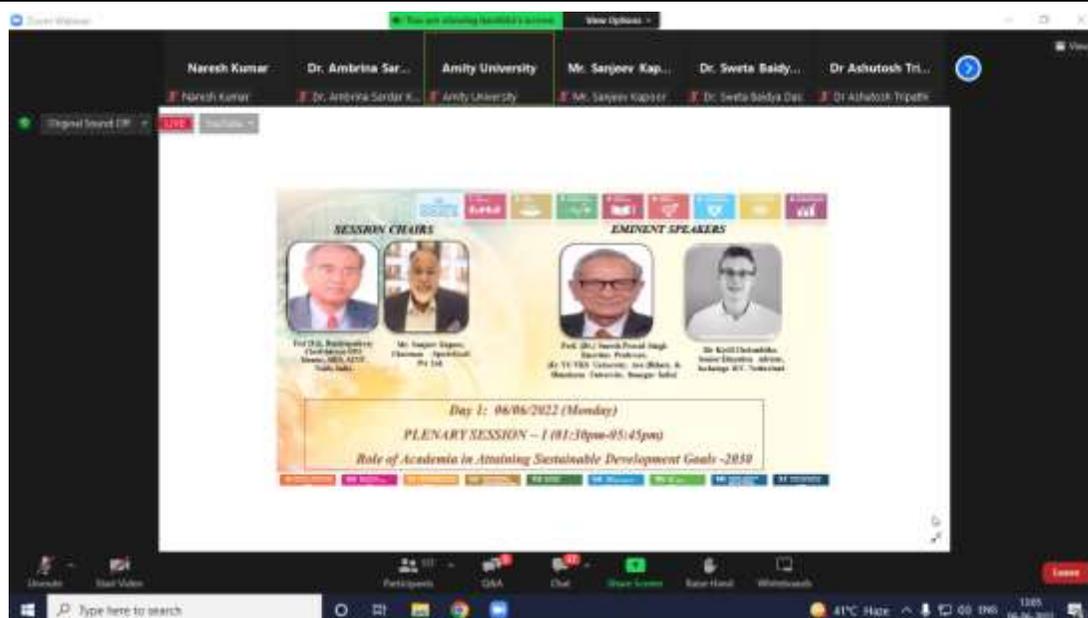
lives in peace and prosperity. He elaborated on the 17 SDGs and emphasize in the interconnection, recognizing that actions in one area have an impact on outcomes in others and that development must strike a balance between social, economic, and environmental sustainability. He focused on the development of a more sustainable global economy will aid in the reduction of greenhouse gas emissions that contribute to climate change. As a result, it's crucial that the world community meets the UN's Sustainable Development Goals – as well as the Paris Climate Agreement's 2015 carbon reduction targets.

At the end of Inaugural session, the customary duty of presenting a vote of thanks was done by Dr. Richa Dave Nagar, Assistant Professor, AIES, followed by the condolence prayer for Late Dr. Manju Rawat Ranjan who left us on June 4th, 2022 on heavenly abode.



**PLENARY SESSION – I- The first session of the FDP has two speakers and two chairs from the respective expert areas across the country who have spoken and discuss the various issues related to role of academia in attaining Sustainable development goals in the field of education. Total 248 people have registered for the event 210 attended the event on the first day.**

<b>Day 1: 06/06/2022 (Monday)</b> <b>Role of Academia in Attaining Sustainable Development Goals -2030</b>		
<b>PLENARY SESSION – I</b> <b>01:30pm-05:45pm</b>		
01:30pm-02:30pm	<b>Chair: Prof. D. K. Bandyopadhyay</b> Chief Advisor FPO / Chairman, Amity Law School, Mentor, Amity Institute of Environmental Sciences, Amity University Uttar Pradesh, India	<b>Co-Chair: Mr. Sanjeev Kapoor</b> Chairman - SportsGrail Pvt Ltd. Director (Affiliations) & International Advisor - SPAA India, Ambassador - Commonwealth Entrepreneur Club Chief Advisory officer - EduDrone, Accrescent & VBFT, UNAccc - Board Member (Rural India)
02:30pm-03:00pm	<b>Keynote Address</b> <b>Prof. Emeritus (Dr.) Suresh Prasad Singh</b> Emeritus Professor-Visiting Professor, Jharkhand Rai University, Ranchi (Former Vice-Chancellor-VKS University, Ara (Bihar), India, & Himalayan University, Itanagar (Arunachal Pradesh) India)	
03:10pm-05:20pm	<b>Mr Kirill Chelombitko</b> -Senior Education Advisor, Inchainge B.V. Netherland	
05:30pm -05:45 pm	<i>Vote of thanks Dr. Ashutosh Tripathi, AIES, AUUP, Online Assessment for PLENARY SESSION – I</i>	



The first plenary session of the FDP was commenced by MC, Dr. Ambrina Sardar Khan, Assistant professor III, AIES, AUUP.

**Chair: Prof. D. K. Bandyopadhyay, Chief Advisor FPO / Chairman, Amity Law School, Mentor, Amity Institute of Environmental Sciences, Amity University Uttar Pradesh, India**

He talked about “Role of Higher Education in SDGs”. He discussed about Introduction, why SDGs, SDGs 4 & 4.3 deals in higher education, some initiatives and 2030 framework main goal of SDG. What is the chronology, and how it started? Target 4.3 is officially monitored by UNESCO Institute of Statistics through the indicator “gross enrolment ratio for tertiary education. He also discussed about the ESD and higher education, challenges for SD in higher education, how to integrate SD in higher education? What is sustainability literacy aim and structure of Guidance framework, Universities and higher education institutions have a key role to play in all of the ESD-GAP priority. The sustainable development goals or global goals are a collection of 17 interlinked global goals designed to be a “blueprint to achieve a better and more sustainable future for all.



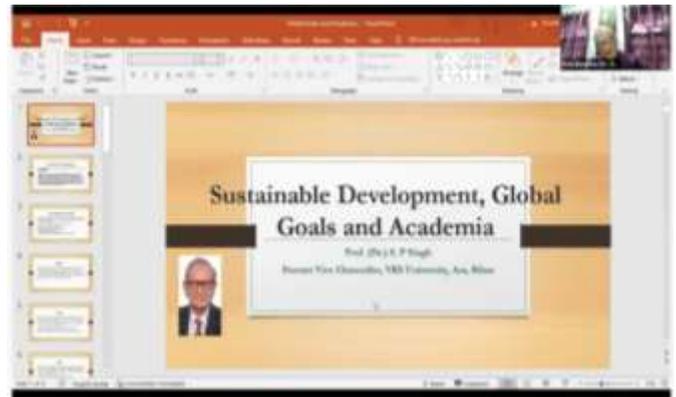
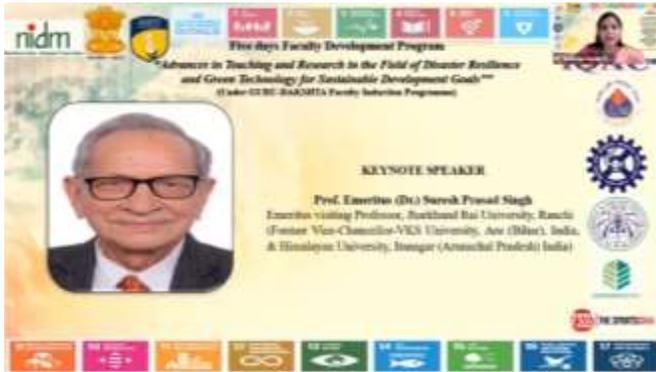
**Co-Chair: Mr. Sanjeev Kapoor, Chairman - SportsGrail Pvt Ltd. Director (Affiliations) & International Advisor - SPAA India, Ambassador - Commonwealth Entrepreneur Club, Chief Advisory officer - EduDrone, Accrescent & VBFT, UNAccc - Board Member (Rural India)**



Mr. Sanjeev Kapoor, Chairman – SportsGrail has emphasized the role of sports in attaining SDGs. He talked about how fit body and mind enhances people’s efficiency to work better. He talked about the common niche between different SDGs and how SDG 4 is related with other SDGs like no poverty, Alternative energy, climate action etc. He discussed that how the SDGs will be going to impact the common people. He elaborated on the. Wider aspects of SDGs ranging from the local to the global level. He. Talked about the awareness of SDGs because it will be going to

help the common people to understand the importance of SDGs and then the implementing of SDGs become easier. He talked about the quality education in the field of sports and how the education in sports will help the people to lead a healthy and sustainable lifestyle. He also highlighted that to attain the **SDGs** all we need is the to come up with the collaboration between the higher education institution and the different sectors of industry, corporate sectors physical education sign in psychological science, economic science and other disciplines of academics.

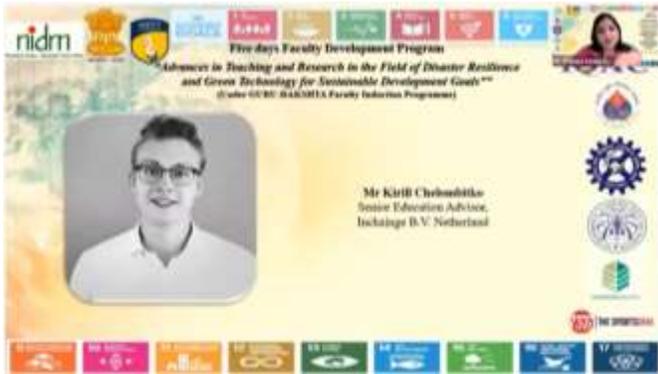
**Keynote Address Prof. Emeritus (Dr.) Suresh Prasad Singh, Emeritus Professor-Visiting Professor, Jharkhand Rai University, Ranchi, (Former Vice-Chancellor-VKS University, Ara (Bihar), India, & Himalayan University, Itanagar (Arunachal Pradesh) India)**



Professor Emeritus Dr. Suresh Prasad Singh had talked about the sustainable development, global goals, and Academy. He elaborated on the roles and responsibilities of the faculty in inculcating the values of sustainable development goals in the students and peer groups. He defines the true meaning of a good teacher. He said that a good teacher is a teacher with ethics,

with morals and with dignity. If a teacher is not able to inculcate these values in their students, then they are not a good teacher. He has very extensively explained all the aspects of sustainable development, different types of sustainable development goals, key objectives, and the strategies through which the teacher can implement these things in their teaching and learning process so that the aim of attaining sustainable development goals through academics can be achieved. He elaborated on all the key objectives of SDGs and how we can work together from different sectors to attain them. He has also touched upon the green technologies, especially on the solar energy panels and the wind energy.

**Mr Kirill Chelombitko-Senior Education Advisor, Inchainge B.V. Netherland**

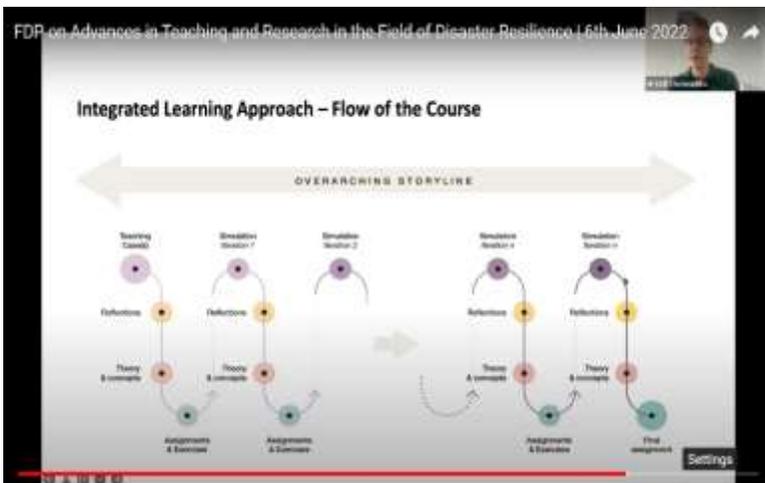


Expert in experiential learning. Circularity and SDGs, and developing business games for the students and faculty members to have more practical understanding of subject. Mr Krill has emphasised that how playing these games and applying your intelligence and cognitive skills, we develop more understanding of systems by working on them.

