# MEMORANDUM OF UNDERSTADING (MOU)

BETWEEN

BNF & MICROBIAL GENOMICS LABORATORY, DEPARTMENT OF BOTANY, JAI NARAYAN VYAS UNIVERSITY, JODHPUR

AND

ENZYME TECHNOLOGY LABORATORY, DEPARTMENT OF MICROBIOLOGY, MAHARAJA GANGA SINGH UNIVERSITY, BIKNER

This MoU is entered into on the Turkoy day of 4-7-2017 by and between Enzyme Technology Laboratory. Department of Microbiology of Maharaja Ganga Singh University (herein after called ETL-MGSU) a State University situated at Bikaner (Rajasthan) established by the State Govt. Act. 12 of 2003 dated Func 7, 2002

and

BNF& Microbial Genomics Lab, Department of Botany of Jai Narayan Vyas University (hereinafter called BNFMGL-JNVU) a State University situated at Jodhpur (Rajasthan) established by the State Govt. Act. - Act. (XVII), Later Aug 24, 1912

The aforesaid Laboratories are hereinafter referred to individually as Lab and collectively as Labs.

### 1. Objectives of the MoU

The objectives of the MoU are to promote:

- i) Joint research activities
- ii) Exchange of academic materials and other information

# 2. Technical areas of collaboration

- i) To provide academic interaction by delivering special lectures at ETL-MGSU / BNFMGL- JNVU on topics related to Microbiology and Biotechnology.
- ii) Usage of academic infrastructure of ETL-MGSU / BNFMGL- JNVU by students, research scholars and faculty members of BNFMGL- JNVU / ETL-MGSU.

# 3. Proposed mode of Collaboration

ETL-MGSU and BNFMGL-JNVU propose to collaborate through the following:

i) Cooperation and promotion of education and training in areas of mutual interest.

ii) Any other appropriate mode of interaction mutually agreed upon between ETL-MGSU / BNFMGL- JNVU.

# 4. Terms and conditions

- i) The cost of infrastructure development at ETL-MGSU / BNFMGL- JNVU should be borne by the concerned Lab.
- ii) For continuing training and research support to ETL-MGSU / BNFMGL-JNVU teachers, staff, research scholars and students, the financial arrangement will be made on mutually agreed terms.
- iii) For the visits related to advice and consultancy, travel and other expenses of ETL-MGSU / BNFMGL-JNVU faculty, staff, scholars and students shall be reimbursed by the respective Lab/University on mutually agreed terms.
- Usage of ETL-MGSU / BNFMGL- JNVU academic infrastructure can be iv) allowed, subject to its availability, approval of the respective Head of the facility/ department and/or respective University norms.
- This MoU may be amended, renewed and terminated by mutual written V) agreement of the Labs at any time.
- Either Department shall have the right to terminate this MoU upon 60 days prior vi) written notice to the other Lab.

# 5. Confidentiality

- The ETL-MGSU and the BNFMGL- JNVU agree to hold in confidence all information/data designated by the Labs as being confidential which is i) obtained from either Lab or created during the performance of the MoU and will not disclose the same to any third party without consent of the other Lab.
- MoU excludes the under the confidential clause information/data possessed by either Lab before entering into this MoU or ii) independently developed and/or information already available through public domain.

# 6. Duration of MoU

This MoU, unless extended by mutual written consent of the Labs, shall expire in five years after the effective date specified in the opening paragraph. However, on review, the MoU shall be extended for another two years on mutual consent.

### 7. Coordinators

Both the Lab In-charges would coordinate and implement this agreement.

# 8. Intellectual Property Rights & Research Publications

The intellectual property (IPR) rights that arise as a result of joint research and collaborative activity under the agreement will be worked out on a case to case basis and will be consistent with officially laid down IPR policies of the two Universities.

Any publication on the basis of academic collaboration between individual Labs/Lab Incharges would be shared (as author and co-author) by the collaborating Scientist/Faculty members/Members involved in undertaking the joint research work.

# 9. Signed in Duplicate

This Mou is executed in duplicate with each copy being an official version and having equal legal validity. By signing below, the Labs, acting by their duly authorized officers, have caused this Memorandum of Understanding to be executed, effective as of the day and year first written above.

On behalf of

On behalf of

Gantam Kr. ETL-MGSU

Maharaja Ganga Singh University,

Bikaner & Galvarelly

BNFMGL- JNVU or h s gehlot Paritagan Vyas University, ACCIDENT OF BOTATY LA Was University, JODANAR

# MEMORANDUM OF UNDERSTADING (MOU)

#### **BETWEEN**

# ENGINEERING COLLEGE BIKANER, BIKANER

#### AND

# DEPARTMENT OF MICROBIOLOGY, MAHARAJA GANGA SINGH UNIVERSITY, BIKANER

This MoU is entered into on the ------ day of 19-1, 2019 by and between Department of Microbiology of Maharaja Ganga Singh University (herein after called DoM-MGSU) a State University situated at Bikaner (Rajasthan) established by the State Govt. Act. No.13 of 2003, dated 07-06-2003

#### and

Engineering College Bikaner, an Autonomous institute of Government of Rajasthan situated at Bikaner (Rajasthan) established by the Societies Registration. Act.1999 ------

The aforesaid Laboratories are hereinafter referred to individually as Lab and collectively as Labs.

