

MEMORANDUM OF UNDERSTANDING (MOU)
BETWEEN

AMITY INSTITUTE OF BIOTECHNOLOGY,
Amity University Mumbai
Mumbai - Pune Expressway, Bhatan,
Post – Somathne, Panvel, Mumbai,
410206. Maharashtra INDIA

AND

PROKARYOTES LAB PVT. LTD.

B-101 BEML Layout, Prism Sovereign, Kundalahalli, Bangalore, Karnataka 560066, India

This Memorandum of Understanding (MOU) is executed on the 15th July of 2019, between the following parties:

Amity Institute of Biotechnology established in 2014 under Amity University Mumbai (A Private University, established under Government of Maharashtra Act No. XIII of 2014 and is recognized as per Section 2 of the UGC Act), situated at Mumbai - Pune Expressway, Bhatan, Post – Somathne, Panvel, Mumbai, 410206. Maharashtra INDIA, through its Director duly authorised to enter into and sign the MOU on behalf of Amity Institute of Biotechnology, Amity University (hereinafter called as 'AIB, AUM') of the ONE PART

AND

PROKARYOTES LAB PVT. LTD, Bangalore, Karnataka, An Environmental Management Company, established on 24 June 2019 Under the company act, 2013 (18 of 2013) and that the company is limited by shares. Registration done under Ministry of Corporate Affairs (cooperate identify number. U90009KA2019PTC125515) having its executive office at B-101 BEML Layout, Prism Sovereign, Kundalahalli, Bangalore, Karnataka 560066, India. (Here in after referred to 'Prokaryotes Lab' as the context permits) is the ANOTHER PART.

Amity Institute of Biotechnology, one of the Institute UNDER the Amity University Mumbai and Prokaryotes Lab Pvt. Ltd., Karnataka, India wishing to establish cooperative/Collaborative relations, agree as follows.

AREAS OF COLLABORATION

Subject to the availability of funds and the approval of the Vice Chancellor, Amity University, Mumbai and the Prokaryotes Lab Pvt. Ltd., Karnataka collaboration will be undertaken through activities or programs such as:

- Conduct joint research activities on the project entitled 'Development of Hydrocarbon degrading Kit' and within the fields of interest with projects that are mutually agreed upon and subject to availability of funds;
- Participate in conference, symposia and seminars of mutual interest
- Collaborate in joint research in the thrust areas of the respective Company-Institute, and file patents and publish research findings;
- Cooperate to solicit joint proposals for funding from various funding agencies and exchange scientific information and documentation, both written and electronic.

The scope of this agreement may be modified in the future based on mutual interest and agreement.

Principles of Collaboration

AIB, AUM and Prokaryotes Lab jointly agree to develop their research links under the principles of mutual understanding, common interest and mutually complementary activities.

1. To work in the areas benefiting the community at large.
2. To identify common thrust areas of research keeping in focus the Sustainable Development Goals (SDGs) and priorities in the field of science and technology especially with biotechnological interventions.
3. To promote individual contacts among Research scholars, Students and Faculty/Staff of both the institutions.
4. To provide opportunities for the faculty/staff members, research scholars and students to use the expertise and facilities available in both the organizations including.
5. To work jointly for the common research interests, including the preparation and submission of research proposals / protocols and their implementation by making use of the material / facilities at either Prokaryotes Lab or AIB, AUM.
6. To consider AIB, AUM as a Research and Development partner for carrying out research studies in mutual interest of both.
7. To mutually acknowledge and share the experience, expertise and capabilities of AIB, AUM, Mumbai and Prokaryotes Lab, Bangalore with due importance in collaboration, resource sharing and partnership.
8. To publish reports of sponsored projects/papers, file patents and disseminate results on mutually agreeable terms.

Patents and Publication

Patents and publications, if any, in respect of the activity under this MoU shall be in the names of involved personnel from both the parties and the sequence of Authors mutually agreed upon based on contribution. In all patents and publications (papers, reports etc.,) it will be duly acknowledged that the work has been carried out by 'AIB, AUM' and 'Prokaryotes lab Pvt Ltd' under this MoU between the parties. All ethical guidelines of research publication existent at both the organizations will be followed, strictly.

RENEWAL, TERMINATION AND AMENDMENT

This agreement shall remain in force for a period of one (1) years from the date of the last signature, with the understanding that it may be terminated by either party giving two months written notice to the partner institution.

This MoU may be terminated by either party by the provision of written notice of termination by not less than six months prior to the desired termination date. However, both parties agree that all continuing obligations to students, staff, funding bodies or other entities are met in full subsequent to the notice of termination.

All notices and other communications required to be served on AIB, AUM under the terms and this MoU, shall be considered to be duly served, if the same is delivered at or posted by registered mail to the Director, AIB, AUM at its registered office in Amity Institute of Biotechnology, Amity University Mumbai, Mumbai - Pune Expressway, Bhatan, Post – Somathne, Panvel, Mumbai, 410206. Maharashtra INDIA

Any dispute arising out of this Memorandum of Understanding or in its enforcement the concerned parties to this MoU will resolve the same amicably. However, in case if the dispute remains unresolved it shall be referred to an arbitrator to be appointed by mutual consent of both the parties. The venue of arbitration shall be at such place as may be fixed by the arbitrators and the arbitration proceeding shall be as provided under the Arbitration and Conciliation Act, 1996. The decision of the arbitrator shall be final and binding upon both the parties.