His deliberation was on teaching and learning about sustainability, experiential learning, and integrated learning approach. He emphasises on the challenges involves in education, is it a promise or a paradox. He emphasised and elaborated on the threat to sustainable future through the overpopulation and resource use. He also talked about the education decreases, fertility rates and leads to slow production growth. He has also emphasised a very important point that how the more educated people are consuming more natural resources then the uneducated ones and how more education does not always mean more sustainable development. He talked about the various challenges that how raising the education levels without unsustainable consumption would lead to the devastation



on the planet. He has emphasised that how it is the time for the change in education and bring the practicality in the curriculum. He is a specialized in designing the business games where the students are allowed to play games being the owners of the company and how sustainable they handle their company and produce sustainable results



and then the rewards are given accordingly. He talked about building the gap in education between the societal pull, an enabler pusher or support system. He discussed that how the demand to become more sustainable needs to evaluate the linear take make dispose approach and how the catalyst “the professionals” can contribute to sustainable practices by educating the teachers and the academicians taking it to

the students. He has also shared the business games that he developed in his organization.

At the end of the session, a thorough discussion took place on the role of Academia in attaining SDGs followed by the customary duty of presenting a vote of thanks by Dr. Ashutosh Tripathi, Assistant Professor, AIES. The day was very fruitful, and the participants have thoroughly enjoyed the sessions. The sessions with all the speakers were very interactive and knowledge gaining.

The Online Assessment for Plenary Session –I was done at the end. The google form was pasted in the chat box and the participants were supposed to attempt all the questions. The aim of the assessment was to know that how actively and sincerely the participants have attended the FDP. The total responses received on the first day were 180.



**PLENARY SESSION – II- The second session of the FDP has four speakers from the different expertise across the country who have spoken and discuss Economy, and Innovations for Sustainable and Equitable Growth.**

**Total 278 people have registered for the event and 161 attended the II day.**

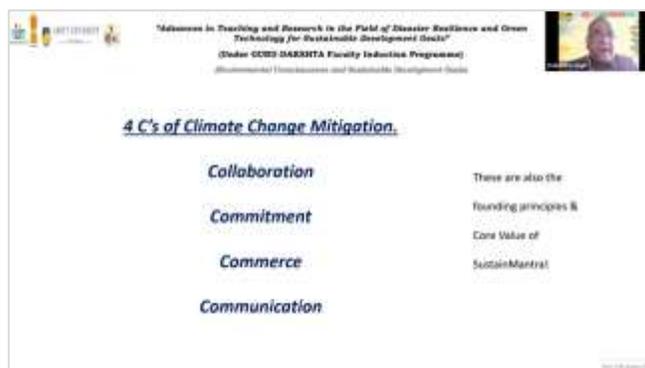
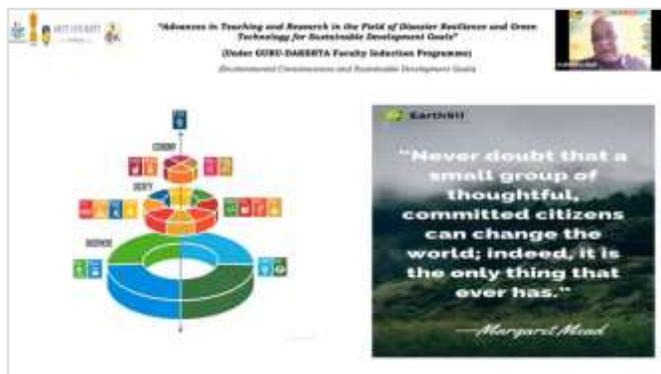
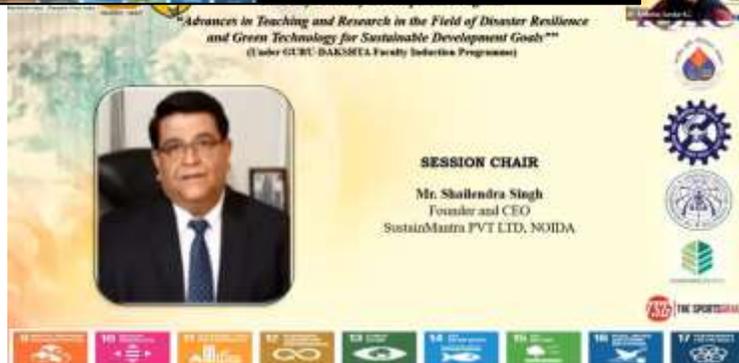
<b>Day 2: 07/06/2022 (Tuesday)</b>	
<b><i>Economy, and Innovations for Sustainable and Equitable Growth</i></b>	
<b>PLENARY SESSION – II, SUSTAIN MANTRA PVT LTD- New Delhi, India</b>	
<b>10:30am-01:30pm</b>	
10:30am-11:00am	<b>CHAIR: Mr. Shailendra Singh</b> Founder and CEO, SustainMantra
11:00am-11:30am	<b>Dr. Rabiaah Bhatia</b> Global SDG Ambassador, Mentor Of Change @ Niti Aayog, World Record Holder Thought Leader, Legal Media Advisor & Founder – eD WebStudio Channel Momprenneur   Founder- eD Web Studio Channel   Mlti Awardee-EduLeader
11:40am-12:10pm	<b>Brigadier Vinod Dutta</b> , CEO, The Career Navigators, West Delhi, Delhi, India Senior Consultant, National Institute of Disaster Management
12:20pm-12:50pm	<b>Dr. Saumyaditya Bose</b> , PhD CEng (Ind), Proprietor   BCS (Bose Consultancy Services)
12:50pm -01:00pm	<i>Address to queries</i>
01:00pm-01:30pm	<b>Ms. Chaitali Das</b> , Chairperson & Managing Trustee, Rakshak Foundation, Managing Director, Route to Jute PVT Ltd.
01:30pm-02:00pm	<i>Vote of thanks Dr. Ambrina Sardar Khan, AIES, AUUP</i>

The second day of the FDP was commenced by MC, Dr. Ambrina Sardar Khan, Assistant Professor, and the session was chaired by Mr. Shailendra Singh, Founder and CEO, Sustain Mantra.



**CHAIR: Mr. Shailendra Singh, Founder and CEO, SustainMantra**

The session started from a very high note of wisdom from Mr. Shailendra by addressing a very intricate and basic questions of sustainability. He started with very important question that the future is here, and we have no time to lose it. He has represented it with a picture where a person is asking that where we will be in 2030. He emphasizes. That this is not the time to finger point, but



to get into action. He has integrated all the SDGs with biosphere, society, and economy and how. All of them can come together, interlinked, intertwined them to have a sustainable environment.

He set up very high thought level and platform for the speakers in the session. He emphasized that to bring the sustainability we must work together. He talked about his mantra of working the 4C's are most important,

Collaboration with other likeminded people| Commitment towards our mission and vision |Commerce the sustainable budgeting| Communication, which is a need of hour to reach out to people.

**Dr. Rabiiah Bhatia, Global SDG Ambassador, Mentor Of Change @ Niti Aayog, World Record Holder, Thought Leader, Legal Media Advisor & Founder – eD WebStudio Channel, Mompreneur |Founder- eD Web Studio Channel | Mlti Awardee-EduLeader**

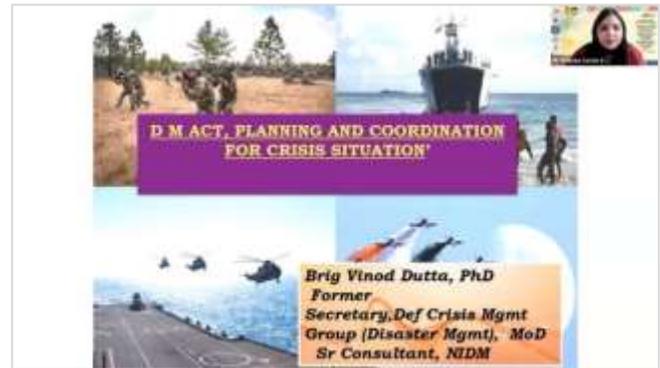
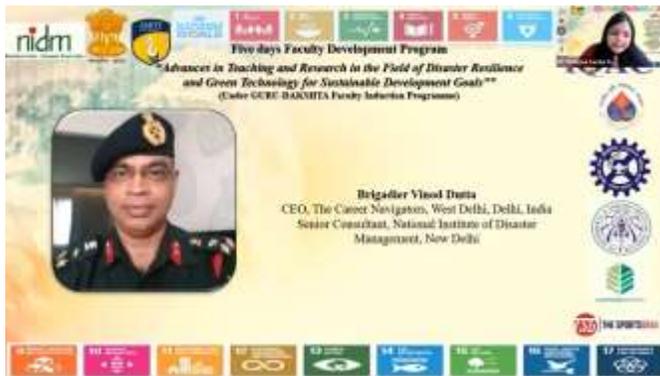


She started her talk saying--Be the change you want to see in this, believe in yourself, trust yourself. She spoke how the lockdown has changed the collaborative process among the various stake holders of the nation, and how the online system has helped to connect the various people, especially youngsters and women, and strengthen their personality and believe in

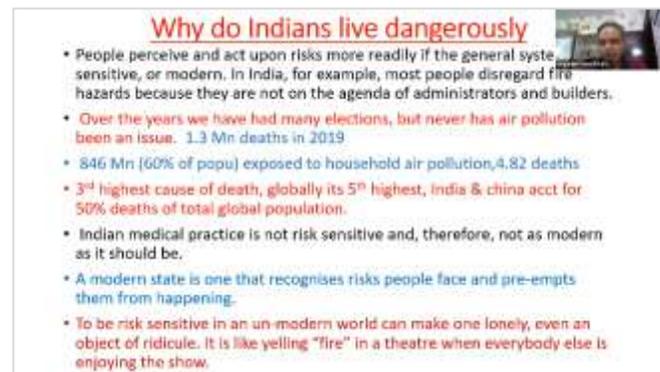
themselves. She talked about creativity, innovation, and economic growth. She emphasized creating nation for job creators and not for seekers. She emphasized that the sustainability is for all, it cannot be for individual. She spoke how the prosperity and the wellbeing can ensure the overall growth of the people across the world. We need to change the mindset of people and orient it towards the growth of all. Learn, unlearn and learning new things is something she wanted all of us to inculcate. She believes that the world must be together, come together with different unique skills to bring the change. Adding to 4Cs of Shailender sir she made it 5Cs Commitment, communication, creativity, critical thinking, and compassion.