### 1. Objectives of the MoU

The objectives of the MoU are to promote:

- i) Joint research activities
- ii) Faculty and Student Exchange
- iii) Exchange of academic materials and other information

### 2. Technical areas of collaboration

- i) To provide academic interaction by delivering special lectures at DoM-MGSU / ECB on topics related to Science and Technology.
- ii) Usage of academic infrastructure of DoM-MGSU / ECB by students, research scholars and faculty members of DoM-MGSU/ ECB.
- iii) To provide a provision for joint supervision of M.Sc/ M.Tech./Ph.D students

# 3. Proposed mode of Collaboration

DoM-MGSU and ECB propose to collaborate through the following:

- i) Cooperation and promotion of education and training in areas of mutual interest.
- ii) Any other appropriate mode of interaction mutually agreed upon between DoM-MGSU / ECB.

# 4. Joint Sponsored Research and Consultancy Projects

DoM-MGSU and ECB staff will undertake jointly sponsored research and consultancy projects according to the following terms:

- Project proposals will be formulated jointly by the concerned faculty/experts of the two Institutions.
- ii) Project would require approval of both the Institutions.
- iii) Income arising out of the consultancy works will be shared by the two Institutions on the basis of inputs and approved norms in each Institution. Consultancy/ manmonths and cost of project will be calculated on the basis of input.

### 5. Terms and conditions

- iv) The cost of infrastructure development at DoM-MGSU / ECB should be borne by the concerned Lab.
- v) For continuing training and research support to DoM-MGSU / ECB teachers, staff, research scholars and students, the financial arrangement will be made on mutually agreed terms.
- vi) For the visits related to advice and consultancy, travel and other expenses of DoM-MGSU / ECB faculty, staff, scholars and students shall be reimbursed by the respective Lab/University on mutually agreed terms.
- vii) Usage of DoM-MGSU / ECB academic infrastructure can be allowed, subject to its availability, approval of the respective Head of the facility/ department and/or respective University/ Institute norms.
- viii) This MoU may be amended, renewed and terminated by mutual written agreement of the Labs at any time.
- ix) Either Department shall have the right to terminate this MoU upon 60 days prior written notice to the other *Lab*.

# 6. Confidentiality

- The DoM-MGSU and the ECB agree to hold in confidence all information/data designated by the Labs as being confidential which is obtained from either Lab or created during the performance of the MoU and will not disclose the same to any third party without consent of the other Lab.
- ii) The above confidential clause under the MoU excludes the information/data possessed by either *Lab* before entering into this MoU or independently developed and/or information already available through public domain.

## 7. Duration of MoU

This MoU, unless extended by mutual written consent of the Labs, shall expire in five years after the effective date specified in the opening paragraph. However, on review, the MoU shall be extended for another period of time on mutual consent.

### 8. Coordinators

Both the Head of departments or Nominated members would coordinate and implement this agreement.

# 9. Intellectual Property Rights & Research Publications

The intellectual property (IPR) rights that arise as a result of joint research and collaborative activity under the agreement will be worked out on a case to case basis and will be consistent with officially laid down IPR policies of the two.

Any publication on the basis of academic collaboration between individual Labs/Lab Incharges would be shared (as author and co-author) by the collaborating Scientist/Faculty members/Members involved in undertaking the joint research work.

# 10. Signed in Duplicate

This MoU is executed in duplicate with each copy being an official version and having equal legal validity. By signing below, the Labs, acting by their duly authorized officers, have caused this Memorandum of Understanding to be executed, effective as of the day and year first written above.

On behalf of

.Registrar MGS University, Blkands DoM-MGSU

Maharaja Ganga Singh University,

Bikaner

On behalf of

**ECB** 

Engineering College Bikaner

Bikaner

ahuTan - 29804

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# Certificate of Association



We Certify that **Hemchandracharya North Gujarat University, Patan**and **Maharaja Ganga Singh University, Bikaner** entered into a

Memorandum of Understanding.

We further commit to remain associated Professionally/Technically in the Field of Academics, Research and Capacity Building.