All legal disputes shall be subjected to the Jurisdiction of the courts in Mumbai, State of Maharashtra.

No modification to this MoU shall be binding unless made in writing and signed by both parties.

This agreement may be amended with the consent of the company and the institution through a written addendum executed by authorized individuals of both. Such agenda, once approved by both of them, will become part of this memorandum of agreement.

This agreement shall be binding upon signing by authorized individuals of the 'AIB, AUM', and 'Prokaryotes Lab' and shall be effective as of the date last written below.

9. To encourage any other activities that both the institutions agreed to be on mutual benefit, Specific terms, conditions and procedural aspects of collaboration including financial obligations of either party shall be finalized on mutual terms and conditions of each specific project and sharing of outcomes (papers and intellectual property rights) under this MoU separately.

The terms and budget for each program or activity implemented under this agreement shall be mutually agreed upon in writing prior to its initiation. Such programs and activities shall be approved by authorized individuals from each party.

Designated official (s) at each institution shall oversee and facilitate implementation of this agreement in cooperation with other appropriate administrators at the respective institutions. All notices shall be in writing and shall be directed to these officials as follows:

Director, Amity Institute of Biotechnology, Amity University Mumbai, Mumbai - Pune Expressway, Bhatan, Post – Somathne, Parvel, Mumbai, 410206. Maharashtra INDIA

Telephone: +91(022) 71987045(O)

Email: nsdesai@mum.amity.edu; neetindesai@gmail.com

Director, B-101 BEML Layout, Prism Sovereign, Kundalahalli, Bangalore, Karnataka 560066, India,

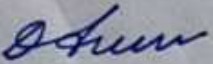
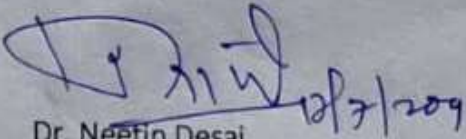
Telephone: 8861117404

Email: darun26.ibm@gmail.com

The present agreement shall enter into force when signed by both parties and will remain effective for one years in the first instance. Either party may bring the agreement to an end by two month written notice to the other. Any modification of the present text during the tenure of this agreement shall be agreed between the parties and submitted for approval to the relevant authorities in both the institutions.

For the purposes of this Memorandum of Association and all addenda hereto encompassing specific programs between 'AIB, AUM' and 'Prokaryotes Lab', it is understood and agreed that neither party shall be liable for any negligent or wrongful acts, either of commission or omission, chargeable to the other, unless such liability is imposed by law. This memorandum of agreement and all addenda shall not be construed as seeking to either enlarge or diminish any obligation or duty owed by one party to the other or to a third party.

IN WITNESS WHEREOF, the parties hereto have offered their signatures:

For and behalf of AIB, AUM		For and behalf of Prokaryotes Lab	
 Mr. Arun Dhakshinamoorthy, Director, PROKARYOTES LAB PVT. LTD. Address: B-101 BEML Layout, Prism Sovereign, Kundalahalli, Bangalore, Karnataka 560066, India		 Dr. Neetin Desai, Director, AMITY INSTITUTE OF BIOTECHNOLOGY, Amity University Mumbai, Mumbai - Pune Expressway, Bhatan, Post – Somathne, Panvel, Mumbai, 410206. Maharashtra INDIA	
Witness: (Name & address)	Sign with date	Witness: (Name & address)	Sign with date
1.		1.	
2.		2.	
		3.	
		4.	

**MEMORANDUM OF UNDERSTANDING (MOU)
BETWEEN
AMITY UNIVERSITY MAHARASHTRA**

Mumbai - Pune Expressway, Bhatan,
Post – Somathne, Panvel, Mumbai,
410206, Maharashtra, India

AND

VROVAFACETS

1723/D, No.2, K. B. Complex,
2nd Stage, M.K.K Road,
Rajajinagar, Bengaluru -560 010
Republic of India

This Memorandum of Understanding (MOU) is executed on the 5th January 2021, between the following parties:

Amity University Maharashtra (A Private University, established under Government of Maharashtra Act No. XIII of 2014 and is recognized as per Section 2 of the UGC Act), situated at Mumbai - Pune Expressway, Bhatan, Post – Somathne, Panvel, Mumbai, 410206, Maharashtra INDIA, through its Registrar duly authorised to enter and sign the MOU on behalf of Amity University Maharashtra (hereinafter called as 'AUM') of the ONE PART

AND

Vrovafacets Private Limited, a company established under the company act, 2013 (18 of 2013) and that the company is limited by shares. The company has its registered office at 1723/D, No.2, K. B. Complex, 2nd Stage, M.K.K Road, Rajajinagar, Bengaluru -560 010 REPUBLIC OF INDIA (here in after referred to as "Vrovafacets" which expression shall, unless it be repugnant to the context or meaning thereof, be deemed to mean and include its successors and permitted assignees) of the Another Part. Amity University Maharashtra and Vrovafacets, Karnataka India wishing to establish cooperative/Collaborative relations, agree as follows.