**Brigadier Vinod Dutta CEO, The Career Navigators, West Delhi, Delhi, India,Senior Consultant, National Institute of Disaster Management**



Dr. Dutta gave us the insight into world and India's disasters and what are the major problems that we are facing. He started his lecture by saying that disasters are the developmental losses to the nation. It's not only devastated the community and the people of the country, but it is equally responsible for the economic loss of the country. He emphasised and highlighted on four very important aspects of a healthy nation, which are good governance, good financial health, good education policy and a good defence. He talked that we are losing average age of 1.5 years due to pollution. If we aim to progress, then we need to innovate and bring all the stakeholders together. He highlighted many important points especially how to minimize the annual deaths due to various anthropogenic and natural disasters. He also emphasises that how through anthropogenic activities we are losing the wealth and the health of our nation. He stated that being the most superior and advanced species on the planet we are responsible for deterioration and the loss of biodiversity and the economic strength of our country. He highlighted the major crisis that are looming over Indian economy and the threats which are awaiting for us.



**Dr. Saumyaditya Bose, PhD CEng (Ind), Proprietor | BCS (Bose Consultancy Services)**

He made a wonderful deliberation on clean energy circular economy in India: problem-solving framework, systems map, intervention areas, and case studies. He highlighted Generalized solution/opportunity incubation acceleration pathway/roadmap for sustainability along with



Solution drivers for market entry/investment/new technology emphasizing on Strategic analysis, Economic analysis, Customers/channels, and Risks involved. He has talked about a very recent and an innovative idea of systems map. He has elaborated that why we need systems map in industries and organisations and how we can mark the areas where we need the potential interventions of clean energy. He highlighted that how the systems map can help us to understand the gaps at the downstream that is supply chain, shortage of resources, crisis, etc.

**Clean energy+circular economy in India: problem-solving framework, systems map, intervention areas, and case studies**

Faculty development program on "Advances in teaching and research in the field of disaster resilience and green technology for sustainable development goals" under Guru-Dakshita faculty induction program Module 3

Amity Academic Staff College, Amity Institute of Environmental Sciences, Amity University

12:20 to 13:00 hrs IST, 07 June 2022

**Systems map (why?)+potential interventions: clean energy**

The systems map diagram illustrates the flow from 'Energy Demand' through 'Energy Supply' to 'Energy Services'. It identifies various 'Intervention Areas' such as 'Renewable Energy', 'Energy Efficiency', and 'Energy Storage'. The map also shows 'Potential Interventions' like 'Solar PV', 'Wind', and 'Energy Storage' that can be implemented to address the energy demand and supply gaps.

He highlighted very important points that how CC related extreme weather events+COVID-19 pandemic+ Ukraine war are leading to Unprecedented increase in energy demand+ food supply chain disruptions+ fossil fuel shortages for power plants with solution-oriented ideas. He advocates the need for India to achieve rapid ecologically sustainable industrial growth which would require a transformation towards green manufacturing and adoption of environmental sustainability practices by promoting green technologies and identifying three cross cutting strategic parts which are mainstreaming and promoting green businesses protecting natural resources and addressing funding issues. The highlights of the presentation were the case studies that Dr. Saumyaditya has shared with the participants and the organizers. He has shown several case studies that are related to the clean Energy alternative energy. Sustainable strategies for maintaining the sustainable development goals in the country.

**Case studies/trends: clean energy Industry**

**CCUS**  
Tata Steel: Poo converts CO2 to useful chemicals

**EE**  
EESL, BEE ink pact to demonstrate energy efficiency projects in industrial units

**RELATED**

The slide provides a brief overview of two key clean energy initiatives. The first case study, 'CCUS: Tata Steel: Poo converts CO2 to useful chemicals', highlights a process where carbon dioxide is captured and converted into useful chemical products. The second case study, 'EE: EESL, BEE ink pact to demonstrate energy efficiency projects in industrial units', discusses a partnership between EESL and BEE to implement energy efficiency projects in industrial settings. A 'RELATED' section is also present at the bottom of the slide.

**Ms. Chaitali Das, Chairperson & Managing Trustee, Rakshak Foundation, Managing Director, Route to Jute PVT Ltd.**



She talked about the theme of the session addressing to decent work and economic growth, Sustainable cities and communities, Industry innovation and infrastructure, responsible consumption, and production.

She also touched upon on how the industry and growth is impacted by Climate change, global warming and other environment and its challenges. She also highlighted importance of health and wellbeing - Good health and

wellbeing, gender equality, Reduced inequality, Peace, justice and strong institutions, Partnership to achieve the goals. Gave a presentation on Economy-Decent work & Economic Growth, Industry Innovation, and infrastructure.

She also shared the Jute Story of her Rakshak Foundation. She emphasized that how she wants to take Indian jute industry across the seas and how she has become the largest jute product supplier across globe. She also showcased some very important case studies of social upliftment of the underprivileged.



She emphasised that how the rerouting and their direction of environmental and industrial strategies are important after the pandemic struck India. Undergoing the lockdown and having no avenues has created lot of unemployment in country how switching to sustainable businesses, conserving greens, taking care of biodiversity, sustainable lifestyles, eco-friendly products can help people to overcome the financial losses. She

shared her dream of making Jude apart of mainstream fashion industry by recreating, reproducing, social inclusion, changing mindset of people to adopt more of Indian fashion culture and products than the foreign brands.

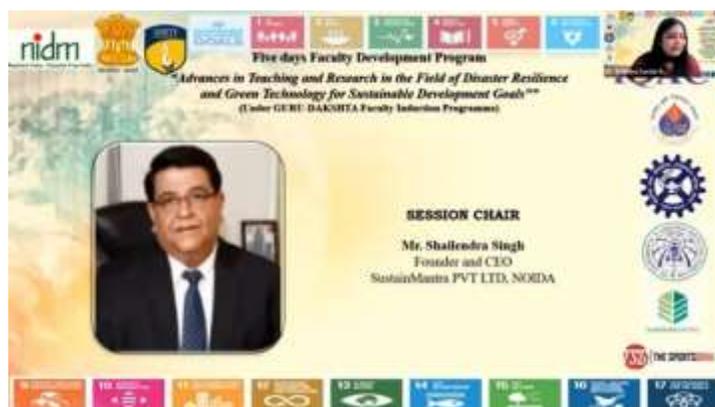
The session was followed by the very intense and though provoking interaction among the speakers, answering the questions of the participants. The chair and speakers have tried to explore the new



possibilities in the sustainable journey of nation. The session was wind up by a vote of thanks by Dr. Ambrina Sardar Khan, Assistant Professor Amity Institute of Environmental Sciences, Amity University.

**PLENARY SESSION – III- The second session of the FDP has four speakers from the different expertise across the country who have spoken and discuss Economy, and Innovations for Sustainable and Equitable Growth. Total 278 people have registered for the event and 161 attended the II day.**

<b>Day 2: 07/06/2022 (Tuesday)</b> <b>PLENARY SESSION – III, Economy, and Innovations for Sustainable and Equitable Growth</b> <b>03:00pm-05:30pm</b>	
03:00pm -03:10pm	<b>CHAIR: Mr. Shailendra Singh</b> Founder and CEO, SustainMantra
03:10pm -03:40pm	<b>Prof. (Dr.) Sunil Kumar</b> Professor & Head, Department of Economics and Deputy Registrar at Alliance University Bengaluru
03:40pm -03:50pm	<i>Address to queries</i>
03:50pm-04:10pm	<b>Mr. Anurag Walia</b> Founder & Chief Executive Officer Aplus Technology Solutions P. Ltd.
04:10pm-04:20pm	<i>Address to queries</i>
04:20pm -04:50pm	Hands on Training session by <b>Dr. Kopal, ECDRM Division, NIDM</b>
04:50pm -05:00pm	<i>Address to queries</i>
05:00pm- 05:30pm	<i>Vote of thanks Dr. Manoj Chander Garg, AIES, AUUP</i> <b>Online Assessment for PLENARY SESSION – II &amp; III</b>

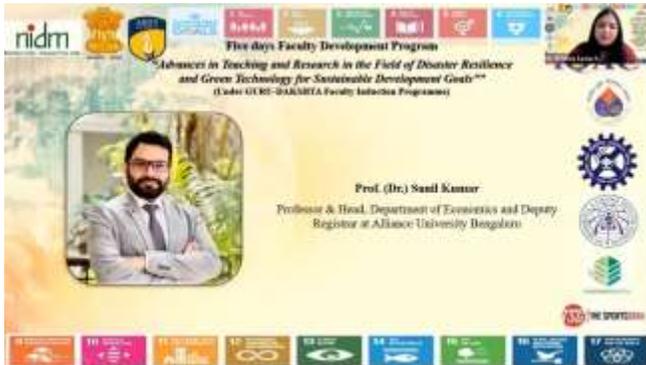


The Plenary session III was started by **Mr. Shailendra Singh** by addressing the audience and Dr. Ambrina has introduced and felicitated the session speakers. The session has three speakers from different industries and a chair that talked from economics of SDGs to the implementation of SDGs.



Subtitles/closed captions (c)

**Prof. (Dr.) Sunil Kumar, Professor & Head, Department of Economics and Deputy Registrar at Alliance University Bengaluru**

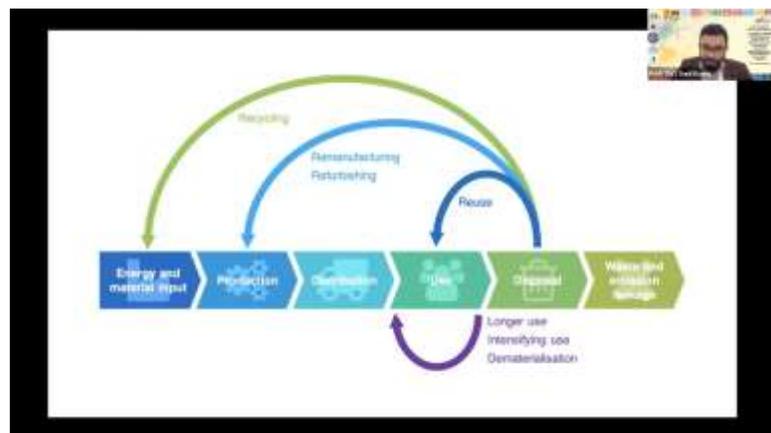


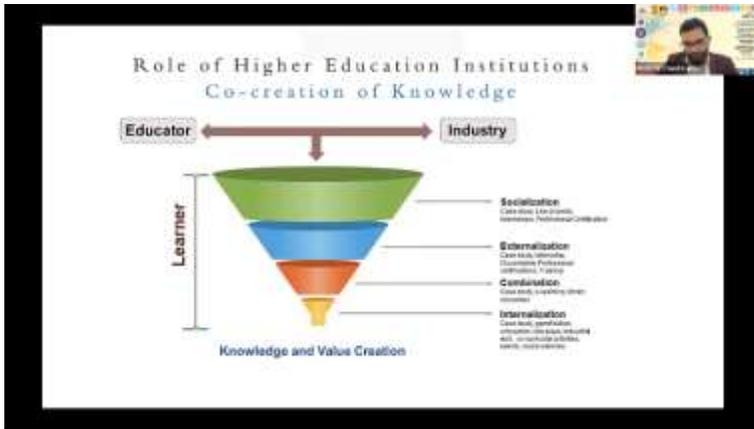
He started his lecture highlighting that it is very important to know the 17 SDGs goal whether you are an academician or entrepreneur or an industrialist or a student or scholar or a researcher. He highlighted that how the 17 SDGs are integrated and interlinked with one another, as they recognise that action in one area will affect outcomes in the others and that the development must balance social, economic and environmental sustainability.