Registrar MGS University, Bikaner

I/C Registrar H.N.G. University, Patan

Sumer

In the Auspicious Presence of Baprajatat

Prof. B. A. Prajapati Vice Chancellor,

Hemchandracharya North Gujarat University, Patan



#### INDIAN INSTITUTE OF TECHNOLOGY DELHI Department of Civil Engineering Hauz khas, New Delhi-110016

Dr. Gazala Habib Associate Professor Phone: +91-11-2659(192 (Office) 491-9971122485 (Mobile) Email: gazala@civil.iitd.ac.in

October 31, 2018

To, Prof. A. K. Chhangani (Project Investigator) Department of Environmental Sciences Maharaja Ganga Singh University NH-15, Jaisalmer Road Bikaner-334004, Rajasthan

Subject: MOU for air quality monitoring at Maharaja Ganga Singh University under National Carbonaceous Acrosol Program-CarbOnaccous Aerosol Emissions, Source apportionment & Climate Effects (NCAP-COALESCE).

Respected Prof. Chhangani,

As per our discussion and meeting with honorable vice chancellor, registrar and finance officer on 29/10/2013 at Maharaja Ganga Singh University, Bikaner, the air pollution monitoring activity at your institute under NCAP-COALESCE project funded by Ministry of Environment and Forest-Climate Change will start soon. This activity at MGSU under academic collaboration with IIT Delhi will benefit your institute in following aspects.

- 1. Training of man power for measurement of emissions from various sources including biomass fuel in cooking stoves, open biomass burning after harvest, brick kiln and vehicles using a custom build source sampling train developed by IIT Delhi and IIT Bombay.
- Training of man power for Super SASS 8-channel aerosol collection sampler with denuder.
- 3. Participation of students in survey related to residential sector, agricultural sector, brick kiln and vehicles using digital application provided by IIT Bombay.
- Enabling Msc/MTech theses of students of MGSU (co-guided by Prof. A. K. Chhangani & Prof. Gazala Habib), exploiting the field survey and sampling data, along with additional analysis using meteorology/ trajectory/ source apportionment/ other models.
- TA/DA of one student visiting any collaborative institutes for training will be paid from 'Travel head' of the NCAP-COALESCE project at IIT Delhi.
- 6. TA/DA of PI (Prof. A. K. Chhangani) for attending review meetings will be paid from 'Travel head' of the NCAP-COALESCE project at IIT Delhi.
- The infrastructure and consumable for conducting the measurement at MGSU will be supported by IIT Delhi.
- The authorship on publication/publications will be decided as per NCAP policy document approved to MOEP-

A technical staff appointed by IIT Delhi will be responsible for operation and maintenance of instruments. The accommodation of technical staff in guesthouse/hostel will be provided by MGSU. The electricity for running the instrument will be provided by MGSU. The instruments including SASS sampler, aethalometer, nephelometer etc. will be loaned to MGSU and will remain the property of IIT Delhi.

Looking forward to your support,

Thanking you,

Yours Sincerely,

Prof. Gazala Habib (PI: IIT Delhi)

Prof. A. K. Chhangani (PI: MGSU) BIKAHER

Professor & Head Department of Environmental Science Maharaja Ganga Singh University

#### MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MoU) made and executed at Jaipur on 22nd June, 2020 between Maharaja Ganga Singh University, Bikaner having its campus N.H.15, Jaisalmer Road, Bikaner (hereinafter referred to as MGSU or FIRST PARTY which expression shall, unless it is repugnant to the subject or context thereof, include its successors, assignees and /or nominees)

#### And

RAJASTHAN ILD SKILLS UNIVERSITY, JAIPUR having its campus at 2<sup>nd</sup> 3<sup>rd</sup> Floor, Rajiv Gandhi Vidhya Bhawan, Shiksha Sankul, JLN Marg, Jaipur – 302 017 (hereinafter referred to as RISU, Jaipur which expression shall, unless it is repugnant to the subject or context thereof, include its successors, assignees and /or nominees)

#### Whereas

Maharaja Ganga Singh University, Bikaner has been established by the University of Bikaner Act, 2003 (Act No. 13 of 2003) holds the distinction of being premier state University of higher learning in Rajasthan. The main objective of the University has been the creation and dissemination of knowledge.

#### And Whereas

RAJASTHAN ILD SKILLS UNIVERSITY, JAIPUR is a State University of Rajasthan established under the provisions of Rajasthan ILD Skills University Act, 2017 (Act no. 6 of 2017) for imparting skill education and training in the state of Rajasthan

### 1. Scope of MoU:

Both the parties in principle agree to work in the following areas of collaboration:

- a) cooperate in the exchange of information relating to their activities in teaching and research in fields of mutual interests.
- b) collaborate in curriculum development for skill education and General education
- c) provide mutual access to facilities for the academic purposes as mutually agreed between the parties prior to commencement of the activity:
- d) conduct short courses, as mutually agreed in writing between the parties prior to commencement of this activity:
- e) areas of collaboration may be proposed by either institution and may include, but are not limited to:
- Joint teaching, research, or cultural activity;
- Mobility of faculty, scholars, and students between institutions;
- Staff professional development;
- Sharing or creation of educational materials and resources.