AREAS OF COLLABORATION

Amity University, Maharashtra and the Vrovafacets Private Limited, Karnataka collaboration will be undertaken through activities or programs such as:



A handwritten signature in blue ink, appearing to be 'Ravi', written over a horizontal line.

- Conduct joint research activities on the project entitled '**Production of high quality food grade agar from seaweed**' and within the fields of interest with projects that are mutually agreed upon and subject to availability of funds;
- Participate in conference, symposia and seminars of mutual interest
- Collaborate in joint research in the thrust areas of the respective Company-University, and file patents and publish research findings;
- Cooperate to solicit joint proposals for funding from various funding agencies and exchange scientific information and documentation, both written and electronic.

The scope of this agreement may be modified in the future based on mutual interest and agreement.

Principles of Collaboration

AUM and Vrovafacets jointly agree to develop their research links under the principles of mutual understanding, common interest and mutually complementary activities.

1. To **work** in the areas benefiting the **community** at large.
2. To identify common thrust areas of research keeping in focus the **Sustainable Development Goals (SDGs)** and **priorities** in the field of **science and technology** especially with **biotechnological** interventions.
3. To promote individual contacts among **Research scholars, Students and Faculty/Staff** of both the institutions.
4. To provide **opportunities** for the **faculty/staff** members, **research scholars** and **students** to use the **expertise** and **facilities** available in both the organizations including.
5. To work jointly for the **common research interests**, including the preparation and submission of **research proposals / protocols** and their implementation by making use of the material / facilities at either **Vrovafacets, Karnataka** and **AUM, Maharashtra**.
6. To consider **AUM** as a **Research and Development partner** for carrying out research studies in mutual interest of both.
7. To **mutually acknowledge** and share the experience, expertise and capabilities of **AUM, Mumbai** and **Vrovafacets, Karnataka** with due importance in **collaboration, resource sharing** and **partnership**.
8. The Vrovafacets will act as a commercial partner of the developed technology, and reserve the right to market, sale, license and to gain profit by other commercial activities on mutually agreeable terms. However, AUM will act as academic partner and can utilise the collaborative research for workshops, national and international conferences, seminars, research publications, citations along with Vrovafacets.
9. Vrovafacets and AUM reserve rights to **publish** reports of **sponsored projects/papers**, file **patents** and disseminate results on mutually agreeable terms.
10. To **encourage** any other activities that both the institutions agreed to be on **mutual benefit**. **Specific terms, conditions and procedural aspects** of collaboration including **financial obligations** of either party shall be finalized on **mutual terms** and conditions of each



specific project and sharing of outcomes (papers and intellectual property rights) under this MoU separately.

The terms and budget for each program or activity implemented under this agreement shall be mutually agreed upon in writing prior to its initiation. Such programs and activities shall be approved by authorized individuals from each party.

Designated official(s) at each institution shall oversee and facilitate implementation of this agreement in cooperation with other appropriate administrators at the respective institutions. All notices shall be in writing and shall be directed to these officials as follows:

Registrar, Amity University Maharashtra, Mumbai - Pune Expressway, Bhatan, Post - Somathne, Panvel, Mumbai, 410206. Maharashtra INDIA

Telephone: +91(022) 71987045(O)

Email: hsvyas@mum.amity.edu

Director, Vrovafacets.

1723/D, No.2, K. B. Complex,

2nd Stage, M.K.K Road,

Rajajinagar, Bengaluru -560 010

REPUBLIC OF INDIA

The present agreement shall enter into force when signed by both parties and will remain effective for one years in the first instance. Either party may bring the agreement to an end by two month written notice to the other. Any modification of the present text during the tenure of this agreement shall be agreed between the parties and submitted for approval to the relevant authorities in both the institutions.

For the purposes of this **Memorandum of Association** and all addenda hereto encompassing specific programs between 'AUM' and 'Vrovafacets ', it is understood and agreed that neither party shall be liable for any negligent or wrongful acts, either of commission or omission, chargeable to the other, unless such liability is imposed by law. This memorandum of agreement and all addenda shall not be construed as seeking to either enlarge or diminish any obligation or duty owed by one party to the other or to a third party.



Patents and Publication

Patents and publications, if any, in respect of the activity under this MoU shall be in the names of involved personnel from both the parties and the sequence of Authors mutually agreed upon based on contribution. In all patents and publications (papers, reports etc.,) it will be duly acknowledged that the work has been carried out by 'AUM' and 'Vrovafacets Pvt Ltd' under this MoU between the parties. All ethical guidelines of research publication existent at both the organizations will be followed, strictly.

RENEWAL, TERMINATION AND AMENDMENT

This agreement shall remain in force for a period of one (1) years from the date of the last signature, with the understanding that it may be terminated by either party giving two months written notice to the partner institution.

This MoU may be terminated by either party by the provision of written notice of termination by not less than six months prior to the desired termination date. However, both parties agree that all continuing obligations to students, staff, funding bodies or other entities are met in full subsequent to the notice of termination.