He gave the complete analysis of the performance by India and ranking when it comes to attain SDGs. He highlighted the major challenges that India is facing in attaining the SDGs. Also, he has highlighted that what are those significant challenges that immediately need to be addressed. He also talked about the challenges that lies upfront when it comes to attaining the SDGs, whereas

he also focused on the SDGs that India has already achieved. He explains that when the development and the application of ideas and technologies that works to improve goods and services or make their production more efficient leads to the achievement of SDGs and that what economic innovation is all about. He elaborated that if we want to do the economic innovation, we must bring those innovations in socio economic policies in process in implementation, focusing on transformation with

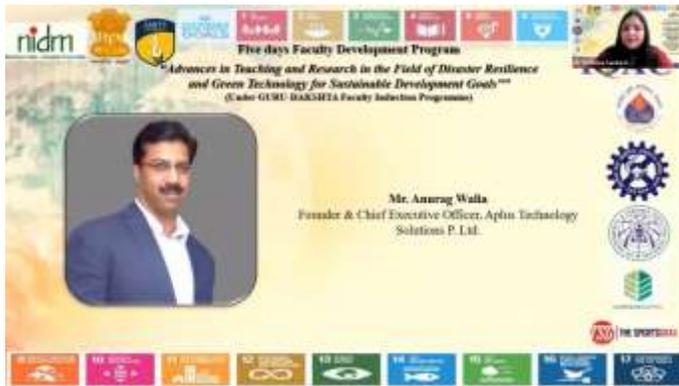




technology and innovation in system monitoring. He also discusses the various sustainable strategies for achieving sustainable development like recycling, remanufacturing, refurbishing and reuse. He also talks about the energy and material input production, its distribution, use and reuse disposal, dematerialization and waste and emission leakage and how it all can be controlled for

SDGs attainment. He discussed the role of higher education institution in obtaining SDGs. He speaks about the co-creation of knowledge where the educator and industry come together to support the learners. In the younger generations, he said that we should use knowledge and value creation for attaining SDG. He emphasised on socialization, externalization, combination and internationalization for attaining SDGs with the help of higher education.

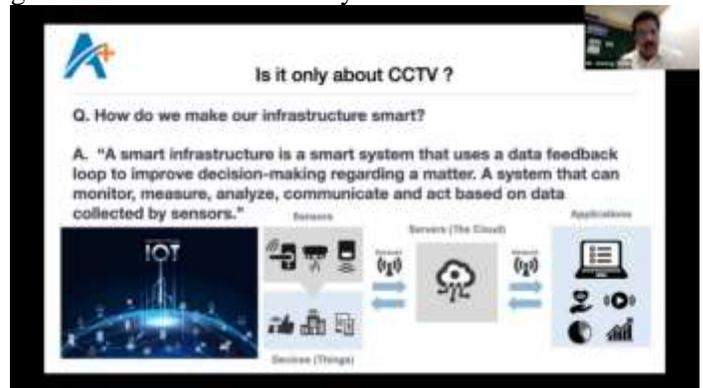
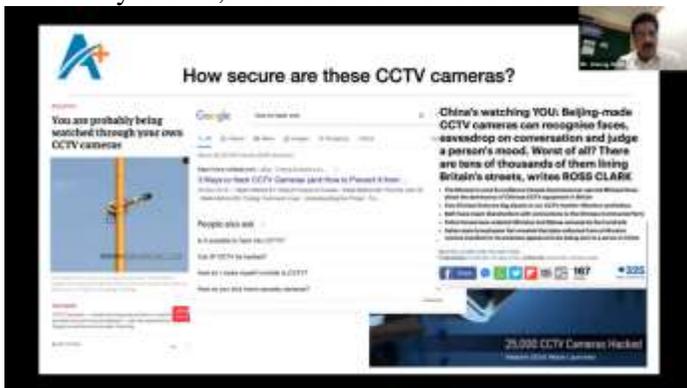
**Mr. Anurag Walia, Founder & Chief Executive Officer, Aplus Technology Solutions P. Ltd.**



Having from a technical background, Mr Anurag Walia, founder and CEO, Executive Officer, Aplus Technology Solutions had started his deliberation with the work that they're doing in the technological sector. He emphasised on the solutions that they provide to the stakeholders namely Microsoft, AWS cloud connects, Samsung, Tera Francisco, Honeywell, Global data Centres and cloud

infrastructure NTT, etc.

He explained in detail that why the technology is important for setting up good urban centres and sustainable city. He talked about how we can keep the city saves, how we can have good surveillance, with good monitoring and security checks, and the cities had to be under watch throughout for sustainable security. He has shared excellent



information about the securities of the CCTV cameras in the cities and shared lot of news from the world across the globe where the technology and internet can interfere with the life of the people and the risk is involved in

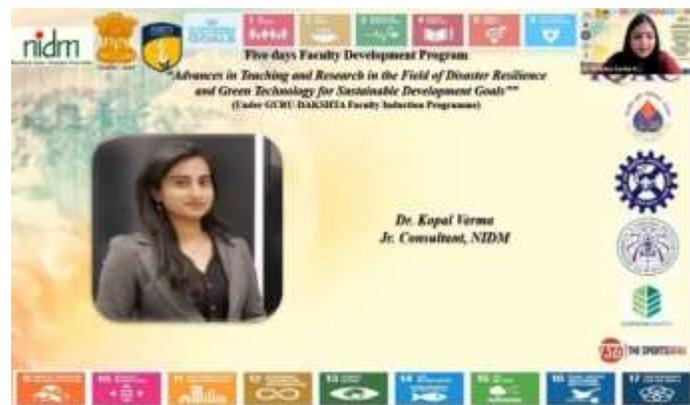


getting technologically advance. He also talked about the security of the smart infrastructure. He has explained in detail what smart infrastructure is and how we are suspected to cyber-attacks when we are using smart infrastructure, he has shared a lot of pieces of information from China, from India where the system has been hacked by the cybercriminals and has led to the security crisis. He also discussed the solutions for the

smart and sustainable cities in detail.

**Dr. Kopal, ECDRM Division, NIDM**

The topic for the deliberation of was Eco innovation for enterprises moving towards sustainability. In her deliberation Kopal has introduced what is sustainability for enterprises? She talked about that, to reach the goal of sustainability eco innovation has been proposed for the effective mechanism and solution and to help enterprises to reduce negative impacts on the environment. She also emphasizes

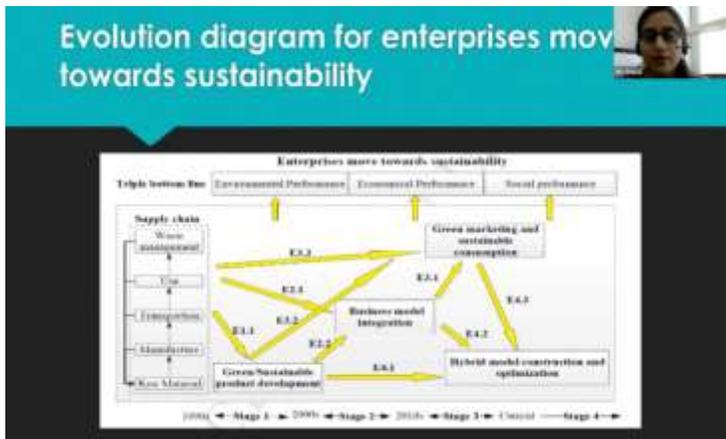


that it is very, very important to understand the evolution of technologies involving eco-innovation in an integrated and systematic manner. She enlightened us on the meaning of sustainability for enterprises. She talked about that how the problems of resource shortage and environmental

degradation by the enterprises can be taken towards sustainability. She also talked about the concept of sustainability and its diffusion into the entire product life cycle, various technologies so that the depletion of natural resources can be avoided and the



ecological balance can be gained. She also enlightened us about the triple bottom line, the concept of social, economical and environmental performance to measure business achievement that was given by Elkington in 1998.



She highlighted the various stages of eco innovation and helped us understanding the technology based eco innovation dimensions. She talked about the green sustainable product development dimension, business model integration dimension, green marketing and sustainable consumption dimension and hybrid model construction and optimization dimension.

She has talked about that now the enterprises are moving towards the sustainability by inculcating eco innovations in their practices. She talked about the green sustainable product development, which is important for the companies to attain. She talked about that earlier the traditional products were mainly designed to meet functional requirements, environmental and social issues were rarely considered during the designing process, but with the latest understanding of SDGs and eco-friendly products today, the design of the products are economically, ecologically, and socially crafted. She also talked about how the eco innovation provides a new business opportunity for an enterprise to be an eco-innovative. She also talked about the perspective of sustainability where the cost is not the only criteria, now the values added design for economical, ecological, and social enhancement has become a significant criterion for India.

The session ends with a lot of exchange of ideas and knowledge followed by a wonderful documentary on latest and innovative technologies.





The Online Assessment for Plenary Session –II &III was done at the end. The google form was pasted in the chat box and the participants were supposed to attempt all the questions. The aim of the assessment was to know that how actively and sincerely the participants have attended the FDP. The total responses received on the third day were 167. Dr. Manoj Garg from AIES, gave the vote of thanks.

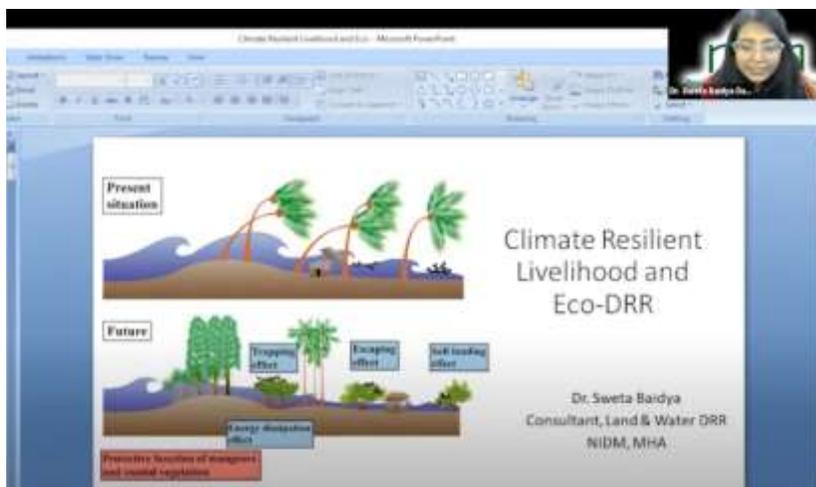
**PLENARY SESSION – IV- The fourth session of the FDP has four speakers from the different expertise across the country who have spoken and discuss Environmental Challenges: Action for Disaster Resilience & Resource Management. Total 260 people have registered for the event and 170 attended the III day.**



<b>Day 3: 08/06/2022 (Wednesday)</b>	
<b><i>Environmental Challenges: Action for Disaster Resilience &amp; Resource Management</i></b>	
<b>PLENARY SESSION – IV</b>	
<b>National Institute of Disaster Management, New Delhi, India</b>	
<b>10:30am-01:30pm</b>	
10:30am -11:00am	<b>Dr. Sweta Baidya Das</b> Consultant, Land & Water DRR, ECDRM, NIDM, MHA.
11:05am-11:35am	<b>Prof. Dr. Shalini Verma</b> An Author - Academician and a Co-founder of Books33 (The World's 1st Eco-friendly Book Publisher) and Samvaad Shaalaa (The Communication School for All)
11:40am -12:10pm	<b>Dr Hishmi Jamil Husain</b> Head Biodiversity, Corporate Sustainability, Tata Steel Limited, Corporate Strategy Planning, Jamshedpur, India
12:15pm-12:45pm	<b>Mr. Tapas Chatterjee</b> Waste Management Specialist, Ex-CEO, Action in Community and Training (ACT)
12:50pm -12:55pm	<b>Dr. Dipti Grover</b>