The RISU offers Concurrent Skills Courses to the students enrolled with other State Funded University as per its regulations. These courses in skill education can be taken up concurrently with the main course for

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# MEMORANDUM OF UNDERSTANDING

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#### 5 Force Majeure

If the performance of the obligations under this Memorandum of Understanding is prevented 5.1 by reason of any contingencies, which could have been reasonably avoided and are beyond the control of the parties, the party so affected shall not be liable to the other for damages to the extent of such prevention. Such contingencies include strikes of workers, fire, flood, explosion, riots sabotage, acts of God and war or enemy action.

#### Notice

Save as hereinbefore otherwise provided, any notice required to be given hereunder shall 6.1 be sufficiently given to each other if forwarded by registered post, speed post, courier, to the last known postal address of the parties. Every notice shall be deemed to have been received and given at the time when in the ordinary course of transmission it should have been delivered at the address to which it was sent.

#### Indemnity:

Both parties shall indemnify the each other against all losses, damages or claims that may 7.1 arise out of any unauthorized representations made by their employees or representatives.

In witness thereof the parties have set their hands and seal on the day month and year first written.

For Maharaja Ganga Singh University, Bikaner

Vice Chancellor Prop P.C. Trivadi')
Maharaja Ganga Singh University, Bikaner, Witness:

For Rajasthan ILD Skills University, Jaipur

Vice Chancellor, (Call Kanway)
Rajasthan ILD Skills University, Jaipur
Witness: Witness:

# THE MEMORANDUM OF UNDERSTANDING (MOU)

1. Swami Keshwanand Rajasthan Agricultural University (SKRAU), an ICAR accredited State Agricultural University, Bikaner, Rajasthan, India-334006 herein after referred to as "SKRAU" with a dedicated mandate of teaching, research and extension in agriculture and its allied subjects

#### and

2. Maharaja Ganga Singh University(MGSU), a State Multi-faculty University, Bikaner, Rajasthan, India herein after referred to as "MGSU" with a committed mandateof strengthening four-fold fundamentals of higher education—teaching, research, extension and consultancy

### Both SKRAU and MGSU jointly agree:

- 1. To undertake joint research projects in the areas of mutual interest.
- 2. To share the facilities for carrying out collaborative research and other academic programmes.
- 3. To organize academic activities and development programmes of mutual interestpotentially beneficial and agreed by both the Universities.
- 4. To share laboratory, research farm, library and other supporting facilities for joint research projects as well as for students.
- 5. To facilitate and coordinate student research work and permitting the faculty to be member/ co-advisor of advisory committee(s) for teaching and guiding students of both the universities.
- 6. To share research results and publish jointly in collaborative projects.
- 7. Any IPR emerging from collaborative project will be the property of both the Universities in proportion to contribution of the investigators, as per Government of India rules.
- 8. In case of projects not supported formally by an extramural grant, but otherwise to by the two Universities, the parties shall meet their respective expenses which they might incur while carrying out their respective agreed obligation.
- 9. Neither of the parties shall claim the usage of facilities/software or other services as a matter of right. It would be subject to availability, but would not be ordinarily refused.
- 10. This MoU is non-binding, non-enforceable and nor financial ramification, but rather a way of mutual understanding for increasing both universities a mutual synergic benefits.

# Implementation:

Both the universities shall designate a liaison officer to develop and coordinate specific activities or programmes. The terms of such activity of mutual interest shall be discussed and agreed prior to the initiation of the activity. During operation, if any alteration / modification is required, the same may be mutually discussed and duly agreed upon in writing.

### **Timeline:**

This MoU will be effective from the date of its signing by both the parties shall remain in operation for a period of 5 (Five) years from the date of signing, until one of the parties serve notice to the other for its intention to terminate it. In such instances, the MoU will stand terminated 3 (three) months from the date of such notice. In case both the universities agree to terminate the MoU, the ongoing research projects will be completed as per already signed MoU and agree obligations.

### Renewal of the MoU:

In case there is nothing to the contrary, this MoU shall continue to get renewed after mutual consent of both the parties, for the next term of 5 (five) years after the completion of one term.

Signed in two originals, one to be retained by each of the signatories, on this day of 31<sup>th</sup> December, 2019 at Bikaner, Rajasthan.

Prof. R. P. Singh Vice-Chancellor Swami Keshwanand Rajasthan Agricultural University, Bikaner

Prof. Bhagirath Singh Vice-Chancellor Maharaja Ganga Singh University, Bikaner

Controller of Examinations.

1). Dr. J.S. KHICHAR

Witness:

1). Dicecter, I son

2). <u>Al. Viula Suntavol</u> Dean, PGS, SKRAU, Bilanei