All notices and other communications required to be served on AUM under the terms and this MoU, shall be considered to be duly served, if the same is delivered at or posted by registered mail to the Registrar, AUM at its registered office in Amity Institute of Biotechnology, Amity University Maharashtra, Mumbai - Pune Expressway, Bhatan, Post – Somathne, Panvel, Mumbai, 410206. Maharashtra INDIA

Any dispute arising out of this Memorandum of Understanding or in its enforcement the concerned parties to this MoU will resolve the same amicably. However, in case if the dispute remains unresolved it shall be referred to an arbitrator to be appointed by mutual consent of both the parties. The venue of arbitration shall be at such place as may be fixed by the arbitrators and the arbitration proceeding shall be as provided under the Arbitration and Conciliation Act, 1996. The decision of the arbitrator shall be final and binding upon both the parties.

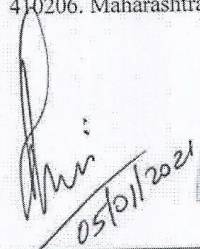



All legal disputes shall be subjected to the Jurisdiction of the courts in Mumbai, State of Maharashtra. No modification to this MoU shall be binding unless made in writing and signed by both parties.



This agreement may be amended with the consent of the company and the institution through a written addendum executed by authorized individuals of both. Such agenda, once approved by both of them, will become part of this memorandum of agreement.

This agreement shall be binding upon signing by authorized individuals of the 'AUM', and 'Vrovafacets' and shall be effective as of the date last written below.

IN WITNESS WHEREOF, the parties hereto have offered their signatures:

For and behalf of AUM Registrar, AUM AMITY UNIVERSITY MAHARASHTRA Mumbai - Pune Expressway, Bhatnagar, Post - Somathane, Panvel, Mumbai, 410206. Maharashtra, India  		For and behalf of Vrovafacets Director, Vrovafacets. 1723/D, No.2, K. B. Complex, 2nd Stage, M.K.K Road, Rajajinagar, Bengaluru -560 010 REPUBLIC OF INDIA  	
Witness: (Name & address)	Sign with date	Witness: (Name & address)	Sign with date
1.		1.	
2.		2.	
		3.	
		4.	

MEMORANDUM OF UNDERSTANDING (MOU)
BETWEEN

AMITY INSTITUTE OF BIOTECHNOLOGY,

Amity University Mumbai

Mumbai - Pune Expressway, Bhatan,

Post – Somathne, Panvel, Mumbai,

410206. Maharashtra, India

AND

ANNOTATION ANALYTICS PVT. LTD.

36, Ward No-14, Biswa, Amarpura,

Gurgaon-122001, Haryana, India

This Memorandum of Understanding (MOU) is executed on the 9th/Dec. of 2019, between the following parties

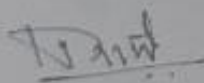
Amity Institute of Biotechnology established in 2014 under **Amity University Mumbai** (A Private University, established under Government of Maharashtra Act No. XIII of 2014 and is recognized as per Section 2 of the UGC Act), situated at Mumbai - Pune Expressway, Bhatan, Post – Somathne, Panvel, Mumbai, 410206. Maharashtra INDIA, through its Director duly authorised to enter and sign the MOU on behalf of Amity Institute of Biotechnology, Amity University (hereinafter called as 'AIB, AUM') of the ONE PART

AND

Annotation Analytics [AA] Private Limited, a company established under the company act, 2013 (18 of 2013) and that the company is limited by shares. The company has its registered office at 36, Ward No-14, Biswa, Amarpura, Gurgaon-122001 (hereinafter referred to as "Annotation Analytics" which expression shall, unless it be repugnant to the context or meaning thereof, be deemed to mean and include its successors and permitted assignees) of the Another Part.

Amity Institute of Biotechnology, one of the Institute UNDER the Amity University Mumbai and Annotation Analytics Pvt. Ltd., Karnataka, India wishing to establish cooperative/Collaborative relations, agree as follows

AREAS OF COLLABORATION





Subject to the availability of funds and the approval of the **Vice Chancellor, Amity University, Mumbai** and the **Annotation Analytics [AA] Private Limited** collaboration will be undertaken through activities or programs such as:

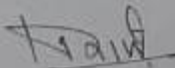
- Conduct joint research activities on the project entitled '*inhibitor prediction for OATP1B1 protein using in silico approach*' and within the fields of interest with projects that are mutually agreed upon and subject to availability of funds;
- Participate in conference, symposia and seminars of mutual interest
- Collaborate in joint research in the thrust areas of the respective Company-Institute, and file patents and publish research findings;
- Cooperate to solicit joint proposals for funding from various funding agencies and exchange scientific information and documentation, both written and electronic.

The scope of this agreement may be modified in the future based on mutual interest and agreement.

Principles of Collaboration

AIB, AUM and Annotation Analytics jointly agree to develop their research links under the principles of mutual understanding, common interest and mutually complementary activities.

