

## PHEROBANK TECHNOLOGIES(PTJ) Smells are surer than sounds 4 pest Solutions

# Memorandum of Understanding

BETWEEN

Tirumala Tirupati Devasthanams

Sri Venkateswara College University of Delhi, New Delhi, India & Pherobank Technologies Private Limited, Shahoo Sachan, J&K, India- 192231

to establish scientific collaboration through research, capacity building and academic cooperation

Prof. K.Chandramani Singh Ag. Principal Sri Venkateswara College, University of Delhi, India

Dr Barkat Hussain Director, Pherobank Pvt. Ltd





### MEMORANDUM OF UNDERSTANDING (MoU)

This MoU was made and entered into execution on the 5th of February 2024 between Sri Venkateswara College, University of Delhi, India located at Benito Juarez Marg, Dhaula Kuan, New Delhi-110021, India, represented by Prof. K. Chandramani Singh (Ag. Principal) hereinafter referred to as "Sri Venkateswara College" (which expression shall include its successors in interest and permitted assigns), referred to as the First Party. AND

**Pherobank Technologies Private Limited,** a Company incorporated under the Companies Act, 2013, with its registered office at Shahoo Sachan, J&K, India- 192231, hereinafter referred to as **"BIG Innovator**" (which expression shall wherever the context admitted, include its successors in interest, liquidators, administrators and assigns) and represented through its authorized signatory of Dr. Barkat Hussain, Director of the company, presently incubated at SKIIEC, SKUAST-K, forming the Second Party.

The primary focus of this collaboration is research, teaching and marketing specifically directed towards identifying and managing plant insect pests prevalent in the region. The focus of research of both parties mainly targets insect pests affecting fruits, vegetables, and other crops with the aim of benefitting the farming community by minimizing losses. Furthermore, this research necessitates advanced technology and skilled personnel to explore the pheromones emitted by these threatening insects. Therefore, it is necessary to have a MOU between the Sri Venkateswara College and Pherobank technologies Pvt. Ltd.

#### Preamble

Pherobank Technologies Pvt. Ltd and Sri Venkateswara College desire to work and collaborate on pest management, various sciences/technologies related to insect pests and marketing products in India and abroad. The collaboration encompasses generating initial data collectively and writing of proposals jointly or individually for research and engaging with different agencies. The partners herein desire to enter into a Memorandum of Understanding (MoU), setting forth the collaborative research. The general purpose of this MoU is to facilitate research and other mutually agreed works/innovations and cooperation between the parties hereunder based upon the principles of mutual benefit.

In particular, the following projects and responsibilities are bestowed upon each partner:

#### **Roles and Responsibilities:**

- Both the parties will work and collaborate in the area of plant research or insect-plant interaction and contribute to joint research projects from the stage of writing of proposals up to the completion of research and will act as knowledge partners for getting funding or consultancy.
- 2. The coordinators for these research projects will be the Director of the respective company, and Principal of Sri Venkateswara College.
- 3. From time to time, depending on the project and the grants received, further discussions and modifications to this agreement will be made and, if needed, the division of work will be discussed and documented.
- 4. A separate agreement will be signed for every new project whenever applied to funding agencies.
- 5. Access to the facilities of each party by the other, and the roles and responsibilities of each party will be decided and documented with every new project as per mutual agreement between both parties.
- Research publications arising out of the joint project will be jointly published by both the parties.
- 7. With regard to intellectual property, based on each individual project and the inputs contributed by each party, a separate IP Agreement will be executed.
- Both parties are free to sign an MoU/agreement with any other parties in India or overseas for similar projects at their own discretion. This is not applicable to the agreed projects which are working together.
- 9. Both parties agree and acknowledge that, any disputes/claims arising out of this consent shall be resolved mutually by both parties.
- 10. Both parties, if agreed, also explore funding for seminars, workshops and conferences to mitigate pollution, pollination and minimising pesticide use.
- 11. Pherobank Private Ltd. is also interested to explore the volatiles especially the kairomones and insect-plant interaction and it is up to the Sri Venkateswara College to be part or be away from this type of research. The outcome, if any, may be shared jointly in the form of research papers or any outcome/ technology will be jointly shared and executed for our mutual benefits or patents or publications.
- 12. This agreement will be applicable to the plant sciences and public health insect pests which shall be mutually agreed upon by both the parties.

a) The Parties shall endeavor to develop cooperation in training human resources for basic and applied research in pest management; sustainable development /organic management and other green technologies.

b) The parties support the information exchange, participation in seminars, and coconferences.