	Assistant Professor, Institute of Environment Studies., Kurukshetra University, Kurukshetra
01:00pm-01:10pm	Hands on Training session by <b>Mr. Harshit Sharma, ECDRM Division, NIDM</b>
01:10pm-01:20pm	Hands on Training session by <b>Ms. Fatima, ECDRM Division, NIDM</b>
01:20pm-01:30pm	<i>Vote of thanks Dr. Kartikeya Shukla, AIES, AUUP</i>

**Plenary session – IV** started with the theme Environmental Challenges: Action for Disaster Resilience & Resource Management in collaboration with National Institute of Disaster Management, New Delhi, India, Chaired by Prof. (Dr.) Anil K. Gupta, Professor & Head ECDRM Division, National Institute of Disaster Management, Ministry of Home Affairs, Government. of India



**Dr. Sweta Baidya Das, Consultant, Land & Water DRR, ECDRM, NIDM, MHA** delivered the first lecture of the technical session and talked about climate resilience livelihood and ecosystem-based disaster risk reduction and how we can use our nature for building resilience. She highlighted how Nature based strategies have emerged as a concept for combing ecosystem-based approaches to solve a

variety of societal problems. She further advised that we should adopt multiple approaches for financial support rather single crop approach. This will help to recover the people from the disastrous aftermath. She emphasized that

Agriculture is the foundation of the Indian economy, creating work through salaried employment or self-employment in both the formal and informal sectors. However, only 40% of the land used for agriculture has access to irrigation systems, leaving the remaining 60% at the mercy of the weather and vulnerable to extreme weather events. She had also highlighted the impact the impact of climate change on different environment.



**Prof. Dr. Shalini Verma, Co-Founder & Chief Mentor of two startups** – Books33 India & SamvaadShaalaa



highlighted the importance of sustainable development in combating climate change in a very interesting way. She deliberated on the concept of what we have received vs what we made, and now what we have vs what we need to pass on to future generations. She talked about reducing carbon dioxide emissions and discussed the technologies by which energy consumption can be reduced by

shifting towards renewable energy. She also stressed that we must come up with innovative solutions to manage cascading disaster risks.



**Dr Hishmi Jamil Husain, Head Biodiversity, Corporate Sustainability, Tata Steel Limited, Corporate Strategy Planning, Jamshedpur, India**

**Dr. Hishmi Jamil Hussain**, Head biodiversity corporate sustainability elaborated on climate change and agenda



2030. He started the presentation by context Setting and further elaborated on what's happening around and why should we Invest in Our Mother Earth followed by effects of Environmental Crisis and Restoration Generation. He stressed upon the key development challenges of provision of clean water, energy services, and food, maintaining a

healthy environment and conserving ecological systems, their biodiversity, and associated ecological goods and services He concluded by telling various to protect biodiversity with the help of Miyawaki method for forest reforestation

**Mr. Tapas Chatterjee, Waste Management Specialist, Ex-CEO, Action in Community and Training (ACT)**

Mr. Tapas Chatterjee, Waste Management specialist, Ex- CEO Action in Community and Training elaborated on 5R's in resource management and waste management hierarchy. He highlighted the types of solid waste resources, policies of dry and wet waste and the importance of waste minimization. He further explained how thin plastics expensive problem at compost plants and how shredded plastics are can make an excellent combination to bitumen roads by a patented process. He concluded on points to ponder for creating more happiness and smile and help next generation to live in a better world encouraging residents to grow terrace gardens and provide biogas to the community for use in lieu of LPG.



**Dr. Dipti Grover, Assistant Professor, Institute of Environmental Science, Kurukshetra University**

deliberated on agriculture crop residue burning and sustainable development goals emphasizing on how the agricultural sector plays a major role in overall economic growth of the world. She further highlighted the adoption of green technologies for high yielding variety of seeds for crop production. She concluded with recommending the initiation of residue collection system, conservation agriculture, supply of machineries and public awareness campaigns to highlight the health effects of high level of toxic particulates released from crop residue burning.



**Mr. Harshit Sharma, Young Professional, NIDM**, New Delhi, strongly advocated the involvement of local bodies in disaster management. He gave an overview of pre-disaster, disaster and post disaster phases of disaster management and the significance of local government in overcoming the ills of the calamity, restoring their resources, and recouping the system. He suggested that the local governments better understand the social vulnerability of natural and manmade disasters. Also, youth, in whatever capacity they are, have an essential role in disaster management. Their energy level, the pace of work, innovative ideas, modern strategies, and proactive approaches need to be channelized properly. Undoubtedly, there is no better political institution than the local governments to ensure that.



**Ms. Fatima Binte Amin, young professional, ECDRM**, enveloped her talk on Heat Waves. She highlighted how heat wave as an extreme weather event has recently become a concern for disaster management in India due to widespread and severe impact on health and environment. For last few years, heat wave during the summer season is increasingly affecting morbidity and mortality in the country. She concluded by telling need for establishing early warning system, capacity building, public awareness and collaborations heat wave action and mitigation plan.



At the end of session, the customary duty of presenting a vote of thanks was done by Dr. Richa Dave Nagar (Assistant Professor, AIES). On behalf of everyone and the entire organizing team she thanked the Administration of Amity University, esteemed delegates, the scientific community, colleagues, participants and research scholars for their support and being an integral part of our journey and this event. She thanked the Admin, IT team, AUUP for their support throughout event celebration.



**PLENARY SESSION – V- The fifth session of the FDP has four speakers from the different expertise across the country who have spoken and discuss Environmental Challenges: Action for Disaster Resilience & Resource Management. Total 278 people have registered for the event and 161 attended the III day.**

<b>Day 3: 08/06/2022 (Wednesday)</b> <b>PLENARY SESSION – V</b> <b>Environmental Challenges: Action for Disaster Resilience &amp; Resource Management</b> <b>Indian Institute of Technology Roorkee</b> <b>02:30pm-05:30pm</b>	
02:30pm-03:00pm	<b>CHAIR: Dr. Brijesh Yadav</b> Professor & Head, Department of Hydrology, IIT Roorkee
03:00pm -03:30pm	<b>Dr. Srabani Mishra</b> Assistant Professor, Mineral-Metal Recovery and Recycling (MMR&R) Research Group, Suleyman Demirel University, Isparta, Turkey
03:40pm-04:10pm	<b>Dr. Basant Yadav</b> Assistant Professor, Department of Water Resources Development & Management Indian Institute of Technology Roorkee
04:20pm-04:50pm	<b>Ms. Meenesh Tomar</b> Regional EHS Manager - APAC Bengaluru, Karnataka, India Certified Lead Auditor ISO 45001(CQI & IRCA)
05:00pm- 05:30pm	<i>Vote of thanks Dr. Kartikeya Shukla, AIES, AUUP</i> <b>Online Assessment for PLENARY SESSION – IV &amp; V</b>

**Plenary session-V** started with the theme Environmental Challenges: Action for Disaster Resilience & Resource Management in collaboration with Indian Institute of Technology Roorkee chaired by **Dr. Brijesh Yadav, Professor & Head, Department of Hydrology, IIT Roorkee**



**Dr. Brijesh Yadav, Professor & Head, Department of Hydrology, IIT Roorkee** deliberated on the theme of the session. He emphasized on the need of monitoring and challenges, further elaborating on how effective monitoring techniques play a crucial role in the detection,

prevention and remediation of polluted sites. Later in his talk he discussed various projects undertaken along the mainstream of Ganga or its major tributaries including real time monitoring of stream flow. He concluded by telling various ways like resource recovery from waste, proposition of hygiene amongst the communis and green and clean energy for the remediation of polluted sites.

**Dr. Srabani Mishra, Assistant Professor, Mineral-Metal Recovery and Recycling (MMR&R) Research Group, Suleyman Demirel University, Isparta, Turkey**

deliberated on Mineral Biotechnology which is an Eco-friendly remediation technique for sustainable treatment of primary and secondary resources. She discussed on the need for bio-



desulphurization of coal and Biodegradation of dibenzothiophene. Further she elaborated on E-waste since it is becoming a threat to the world highlighting the environmental effects of waste disposal because it causes environmental damage and compliance with circular economy for E-waste management for zero waste generation.

**Dr. Basant Yadav, Assistant Professor, Department of Water Resources Development & Management, Indian Institute of Technology Roorkee** discussed the role of hygiene promotion among

rural and urban community which builds resilience to hazards in water, sanitation and hygiene systems. He deliberated on the concept of social vulnerability to natural hazards and hygiene promotion which is the process of enabling people to increase control over and improve their hygiene and its purpose and importance. He elaborated six principles of hygiene promotion and its promotion strategy. He concluded with describing various myths associated with hygiene promotion and way forward.



**Ms. Meenesh Tomar, Regional EHS Manager - APAC Bengaluru, Karnataka, India,** Certified Lead Auditor ISO 45001(CQI & IRCA) mainly discussed sustainable operations for clean and green energy. She elaborated

on various ways of clean energy that are applicable and beneficial based on their needs and ESG goals. She spoke about green energy initiatives to achieve operational net zero or renewable energy targets. She concluded with offsite solutions for ease of transferability since it allows the customer flexibility to vacate the site and allows developer to sell energy to new customers seamlessly and few examples of clean/green energy initiatives and sustainable development.

At the end of session, the customary duty of presenting a vote of thanks was done by Dr. Kartikeya Shukla (Assistant Professor, AIES). On behalf of everyone and the entire organizing team he thanked the



Administration of Amity University, esteemed delegates, the scientific community, colleagues, participants and research scholars for their support and being an integral part of our journey and this event. He thanked the Admin, IT team, AUUP for their support

throughout event celebration.



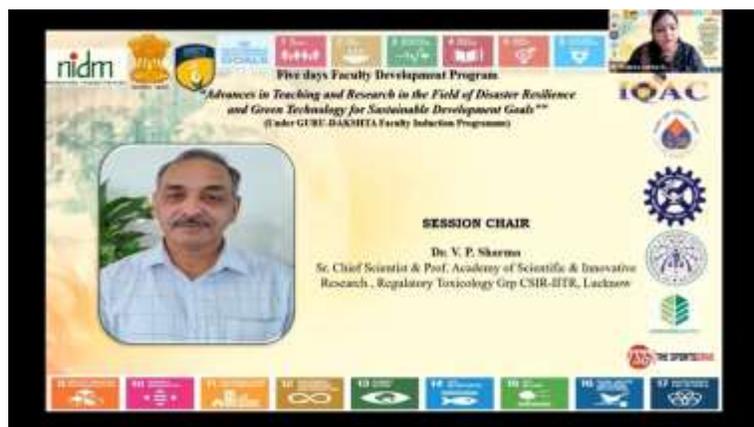
The Online Assessment for Plenary Session –IV & V was done at the end. The google form was pasted in the chatbox and the participants were supposed to attempt all the questions. The aim of the assessment was to know that how actively and sincerely the participants have attended the FDP.