1. To **work** in the areas benefiting the **community** at large.
2. To identify common thrust areas of research keeping in focus the **Sustainable Development Goals (SDGs)** and **priorities** in the field of **science and technology** especially with **biotechnological interventions**.
3. To promote individual contacts among **Research scholars, Students and Faculty/Staff** of both the institutions.
4. To provide **opportunities** for the **faculty/staff members, research scholars and students** to use the **expertise and facilities** available in both the organizations including.
5. To work jointly for the **common research interests**, including the preparation and submission of **research proposals / protocols** and their implementation by making use of the material / facilities at either **Annotation Analytics, Gurgaon or AIB, AUM**.
6. To consider **AIB, AUM** as a **Research and Development partner** for carrying out research studies in mutual interest of both.
7. To **mutually acknowledge** and share the experience, expertise and capabilities of **AIB, AUM, Mumbai and Annotation Analytics, Gurgaon** with due importance in **collaboration, resource sharing and partnership**.
8. The Annotation Analytics will act as a commercial partner of the developed technology, and reserve the right to market, sale, license and to gain profit by other commercial activities. However, AIB will act as academic partner and can utilise the collaborative research for workshops, national and international conferences, seminars, research publications, citations along with Annotation Analytics
9. Annotation Analytics reserve rights to **publish** reports of **sponsored projects/papers**, file **patents** and disseminate results on mutually agreeable terms.





10. To encourage any other activities that both the institutions agreed to be on mutual benefit. Specific terms, conditions and procedural aspects of collaboration including financial obligations of either party shall be finalized on mutual terms and conditions of each specific project and sharing of outcomes (papers and intellectual property rights) under this MoU separately.

The terms and budget for each program or activity implemented under this agreement shall be mutually agreed upon in writing prior to its initiation. Such programs and activities shall be approved by authorized individuals from each party.

Designated official(s) at each institution shall oversee and facilitate implementation of this agreement in cooperation with other appropriate administrators at the respective institutions. All notices shall be in writing and shall be directed to these officials as follows:

Director, Amity Institute of Biotechnology, Amity University Mumbai, Mumbai - Pune Expressway, Bhatan, Post – Somathne, Panvel, Mumbai, 410206. Maharashtra INDIA
Telephone: +91(022) 71987045(O)
Email: nsdesai@mum.amity.edu; neetindesai@gmail.com

Director, Annotation Analytics, 36, Ward No-14, Biswa, Amarpura, Gurgaon-122001, India,
Telephone: +918826423598
Email: sunil.jayant@gmail.com

The present agreement shall enter into force when signed by both parties and will remain effective for one years in the first instance. Either party may bring the agreement to an end by two month written notice to the other. Any modification of the present text during the tenure of this agreement shall be agreed between the parties and submitted for approval to the relevant authorities in both the institutions.

For the purposes of this Memorandum of Association and all addenda hereto encompassing specific programs between 'AIB, AUM' and 'Annotation Analytics', It is understood and agreed that neither party shall be liable for any negligent or wrongful acts, either of commission or omission, chargeable to the other, unless such liability is imposed by law. This memorandum of agreement and all addenda shall not be construed as seeking to either enlarge or diminish any obligation or duty owed by one party to the other or to a third party.

Dr. N. S. Desai



Patents and Publication

Patents and publications, if any, in respect of the activity under this MoU shall be in the names of involved personnel from both the parties and the sequence of Authors mutually agreed upon based on contribution. In all patents and publications (papers, reports etc.,) It will be duly acknowledged that the work has been carried out by 'AIB, AUM' and 'Amity Analytics Pvt Ltd' under this MoU between the parties. All ethical guidelines of research publication existent at both the organizations will be followed, strictly.

RENEWAL, TERMINATION AND AMENDMENT

This agreement shall remain in force for a period of one (1) years from the date of the last signature, with the understanding that it may be terminated by either party giving two months written notice to the partner institution.

This MoU may be terminated by either party by the provision of written notice of termination by not less than six months prior to the desired termination date. However, both parties agree that all continuing obligations to students, staff, funding bodies or other entities are met in full subsequent to the notice of termination.

All notices and other communications required to be served on AIB, AUM under the terms and this MoU, shall be considered to be duly served, if the same is delivered at or posted by registered mail to the Director, AIB, AUM at its registered office in Amity Institute of Biotechnology, Amity University Mumbai, Mumbai - Pune Expressway, Bhatnagar, Post - Somathane, Panel, Mumbai, 410206. Maharashtra INDIA.

Any dispute arising out of this Memorandum of Understanding or in its enforcement the concerned parties to this MoU will resolve the same amicably. However, in case if the dispute remains unresolved it shall be referred to an arbitrator to be appointed by mutual consent of both the parties. The venue of arbitration shall be at such place as may be fixed by the arbitrators and the arbitration proceeding shall be as provided under the Arbitration and Conciliation Act, 1996. The decision of the arbitrator shall be final and binding upon both the parties.

All legal disputes shall be subjected to the Jurisdiction of the courts in Mumbai, State of Maharashtra.


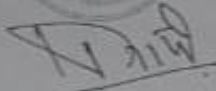


No modification to this MoU shall be binding unless made in writing and signed by both parties.

This agreement may be amended with the consent of the company and the institution through a written addendum executed by authorized individuals of both. Such agenda, once approved by both of them, will become part of this memorandum of agreement.