13. This MoU does not impose any financial burden on the parties.

#### **Timelines:**

This MoU is agreed upon for an initial period of 5 years duration, which may be extended based on mutual understanding and discussions.

This MoU has been executed in two originals; one of these has been retained by Pherobank technologies Pvt. Ltd. and the other by the Sri Venkateswara College.

In witness whereof, the parties hereto have signed this MoU on the day, month and year mentioned herein before. **PARTIES:** 

For and on behalf of Pherobank For and on behalf of Sri Venkateswara technologies Pvt. Ltd College Signature Signature : m Name : Dr. Barkat Hussain Name : Prof. K. Chandramani Singh Designation : Designation : (Ag. Principal) PRINC PAL (Acting) Sri Venkateswara College Sea (University of Delhi) Seal: Dhaula Kuan, New Delhi-110021 WITNESS (Name & Address) Valiliefath 1. Prof. Vartika Mathur Animal - Blant interaction lab, Deft. of Zoology, Sui Venkateswara College, University of Delhi NASIR AHMAD BHAT StoGHULAM RASUOL BHAT RIO TAIL BAL SRINAGAR Jicha Misra Dr. RICHA MISRA 2. BILAL AHMAD BHAT SIO GILLA BHAT 2. Assistant SOS Zoolog SVC RID NEW THEED FLARWAN

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# Activity 1

(15<sup>th</sup> April 2024 - 17<sup>th</sup> April 2024)

# **Event 1: Talk on "Insect-Plant-Microbe interactions" by Prof. Vartika Mathur followed by interaction with the Ph.D. scholars (Entomology) at SKUAST-K**

On 16<sup>th</sup> April 2024, Prof. Vartika Mathur delivered an insightful talk on "Insect-Plant-Microbe Interactions" at Discovery Centre, Sher-e-Kashmir University of Agricultural Sciences and Technology- Kashmir (SKUAST-K). The talk covered the intricate and dynamic relationships that exist between plants, insects and microbes and their significance in the agriculture. This was followed by an interaction session with the Ph.D. scholars from SKUAST-K and Kashmir University (KU) from the Department of Entomology, concluded by a question-answer session.







## **Event 2: Visit to Incubation Centre, Discovery buildings, SKUAST-K**

An overview of the centre's facilities and its role in promoting innovative agricultural research and start-up projects was given through this visit, thus highlighting its contributions to encouraging innovation and advancement within the field of research.





# **Event 3: Visit to Central Instrumentation Facility, Quality Control Lab, at SKUAST-K**

The visit demonstrated state-of-the-art analytical equipments and quality control procedures necessary for high-precision research.



## **Event 4: Meeting with Vice Chancellor, SKUAST-K**

A meeting between Vice Chancellor, SKUAST-K, Prof. Nazir Ahmad Ganai, Prof. Vartika Mathur and Prof. Barkat Hussain took place. The discussion centered on the University's research, current projects at both Sri Venkateswara College, University of Delhi and SKUAST-K and potential joint ventures. A fruitful exchange of ideas was encouraged by this meeting.

# **Event 5: Visit to the lab headed by Dr. Barkat Hussain, Chief Scientist, Department of Entomology**

Research and techniques used to study insect behavior and pest management were observed followed by a discussion on potential future joint ventures.





Tirumala Tirupati Devasthanams శ్రీ వేంకటేశ్వర కళాశాల Sri Venkateswara College (University of Delhi) NAAC Grade A+

## **CERTIFICATE**

This is to certify that the **Research Interaction session** was successfully conducted from 15-04-2024 to 17-04-2024 from 9:00 am to 5:00 pm under the supervision of Prof. Vartika Mathur as a part of MoU between Sri Venkateswara College and Sher-e-Kashmir University of Agricultural Sciences and Technology-Kashmir (SKUAST-K) in the physical mode and its event report has been submitted to IQAC for records.

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Event In-Charge

IQAC Coordinator

Coordinator, IQAC Sri Venkateswara College (University of Delar) Dhaula Kuan, New Delhi-110021

Principal प्रधानाचार्य Principal श्री वेंकटेश्वर महाविद्यालय Sri Venkateswara College दिल्ली विश्वविद्यालय / University of Delhi धौला कुओं, नई दिल्ली / Dhaula Kuan, New Delhi-21