**PLENARY SESSION – VI- The sixth session of the FDP has four speakers from the different expertise across the country who have spoken and discuss Environmental Challenges: Action for Disaster Resilience & Resource Management. Total 278 people have registered for the event and 161 attended the IV day.**

<i>Day 4: 09/06/2022 (Thursday)</i>	
<b><i>Exploring Linkages between Environment and Global Health &amp; Safety Issues</i></b>	
<b>PLENARY SESSION – VI</b>	
<b>Indian Institute of Toxicology Research-Lucknow</b>	
<b>10:30am-01:30pm</b>	
10:15am-10:25am	<b>CHAIR: Dr. V. P. Sharma</b> , Chief Scientist & Prof AcSIR, Regulatory Toxicology Group CSIR-IITR, Lucknow.
10:25am-10:55am	<b>Mr. Luis Gallardo</b> , Founder and President World Happiness Foundation USA
11:05am-11:35am	<b>Dr. Audrey Tang</b> , Business Author, International speaker, Mental health and wellness expert, UK
11:45am -12:15pm	<b>Dr. C M Nautiyal</b> , Consultant for Sci. Communication, Indian National Science Academy - INSA Former Scientist, Radiocarbon lab. Birbal Sahni Institute of Palaeobotany, Lucknow
12:25pm-12:55pm	<b>Dr. V. P. Sharma</b> , Chief Scientist & Prof AcSIR, Regulatory Toxicology Group CSIR-IITR, Lucknow.
01:05pm-01:35pm	<b>Dr. A.B. Pant</b> , Area Coordinator, Regulatory Toxicology & Sr Principal Scientist CSIR-IITR Lucknow
01:45pm -01:50pm	<i>Vote of thanks Dr. Richa Dave Nagar, AIES, AUUP</i>



**CHAIR: Dr. V. P. Sharma, Chief Scientist & Prof AcSIR, Regulatory Toxicology Group, CSIR-IITR, Lucknow.**



The CHAIR Dr. V. P. Sharma, Chief Scientist & Prof Professor Academy of Scientific & Innovative Research, Regulatory Toxicology Group, CSIR-IITR, Lucknow has set up the pace for the session highlighting the importance of Exploring Linkages between Environment and Global Health & Safety Issues. Very beautifully he has encompassed and touched upon every SDGs to be covered

under this session. He also shared that's it's a world accreditation and how this FDP became a means to celebrate World environment day, world ocean day and world accreditation day. He has chaired the session so wonderfully weaving all the agendas together. We are so grateful to him for taking out his time and to be with us throughout. He made the excellent deliberation facilitating the natural bridges between faculty & facility. He has covered all the linkages bringing all the facets in one lecture. Very inspiring lecture. We are just not enriched listening to him instead we are overwhelmed.



**Mr. Luis Gallardo, Founder and President World Happiness Foundation USA**

His deliberation was focused on "happytalism," which means growing stronger from pain and miseries, the unlimited power of synarchy, a hope to live. He emphasized on constant stress, emptiness inside, loneliness, self

doubt and how to emerge out of it. He talks about will power, the mental state which have power to turn things around and help us to bounce back. He emphasized that we live in a divided world. And not just politically. The world economy is creating winners and losers, with no clear way to prosperity for millions of people. The last couple of decades have produced great inequality of wealth and, with it, unequal access to the reins of power. We are separated along local, regional, and borderlines,



and we are divided into rural and urban parts. We increasingly struggle with differences of class, race, and religion. He also mentioned that the way before the onset of the COVID-19 pandemic, loneliness was already recognized as a significant public health issue, prompting numerous countries to create a strategy to end loneliness. But with the start of the pandemic, and with such measures as lockdowns, shielding, and limiting contact with others, has left millions more dealing with social isolation, lengthy separations, and loneliness. He talked about collective healing and its so true, we all help each other in healing. We need each other to heal and to be happy. Time to reconnect.



**Dr. Audrey Tang, Business Author, International speaker, Mental health and wellness expert, UK**



Dr. Audrey Tang, Business Author, International speaker, Mental health and wellness expert, UK. She started her deliberation with gut, heart and brain linkages. She emphasized that we know things, but we should also know how to make them practical. She elaborated on the four practical tools, that can be adopted for balanced and happy life. She beautifully described how we work with the pre-

established pathways by our brain, we are already coming with emotional packages that resist changes, so to tackle these emotional and mental dips we need to work on ourselves. She talked about retrofitting and asking oneself very basic questions, that why I can't be happy? Why can't I have a peaceful life? All these questions to oneself leads to the understanding of life better. She talked about emotional resilience and calm personality that we are seeking in this mad world.



Expressed beautifully "you are you". We all grew with adversity, failure. We become resilient, we become stronger... we need help and we do offer help to people who are very attached to worldly things. She educate us about the ideal way of life analysis by making a pie-chart of our time utilization or time investment. This is to understand that where we are invwting our time, is it the things we really like or its the time simply going wasted?

She elaborated on well being wheel and it is assured that everyone of us present tharer would implement it, followed by SWOT analysis of our own self...and last but not the least -two cup of tea which means value people, spend time, understand them.

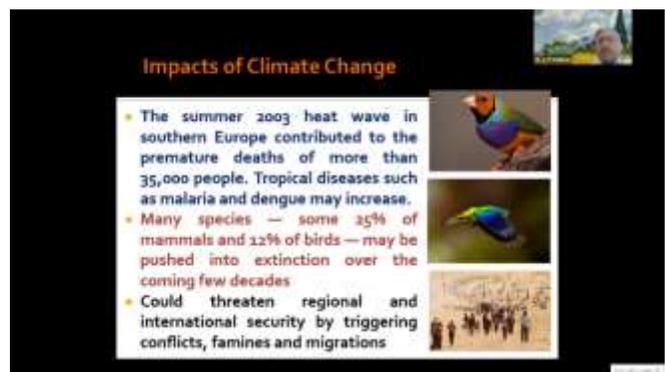


**Dr. C M Nautiyal, Consultant for Sci. Communication, Indian National Science Academy - INSA, Former Scientist, Radiocarbon lab. Birbal Sahni Institute of Paleobotany, Lucknow**

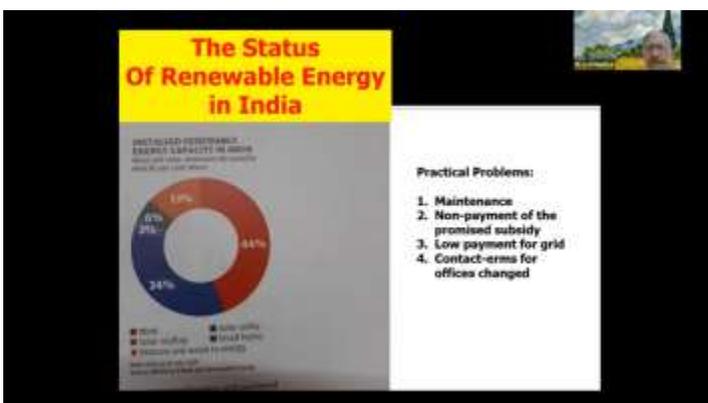


Dr. C M Nautiyal, Consultant for Sci. Communication, Indian National Science Academy – INSA, Former Scientist, Radiocarbon lab. Birbal Sahni Institute of Palaeobotany, Lucknow. His topic of deliberation was climate and health. He has covered all the aspects of environment which is affecting the health and how it is growing detrimental each day. What a perfect start to his session and

connecting science with life and heart. He began his lecture with a statement that climate is a bull an we keep poking it with a stick. He encompasses all the parameters in his lecture which are responsible for holistic health. He talked about the climate change and its impact and summarises how the climate is resulting into the premature deaths of more than 35,000 people. Tropical diseases such as malaria and dengue are increasing in the



Asian countries. He also talked about the decrease and the extinction of various species of mammals and birds in the coming few decades. He also elaborated on the threat that is lingering on the regional and International Security triggered due to conflicts, famines and migrations. He also touched upon the adverse effects on crops because of the climate change. He gave excellent examples from



the past that have the climate change has impacted the dynasties and the kingdoms at that time. He highlighted how climate change affects the social and environmental determinants of health – clean air, safe drinking water, sufficient food and secure shelter focussing on the upcoming challenges b/w 2030 and 2050, with expected to cause approximately 250 000 additional deaths per year, from malnutrition, malaria, diarrhoea and heat stress. He gave the overview of climate-sensitive health risks, their exposure pathways, practical problems and vulnerability factors.

**Dr. A.B. Pant, Area Coordinator, Regulatory Toxicology & Sr Principal Scientist, CSIR-IITR Lucknow**



his deliberation was on ethics in research, moral principle, professional code of conduct. He started his lecture with a very basic question, what is research? He elaborated on the philosophy of thinking out of the box. He emphasises that the research is not for the individual but for the society. So, to begin with the research, first we have to

identify the needs of the society. He has touched upon a very basic very fundamentals aspects- difference between fiction and fact. He elaborated on the points that needs to be considered. For the good research which are planning, performing, recording, reporting, and archiving. He emphasized on the difference



between search and re-search?, he asked many significant questions that what are we doing with science?



If we are not contributing anything to existing text then its not worth, we have to strive to bring newness to science. Gaps should be indentified and efforts should be make to convert it to a good and new research highlighting the 6 pillars. He explained in detail what is the meaning of the research ethics. He explained that the application of

moral principles and professional codes of conduct to the collection, analysis, reporting and publication

of information about research findings is a research ethic. He said that we should have to have right to privacy informed consent, confidentiality, data integrity and it is the responsibility of researchers that he or she should be honest and respectful to all the individuals who have been associated with their research studies and going to be affected by the outcome of their research. He quoted some excellent examples from the history and the present to let us understand the consequences of poor moral and research ethics. He explained in detail the various ethical codes and principles that need to be followed in the research areas namely honesty and integrity, objectivity of the research, competency, respect for colleagues, responsible mentoring, publication and IPR, animal care, no discrimination in biodiversity care, human subjects, welfare and legality. These are some of the ethical codes and principles that need to be taken into consideration for good research work.



At the end of session, the customary duty of presenting a vote of thanks was done by Dr. Ambrina Sardar Khan (Assistant Professor, AIES). On behalf of everyone and the entire organizing team he thanked the Administration of Amity University, esteemed delegates, the scientific community, colleagues, participants and research scholars for their support and being an integral part of our journey and this event. She thanked the Admin, IT team, AUUP for their support throughout event celebration.

**PLENARY SESSION – VII- The sixth session of the FDP has four speakers from the different expertise across the country who have spoken and discuss Environmental Challenges: Action for Disaster Resilience & Resource Management. Total 258 people have registered for the event and 169 attended the IV day.**

<b>Day 4: 09/06/2022 (Thursday)</b> <b>PLENARY SESSION – VII</b> <b>Exploring Linkages between Environment and Global Health &amp; Safety Issues</b> <b>Indian Agricultural Research Institute, New Delhi, India</b> <b>02:30pm-05:50pm</b>	
02:30pm-03:00pm	<b>CHAIR: Dr. Shakeel Ahmad Khan</b> Principal Scientist, Division of Environmental Sciences, (CESCRA), Indian Agricultural Research Institute, New Delhi
03:00pm-03:30pm	<b>Dr. Bhupinder Singh</b> Principal Scientist, Nutrio-physiology and Radiation Biology, Indian Agricultural Research Institute, New Delhi
03:40pm-04:10pm	<b>Professor Vinay K Sehgal</b> Principal Scientist, Division of Agricultural Physics, Indian Agricultural Research Institute
04:20pm-04:50pm	<b>Dr Joydeep Mukherjee,</b> Principal Scientist, Micrometeorology, Agricultural Meteorology, Microwave remote sensing,
05:00pm - 05:30pm	<b>Dr. Bidisha Chakrabarti</b> Principal Scientist, Climate change, ecosystem services, simulation modelling, Indian Agricultural Research Institute, New Delhi
05:40pm- 05:50pm	<i>Vote of thanks Dr. Ashutosh Tripathi, AIES, AUUP</i> <b>&amp; Online Assessment for PLENARY SESSION – VI &amp; VII</b>



Plenary session- VII started with the theme Exploring Linkages between Environment and Global Health & Safety Issues in collaboration with Indian Agricultural Research Institute, New Delhi, India chaired by CHAIR: Dr. Shakeel Ahmad Khan, Principal Scientist, Division of Environmental Sciences, (CESCRA), Indian Agricultural Research Institute, New

Delhi.