This agreement shall be binding upon signing by authorized individuals of the 'AIB, AUM', and 'Annotation Analytics' and shall be effective as of the date last written below.

IN WITNESS WHEREOF, the parties hereto have offered their signatures:

For and behalf of AIB, AUM		For and behalf of Annotation Analytics	
  Dr. Neetin Desai, Director, AMITY INSTITUTE OF BIOTECHNOLOGY, Amity University Mumbai, Mumbai - Pune Expressway, Bhatan, Post - Somathne, Parvel, Mumbai, 410206. Maharashtra INDIA		  Mr. Sunil Jayant Director, ANNOTATION ANALYTICS PVT. LTD. Address: 36, Ward No-14, Biswa, Amarpura, Gurgaon-122001, Haryana, India	
Witness: (Name & address)	Sign with date	Witness: (Name & address)	Sign with date
1.		1.	
2.		2.	
		3.	
		4.	

Page 4

Projected Budget

Expenses incurred:

Proof of Concept Development Expenditure:

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Projected Budget:

1. Computer Equipments and software : : 70,000 Rs/- (Rs Approx)
2. Manpower : : 30,000 Rs/- (Rs. 5,000/- * 6 month)
3. Overhead expense : : 20%

TOTAL: 100,000/- + Overhead: 20%

Timelines

Deliverables	Months												
	1	2	3	4	5	6	7	8	9	10	11	12	
Purchase of Computer and software	█	█											
Bibliography	█	█											
Optimization of Modeling parameters			█	█	█	█							
Modeling studies					█	█	█	█	█	█	█	█	█
Data and review		█	█	█	█	█	█	█	█	█	█	█	█

[Handwritten signature]



Date: 03.12.2019

To
The Director,
Amity Institute of Biotechnology,
Amity University, Mumbai - Pune Expressway


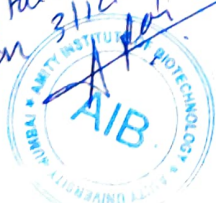
Subject: Installation Report of Chiller Unity for Reactor Date : 03.12.2019.

Dear Sir,

We are pleased to inform you that Chiller Unity for Reactor equipment was delivered and it was successfully installed and commissioned on 03rd December 2019 at Panvel.

Sincerely


Vasudev Naik


*9ms failed
on 3/12/19*



DELIVERY CHALLAN GUMPRO DRILLING FLUIDS PVT.LTD.

LABORATORY INSTRUMENTS DIVISION

Admin. Address:- Opp. Karma Stambh
L.B.S.Marg, Vikhroli (West) Mumbai-400083
Phone Nos: 25793280, 25773200

MESSRS :- **AMITY Institute of Bio Technology**
Mumbai – Pune Express way ,
BHATAN , Post : Somathane, Panvel,
Dist . Raigad, Maharashtra

SUPPLY ORDER NO :- As per Instructions by Mr. Nitin Desai
DATED : 25.11.2019
TO BE DISPATCHED TO :- Same as above address

CARRIED BY :- Transport
DELIVERY CHALLAN NO. :- **GDFPL/LID/125/2019-20**
DATED :- 03.12.2019

Please receive and acknowledge the following material in good condition

Sr. No.	Description	HSN Code	Quantity
1	Chiller Unit for Reactor	8418	1 No.

The material is not for sale. It is donation free of cost
The approx.. value is Rs 20, 000/-


Vehicle No. MH 04 FU 4314

NB.: Our Risk & responsibility ceases after delivery

For Gumpro Drilling Fluids Pvt. Ltd.
Lab Instrument Division


Authorized Signatory



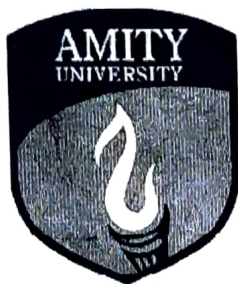

Receiver's Signature



A symbolic

Memorandum of Understanding (MoU)

Between Amity Institute of Biotechnology, Amity University, Mumbai and
Gumpro Drilling Fluids Pvt. Ltd. Mumabi



gumpro
DRILLING FLUIDS

Dr. Neetin Desai
11-6-2018

*Given to Registrar ofe.
R. 119.*

A Symbolic
MEMORANDUM OF UNDERSTANDING (MOU)
BETWEEN

AMITY INSTITUTE OF BIOTECHNOLOGY,
Amity University Mumbai

Mumbai - Pune Expressway, Bhatan,
Post - Somathne, Panvel, Mumbai,
410206. Maharashtra INDIA

AND

GUMPRO DRILLING FLUIDS PVT. LTD.