**Dr. Bhupinder Singh, Principal Scientist, Nutrio-physiology and Radiation Biology, Indian Agricultural Research Institute, New Delhi** deliberated on Biofortification as a tool to reduce micronutrient malnutrition. He

elaborated on the current challenges in plant mineral nutrition and wheat production constraints. He emphasized on global malnutrition scenario which shows that mineral deficiency can cause problems in human nutrition. He then demonstrated several nutrition intervention techniques which is the need of the hour and possible mechanisms of plant MN efficiency.



**Professor Vinay K Sehgal, Principal Scientist, Division of Agricultural Physics, Indian Agricultural Research**



**Institute** discussed on the advances in remote sensing research for climatic risk mapping and management in agriculture. He addressed risks associated with present day climate variability that would enhance capacity of vulnerable agricultural systems to withstand future climate change impacts. He further explained climatic risk management factors including risk identification, risk reduction and risk transfer.

**Dr Joydeep Mukherjee, Principal Scientist, Micrometeorology, Agricultural Meteorology, Microwave remote sensing**

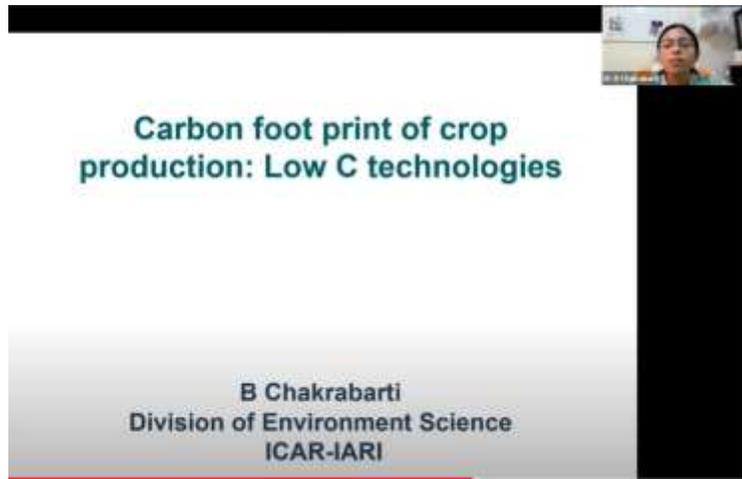
explained biotic and abiotic stresses detection and management in agriculture to enhance food security. He discussed instruments used to measure plant stress using specialized equipment's. Among the most commonly used instruments are those that measures parameters related to photosynthesis (Chlorophyll content). He further elaborated on methods for diagnosis and detection of plant diseases. He concluded by saying further studies should be done to accurately differentiate the



symptoms caused by biotic and abiotic stresses using remote sensing sensors.

**Dr. Bidisha Chakrabarti, Principal Scientist, Climate change, ecosystem services, simulation modelling,**

**Indian Agricultural Research Institute,** New Delhi deliberated on carbon footprint of crop production and Low carbon technologies. She discussed choice of boundaries for carbon footprinting of agricultural products like activities and inputs associated with cultivation of crop to be considered a boundary. She concluded by telling the benefits and challenges of low carbon technologies like water saving and energy saving.



At the end of session, the customary duty of presenting a vote of thanks was done by Dr. Richa Dave Nagar (Assistant Professor, AIES). On behalf of everyone and the entire organizing team she thanked the Administration of Amity University, esteemed delegates, the scientific community, colleagues, participants and research scholars for their support and being an integral part

of our journey and this event. She thanked the Admin, IT team, AUUP for their support throughout event celebration.

The Online Assessment for Plenary Session –VI & VII was done at the end. The google form was pasted in the chatbox and the participants were supposed to attempt all the questions. The aim of the assessment was to know that how actively and sincerely the participants have attended the FDP

**PLENARY SESSION – VIII- The sixth session of the FDP has four speakers from the different expertise across the country who have spoken and discuss Ensuring Social Justice & Equality through Institutional Partnership & Capacity Building. Total 271 people have registered for the event and 168 attended the V day.**

<b>Day 5: 10/06/2022 (Friday)</b>	
<b>Ensuring Social Justice &amp; Equality through Institutional Partnership &amp; Capacity Building</b>	
<b>PLENARY SESSION – VIII</b>	
<b>THE ENVIRONMENTAL &amp; CONSUMER PROTECTION FOUNDATION, SOUTH DELHI, INDIA</b>	
<b>10:30am-02:30pm</b>	
10:15am-10:45am	<b>Chair: Mr. Rakesh Aggarwal</b> Executive Chairman, The Environmental & Consumer Protection Foundation, New Delhi And <b>Dr. S K Jain</b> , Director, The Environmental & Consumer Protection Foundation, New Delhi
10:45am-11:15am	<b>Keynote: Dr. Surendra Kumar Pathak</b> Professor and Head, Department of Value Education, Director – Existential Harmony Projects, Former -Dean, Social Sciences, IASE (D) University, Gandhi Vidya Mandir, Sardarshahar, Rajasthan
11:25am-11:55am	<b>Dr. Ajay Kumar Pandey</b> Advocate Supreme Court of India, New Delhi & Political Analyst
12:05pm-02:30pm	<i>Vote of thanks Dr. Ambrina Sardar Khan, AIES, AUUP</i> <b>&amp; Online Assessment for PLENARY SESSION – VIII and Feedback of the FDP</b>



Plenary session- VIII started with the theme Ensuring Social Justice & Equality through Institutional Partnership & Capacity Building in collaboration with the environmental & consumer protection foundation, South Delhi, India chaired by **Mr. Rakesh Aggarwal, Executive Chairman, The Environmental & Consumer Protection Foundation, New Delhi.**

**Dr. S.K Jain, Director of Ecpfo**, The Environmental and Consumer Protection Foundation, New Delhi, Former GM (Environment) NTPC corporate officer discussed about social justice and five main principles of social justice. He explained gender equity and role of government and NGOs in social justice and access of resources importance in social justice and equality.



**Dr. Ajay Kumar Pandey, Advocate Supreme Court of India, New Delhi & Political Analyst**

deliberated on history of social justice. He emphasized on reservation system in India and how India's Constitution has solemnly guaranteed all its people social, economic and political justice; freedom of expression of speech, belief, religion and worship; equality of status and

opportunity; and the promotion of the dignity of the person and the unity of the community among all the fraternity. He said social justice is a dynamic tool to improve the conditions of the marginalized sections of the society. If implemented in letter and spirit can help ensure human dignity and equal opportunities.

At the end of session, the customary duty of presenting a vote of thanks was done by Dr. Ambrina Sardar Khan (Assistant Professor, AIES). On behalf of everyone and the entire organizing team she thanked the Administration of Amity University, esteemed delegates, the scientific community, colleagues, participants and research scholars



for their support and being an integral part of our journey and this event. She thanked the Admin, IT team, AUUP

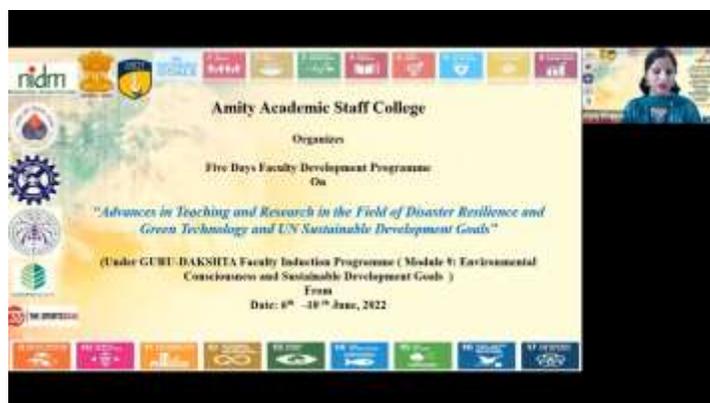
for their support throughout event celebration.

The Online Assessment for Plenary Session –VIII and feedback I was done at the end. The google form was pasted in the chatbox and the participants were supposed to attempt all the questions. The aim of the assessment was to know that how actively and sincerely the participants have attended the FDP

<b>VALEDICTORY -10/06/2022 (Friday)</b> <b>03:30PM – 05:30PM</b>	
03:30-pm-03:35pm	Lighting of Lamp & Saraswati Vandana
03:35pm-03:40pm	Welcome Address by Dr. Ambrina Sardar Khan, AIES
03:45pm-03:55pm	Report Presentation by <i>Dr. Renu Dhupper, Joint coordinator, AIES, AUUP</i>
03:55pm-04:05pm	Few thoughts by <b>Prof. D. K. Bandyopadhyay</b> , Chief Advisor FPO / Chairman, Amity Law School, Mentor, Amity Institute of Environmental Sciences, Amity University Uttar Pradesh, India
04:05pm-04:15pm	Few thoughts by <b>Prof. (Dr.) Balvinder Shukla</b> , <i>Vice Chancellor, Amity University Uttar Pradesh (AUUP)</i>
04:15pm-04:25pm	<b>Special Address</b> <b>Prof. (Dr.) Anil K. Gupta</b> Professor & Head ECDRM Division, National Institute of Disaster Management, Ministry of Home Affairs, Government. of India
04:25pm-04:35pm	<b>Address by Guest of Honor</b> <b>Major General Rajan Kochhar</b> Vice Chairman National Council of News and Broadcasting Noida, Uttar Pradesh, India
04:35pm- 04:45pm	<b>Address by Guest of Honor</b> <b>Dr. Nisha Mendiratta</b> , Adviser / Scientist "G" & Head, Women In Science & Engineering (WISE) - KIRAN Division &Head, Climate Change Programme (CCP) Division, Department of Science & Technology (DST)
04:45pm-05:00pm	<b>Address by Chief Guest</b> <b>Dr. S K Vasudeva</b> , Consultant Defense Technologies, Office of Principal Scientific Adviser to Govt of India, New Delhi Ex Chief Controller (R&D) DRDO, New Delhi
05:00pm-05:25pm	<b>MoU with Indian Meteorological Department, New Delhi</b>
05:25pm-05:30pm-	<i>Vote of Thanks Dr. Anshu Arora, ASCO, AUUP</i>



Valedictory session was started with the welcome address given by **Dr. Ambrina Sardar Khan, Assistant Professor-III, Amity Institute of Environmental Sciences, Amity University** with the blessings of Hon’ble Founder President Sir, Hon’ble Chancellor Sir, Hon’ble Vice Chancellor, and mentor AIES. The journey began five days ago with an aim and a hope that we will explore the niche where development and nature can co-exist,



will harmonized, and can live together. With the cluster of eminent speakers sharing their research, experiences, ideas and hope to see a better and a sustainable world have paved a path for all of us to begin and to explore new avenues in the Field of Green Technology and UN Sustainable Development Goals “has setup the base to move forward for all of us.