L.B.S. Road, Opp. Karm-Stambh, Vikhroli, (West),
Mumbai - 400083. Maharashtra INDIA

This Memorandum of Understanding (MOU) is executed on the **6th November of 2018**, between the following parties:

Amity Institute of Biotechnology established in 2014 under **Amity University Mumbai** (A Private University, established under Government of Maharashtra Act No. XIII of 2014 and is recognized as per Section 2 of the UGC Act), situated at Mumbai - Pune Expressway, Bhatan, Post - Somathne, Panvel, Mumbai, 410206. Maharashtra INDIA, through its Director duly authorised to enter into and sign the MOU on behalf of Amity Institute of Biotechnology, Amity University (hereinafter called as '**AIB, AUM**') of the ONE PART

AND

Gumpro Drilling Fluids Pvt. Ltd., Mumbai, a manufacturing specialty Oilfield ISO Certified Chemical company, established in 1983, with dedicated R&D Centre having presence in India and U.A.E with dedicated QC laboratories, having committed to minimize, environmental impact and to adhere Oilfield standards for quality assurance, packing, logistics and documentation, having its executive office and laboratory at L.B.S. Road, Opp. Karm-Stambh, Vikhroli, (West), Mumbai - 400083. Maharashtra INDIA (hereinafter referred to '**Gumpro**' as the context permits) is the ANOTHER PART.

Amity Institute of Biotechnology, one of the Institute UNDER the Amity University Mumbai and Gumpro Drilling Fluids Pvt. Ltd., Mumbai, India wishing to establish cooperative/Collaborative relations, agree as follows.



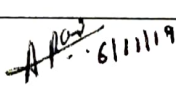
AREA OF COLLABORATION

Subject to the availability of funds and the approval of the **Vice Chancellor, Amity University, Mumbai** and the **Gumpro Drilling Fluids Pvt. Ltd., Mumbai** collaboration will be undertaken through activities or programs such as:

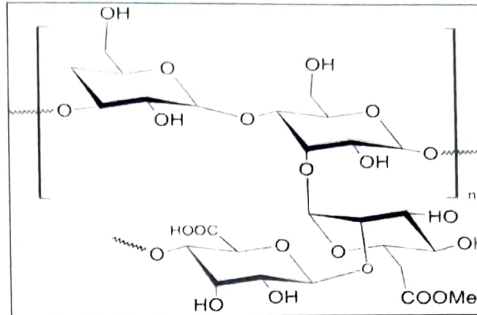
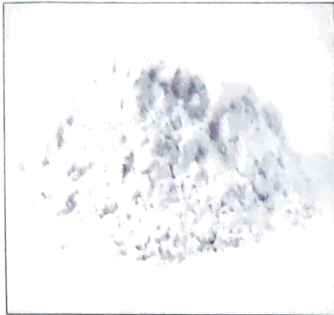
- Conduct joint research activities on the project entitled '**Production of Gum for drilling fluids using biotechnological approach**' and within the fields of interest with projects that are mutually agreed upon and subject to availability of funds;

The scope of this agreement may be modified in the future based on mutual interest and agreement. A final MoU will drafted with mutual understanding and will be signed later.

IN WITNESS WHEREOF, the parties hereto have offered their signatures:

For and behalf of AIB, AUM		For and behalf of Gumpro	
 AMITY INSTITUTE OF BIOTECHNOLOGY , Amity University Mumbai, Mumbai - Pune Expressway, Bhatan, Post - Somathane, Mumbai - 410206. Maharashtra INDIA		 GUMPRO DRILLING FLUIDS PVT. LTD. L.B.S. Road, Opp. Karm-Stambh, Vikhroli, (West), Mumbai - 400083. Maharashtra INDIA	
Witness: (Name & address)	Sign with date	Witness: (Name & address)	Sign with date
Dr. Sandeep Pai Dr. Revitra Joshy Dr. Pamela Sha	 6/11/19		

Production and Purification of Xanthan Gum by fermentation process



Amity Institute of Biotechnology (AIB)
Amity University, Mumbai

1

Work done so far

1. New isolates of polysaccharide producing organisms
2. Lab scale fermentation process upto 250mL by 2 isolates
3. Media optimization for 2 isolates
4. Separation and isolation of Gums from 2 isolates
5. Overall yield - 1.5% (Wt/Wt)