The report Presentation was done by **Dr. Renu Dhupper**, Assistant Professor-III, Joint Coordinator, Amity Institute of Environmental Sciences, briefing the discussion and the deliberations made by various eminent speakers. She has highlighted the key points of the FDP and explained the outcomes achieved in detail.



**Prof. D. K. Bandyopadhyay, Chief Advisor FPO / Chairman, Amity Law School, Mentor, Amity Institute of Environmental Sciences, Amity University Uttar Pradesh,**

He congratulated for the success of FDP. He said that we started this program in terms of giving recent development in some upcoming field and the topic that we chose under this Guru Dakshta scheme, which is that environmental consciousness and sustainable development goals and this faculty development program and very correctly it was mentioned with objective to build sensitivity and develop awareness of great technology and sustainable development goals among participants to foster skills in thinking reasoning inquiry and making decisions about the environment and world around them. He emphasized that everyone has a role to play in this novel venture that's most important thing and how do you really involve everybody because decadent ecosystem restoration aims to catalyze global movement among local communities, activists, and women, youth engineers in indigenous groups, private companies, financial investor, research and government at all levels. The beauty of this is that it conveys a message of action and hope. It can happen at any scale whether a backyard plot, a city park, a river valley, a national forest or a globally threatened ecosystem this means that everyone can get involved that's most important thing.

**Prof (Dr.) Balvinder Shukla, Vice Chancellor, Amity University Uttar Pradesh**

Hon'ble Madam has congratulated whole team of AIES under the leadership of Prof. D. K. Bandyopadhyay for organizing wonderful Faculty Development Programme Under GURU-DAKSHTA Faculty Induction Programme.



She said that due to the fact that our Faculty Development Program is coming to an end, we must possess the learning from this FDP and implement into our lives and professions. The challenge is is how we are able to understand the the issues of environment and society and how we are actually tackling it. Whether or not the UN Sustainable Development Goals and green technology are the focus of the this FDP, the idea

is "reimagine, recreate, and repair." She assured all the attendees, who represented a variety of universities and colleges, that they would not only develop teaching pedagogies but also incorporate these ideas into the curriculum in order to raise up a future generation that is pro-environment and concerned about the depletion of natural resources.

Therefore, this faculty Development Program becomes extremely important in the vision of the Hon'ble Founder President that how do we as a higher education institution develop the youth which not only contributed to their own career, they make their career but also look at the world requirement, the national requirement, making this world a better place to live because the environment is very important. Environment directly helps the impacts the health environment, directly impacts the agriculture, environment directly impacts the forest natural resources, and what kind of the technology we should use, what kind of the strategies we should make so that we are able to meet all the UN sustainable development goals.

She added that the faculty development program would lead to improvements in curriculum, teaching, and learning as well as research projects that faculty would undertake. These research projects would all always be focused on the SDG, meet community needs, and address environmental concerns, among other initiatives, enabling us to become a fully revitalized nation. We can take a variety of



actions that ultimately support the objectives of sustainable development, from the campus to the neighborhood, the city, and the country. She said that from this FDP which has focus on the green technologies we will move ahead designing and developing the curriculum and the pedagogy and the developing the youth and conducting the research, we will meet the sustainable development goals.

**Prof. (Dr.) Anil K. Gupta, Professor & Head ECDRM Division, National Institute of Disaster Management, Ministry of Home Affairs, Government. of India**



He appreciated and congratulated all the FDP team and gave good wishes. He said that we have very good and learned speakers joined us for this FDP and hope that everyone will share and impart the knowledge attained to students and future generations so that they can implement the same in their leads, in their future career and other areas of their life. He also thanked all

the eminent speakers which have been part of this five days FDP. He emphasized that sustainability can be achieved by setting up the objectives and this weeklong faculty development program was very specific in its approach and team and conducted throughout the 5 days. He highlighted the importance of resilience that, along with the effective government, good health, wellbeing, all we need is to be resilient towards the climate change and the various disasters and look for the mitigation strategies to have sustainable nation. He also emphasised that we are only left with 7 and a half years to attain sustainability or a sustainable nation by 2030. He also focused that the major problem that we have faced as a country is the disasters that has struck India in last few decades.

**Major General Rajan Kochhar, Vice Chairman National Council of News and Broadcasting, Noida, Uttar Pradesh, India**



He was the Guest of Honor of the FDP and expressed his gratitude to the Hon'ble Chancellor and Hon'ble Vice Chancellor for giving this opportunity and congratulated to all eminent speakers, panelists teachers and staff for their hard

work and dedication. But he also put forward his thought that it is the high time for these conferences, webinars and workshops. In fact, it is the time for action, he said that whatever learnings we have taken from this FDP should be implemented and should be



brought down to the ground level so that the society and the nation can be benefited out of it. We must be the ground soldiers for tomorrow and we must sensitise the youth of the nation and inculcate the belongingness and SDGs into them. He has put forward the many validate points and appealed through our program that there must be some legislation where the builder should keep 70% of the land free and only 30% should be constructed because we need more and more forest and lands to have a clean and green environment. He expressed his appreciation and good wishes for the future endeavours of Amity Institute of Environmental Sciences.

**Dr. Nisha Mendiratta, Adviser / Scientist "G" & Head, Women In Science & Engineering (WISE) - KIRAN Division & Head, Climate Change Programme (CCP) Division, Department of Science & Technology (DST)**



She started her discussion by congratulating the entire team and the Vice Chancellor of Amity University, along with the respected dignitaries that are present in the valedictory session. She began her address by coating the gender equality and the gender sensitization across the country and globe. She mentioned that Amity is doing a wonderful task in gender

inclusiveness, as she can see that how wonderfully the sessions and the faculty development program was accomplished by the women in majority. Being the head of the women in science and engineering in the division of DST, she mentioned that it's a proud work for her and her team that they are helping at the women scientists across the country. They are providing the opportunities to the women scientists in India to come forward and achieve their dreams of being scientist at frontline. She also shared the details of the program that is run by the Wise Department of DST which is the policy intervention. She was very happy to know that in these 5 days the Amity Institute of Environmental Sciences have covered so many different aspects under one head in this faculty development program. Also, she has congratulated the team for the wonders, full speakers that has been called for this particular faculty development program. She highlighted the lacunae where India is lacking and the role of academicians, stakeholders and the industry to come together to attend the SDGs by 2030.

**Dr. S K Vasudeva, Consultant Defense Technologies, Office of Principal Scientific Adviser to Govt of India, New Delhi, Ex Chief Controller (R&D) DRDO, New Delhi**



He thanked and congratulated Amity University for the Faculty Development Programme. He appreciated the nomenclature given to this program - and given very thoughtfully – Guru Dakshita. He acknowledged that it has provided him a chance to have a glimpse of the Academic World contributions to the

noble cause of saving and preserving the Environment for the future generations. Over the last five days, many pioneers in this field have addressed on diverse topics covering every aspect of the SDGs, green technology and resilience in disaster management capabilities. He mentioned a few things about initiatives for achieving sustainable development goals and accelerating green growth, taken by the Office of the Principal Scientific Advisor to the Government of India.

He elaborated that during the course of this FDP, various speakers have made the participants aware of the Sustainable Development Goals (SDGs). SDGs, also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to protect the planet. He appreciated that all the SDGs are integrated, since it is recognized that action in one area will affect outcomes in others. Hence, the development must balance social, economic, and environmental sustainability. Our country has committed to prioritize progress for those who're at the bottom-most rung of the social ladder.

He said that to overcome these challenges, the future generations must be ready to build upon the foundations being laid today. This is where the role of a teacher becomes most important in providing guidance to the students and promoting a culture of cultivating a mindset for turning problems into sustainable solutions. It is the personal and social values that are cherished, carried forward by the teachers, and which are engrained by them in their students, which form the strongest foundations of the future of the country. Therefore, this edition of the Faculty Development Program of Amity University on “Disaster Resilience and Green Technology for SDGs” is a very important step towards that National goal as well. He also said that by organizing this FDP, we are already fulfilling the 4th part of the 17 SDGs that UNDP declared in 2015. He congratulates the entire team for this endeavor in

making your faculty aware of green technology and sustainable development goals (SDGs) and contributing to the National efforts in this direction.

**MoU is signed with Indian Meteorological Department, New Delhi and Amity University.** The signing ceremony was graced with the presence of Dr. Pattanaik, Head of Numerical Weather Prediction division IMD and Dr. W Selvamurthy is an Indian scientist, President of Amity Science, Technology and Innovation Foundation and Director General for Amity Directorate of Science and Innovation. Honorable Vice Chancellor Madam has congratulate the organization for the successful MoU Signing.





**MoU is signed with Indian Meteorological Department, New Delhi, both parties agree to collaborate on the following areas for the pursuit of academic excellence in the field of Meteorology and Climate Modelling: -**

- i) To Plan and execute joint research, capacity building, field studies and consultancy projects in the field of Environmental Sciences.
- ii) Undertake development of case studies, conduct research, and bring out publications and report.
- iii) Organize round table meetings, seminars, and conferences on emerging issues in the area of Environment.
- iv) Jointly explore use of emerging technologies such as geospatial technologies in the areas of Environment.

- v) Exchange of resource persons and sharing training resources including online/offline modules developed separately or jointly.
- vi) To take up Joint supervision of Research Projects/ Dissertation work of students with IMD, New Delhi faculty as co-guides along with CDMS faculty in the areas of Environment related.

**At the end of Inaugural session, the customary duty of presenting a vote of thanks was done by Vote of Thanks Dr. Anshu Arora, ASCO, AUUP.** On behalf of everyone and the entire organizing team she thanked Honorable Founder President sir, Honorable Chancellor, Honorable Vice-chancellor, mentor, the Administration of Amity University, esteemed delegates, the scientific community, colleagues, participants, and research scholars for their support and being an integral part of our journey and this event. She thanked the Admin, IT team, AUUP for their support throughout these five days FDP and helping since the beginning.

The opportunities that are generated from this FDP will be worked upon and materialise in the future. The following opportunities can be avail:

- ❖ MOUs with the institutions of the speakers.
- ❖ Students of B.Sc. & M.Sc. EVS can be sent for Dissertation.
- ❖ Speakers can be utilized as PhD External Guides.
- ❖ Speakers can be utilized as Industry/ area experts in BOS & AAB.
- ❖ Generate the opportunity for the placement of our students.
- ❖ Collaborative R&D projects.
- ❖ Can be use as resources person for the future events & vice versa.

- ❖ Training programs and
- ❖ Consultancy

All the panellists and participants have expressed their thanks and congrats the team of Amity Institute of Environmental Sciences, Amity School of Natural Resources and Sustainable Development and Amity University Uttar Pradesh for organising such a wonderful and extremely beneficial Five Days On-Line Faculty Development Programme on “Advances in Teaching and Research in the Field of Green Technology and UN Sustainable Development Goals”, (Under GURU-DAKSHTA Faculty Induction Programme (Module 9: Environmental Consciousness and Sustainable Development Goals). All the eminent speakers and guest of honour have expressed their gratitude for giving them an opportunity and a platform to share their knowledge, experience and ideas to the academicians, people from corporate and research scholars. The response of the participants was overwhelming and encourages the organising team to come up with many more such type of events soon. With more than 150 people attending the faculty development program for five days itself speaks about the success of the faculty development program.