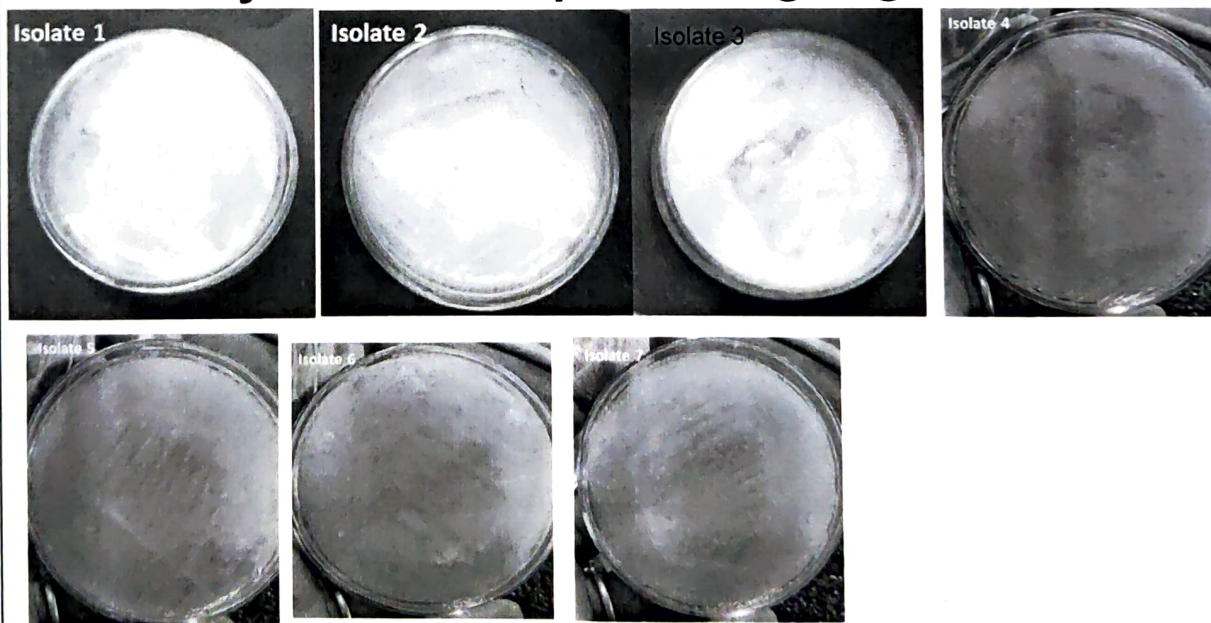
2

Future studies

1. Scaling up of fermentation process to 5L on optimized lab data
2. Characterization of the isolates
3. Product characterization by different isolates
4. Identifying the isolate which gives maximum yield

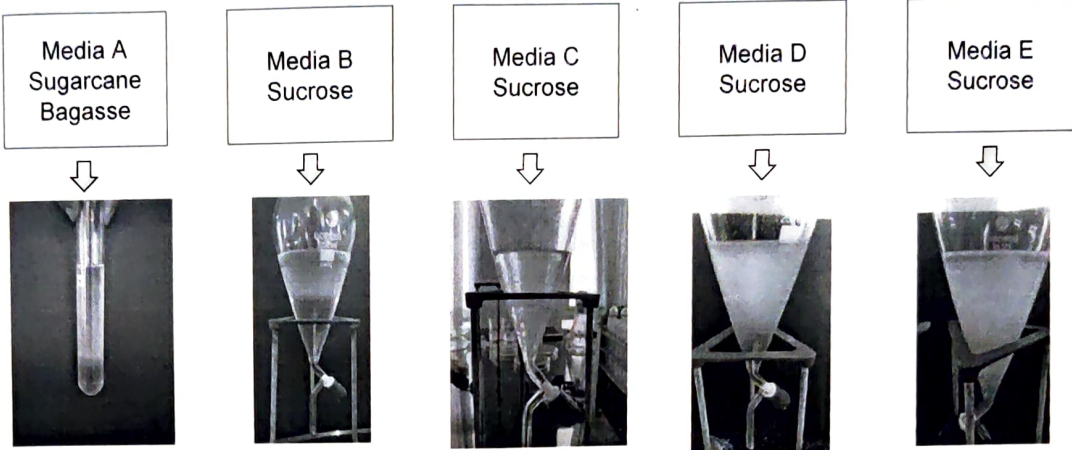
3

Polysaccharide producing organisms

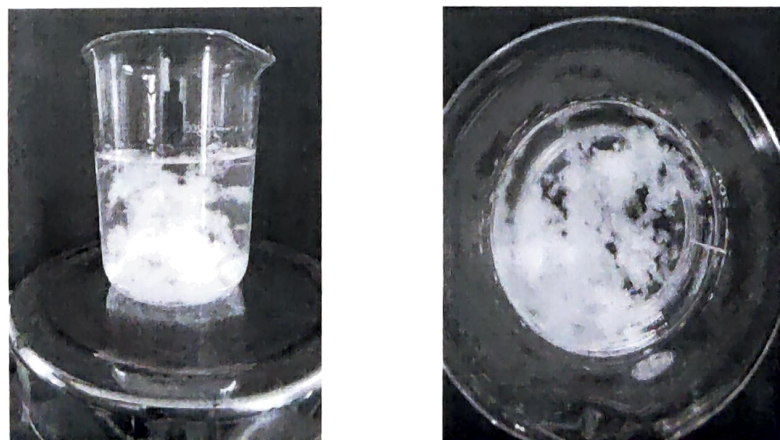


4

Media Optimization



Extraction of Gum



Final Product (Wet Mass)



Final Dried Product



Budget:

Lab Process Development Expenditure (Batch size: 250 mL; 20 batches):

Chemical expenses	:	Rs. 30,000/-	
Budget provision (Batch size 5 L; 1 batch)	:	Rs. 5,28,088/-	
Manpower (Research Fellow)	:	Rs. 25,000/- pm	= 75 x 2 x 3 25
Chemical	:	Rs. 30,080/-	
Glassware /instruments (Centrifuge, Bioreactor 5L, Membrane)	:	Rs. 3,50,000/-*	
Characterization of isolates	:	Rs. 50,000/-	
Analysis and Characterization	:	Rs. 25,000/-	
Gum Ancillary	:	Rs.	
48,008/-			

9

Thankyou

10