



കേരളം കേരल KERALA

DZ 815121

### MEMORANDUM OF UNDERSTANDING

1.1 This MoU made and entered into on this .....17<sup>th</sup>..... day of .....August..... Two Thousand Twenty-Three between Sree Chitra Thirunal College of Engineering, Pappanamcode, Thiruvananthapuram established by the Memorandum of Association of KSRTC Sree Chitra Thirunal College of Engineering (TVM) Society (Hereinafter called **SCTCE** which expression shall where the context so admits, include its successors and permitted assigns) of the second part

And

1.2 Council of Scientific and Industrial Research, a Society registered under the Societies Registration Act XXI of 1860 having its registered office at Anusandhan Bhawan, 2 Rafi Marg, New Delhi-110 001 (hereinafter called **CSIR**) through its constituent laboratory **National Institute for Interdisciplinary Science and Technology**, Industrial Estate P.O., Thiruvananthapuram – 695 019 (hereinafter called **CSIR-NIIST**, which expression shall where the context so admits, include its successors and permitted assigns) of the one part.

Each of **CSIR-NIIST** and **SCTCE** hereunder are also referred to separately as the ("Party"), or together as the ("Parties")

### 2. PREAMBLE

2.1 WHEREAS **SCTCE** Pappanamcode Thiruvananthapuram has been established for promoting Engineering and Technology Education and Research in Kerala and the college has one of its departments inter alia the Biotechnology & Biochemical Engineering Department (BT& BCE);

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The Director CSIR  
SCTCE Pappanamcode.

NIIST

A. SURESH KUMAR

R. S. S. S.





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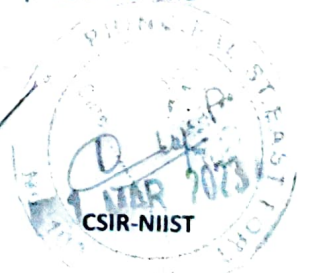
- 2.2 AND WHEREAS CSIR-NIIST is a pioneer research institute under CSIR carrying out R&D of international relevance while addressing regional needs and it has inter alia strong expertise in biotechnology, microbial processes, polymer science and nanotechnology;
- 2.3 AND WHEREAS BT & BCE under SCTCE wish to join hands with CSIR-NIIST for collaboration in the areas of mutual interest.

**AND THEREFORE**, this MoU is executed with the scope as below

- Collaboration in the area of environmental biotechnology with thrust on bioremediation and solid/ liquid waste management.
- Collaboration for research, development and commercialization of value-added products such as biofuels and biochemicals through biorefinery approach.
- Collaboration for promoting research on sustainable methods for minimizing carbon footprint in the environment.
- Research on methods for rehabilitation of soil, water and air in ecosystems which are disturbed by natural forces and anthropogenic activities.
- Collaboration on microbial processes for detoxification of medical/ e-wastes for sustainable environment.
- Collaboration on microbial processes including isolation and characterisation of structurally novel and biologically active metabolites from microalgae for application in food and pharmaceutical industry.
- Collaboration on microbial fermentation processes for production of probiotics and prebiotic for health improvement and infection control.

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The Director CSIR-NIIST  
SCTCE Pappanamcode

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- Collaboration on microbial processes and synthesis of various types of biopolymer like PHB, L (+) Lactic acid for different biomedical and other applications.
- Collaboration in research areas like extraction of bioactive components/phytochemicals from plant sources and Nano- encapsulating them using biocompatible polymers to target degenerative disorders.
- Collaboration in the field of Research to develop Nanobionics bioluminescent plants.
- Student exchange, training and internship to students, joint research proposals submission to different funding agencies, joint research laboratory works, joint publications, joint workshops, in the identified research area.

### 3. FORCE MAJEURE

Neither party shall be held responsible for non-fulfilment of their respective obligations under this agreement due to the exigency of one or more of the force majeure events such as, but not limited to, acts of God, War, Flood, Earthquakes, Strikes, Lockouts, Epidemics, Riots, Civil Commotion etc., provided on the occurrence and cessation of any such event the party affected thereby shall give a notice in writing to the other party within one month of such occurrence or cessation. If the force majeure conditions continue beyond six months, the parties shall jointly decide about the future course of action.

### 4. AMENDMENT

No amendment or modification of this MoU shall be deemed valid unless the same is made in writing by both the parties.

### 5. ASSIGNMENTS OF THE AGREEMENT

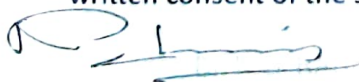
The rights or/and liabilities arising to any party to this agreement shall not be assigned except with the written consent of the other party and subject to such terms and conditions as may be mutually agreed upon.

### 6. ARBITRATION

Except as hereinbefore provided, any dispute arising out of this Agreement, the same shall be referred to the arbitration of two arbitrators, one to be appointed by each party to the dispute, and in case of difference of opinion between them to an umpire appointed by the said two arbitrators before entering on the reference and the decision of such arbitrators or umpire, as the case may be, shall be final and binding on both parties. The venue of arbitration shall be at such place as may be fixed by such arbitrators or umpire and the arbitration proceedings shall take place under the Indian Arbitration and Conciliation Act, 1996 with its amendments from time to time.

### 7. CONFIDENTIALITY

Any information which the acquired shall be considered strictly confidential and shall not be disclosed by one party of the MoU to third-parties or used for any purpose without prior written consent of the second party of the MoU.




## 8. FINANCIAL ARRANGEMENTS:

This MoU has no financial bearing. All financial aspects would be incorporated on mutually agreed terms in separate specific agreement(s) on a case-to-case basis. No financial commitment from any party will be assumed unless a formal approval/ acceptance to that effect for the works services has been accorded through signed documents by both the parties prior to starting of the work under the specific Project Agreement(s).

## 9. TERM & TERMINATION

- a) This MoU shall commence from the Date of Execution, upon signatures of the Parties and shall remain valid and in force for a period of 3 years from the date of Execution of this MoU or unless terminated as per termination clause of this MoU.
- b) In the event, the Parties desire to extend the term of this MoU, the term may be extended for such further period and on such terms and conditions as may be mutually agreed between the Parties in writing.
- c) This MoU can be terminated by either Party by serving advance written notice of three months to the other Party. In addition to this, either Party shall have a right to terminate this MoU by written notice to the other Party, if either Party unable to perform any part of the MoU due to any circular, notification, guidelines, order etc from regulatory authority, judicial authority or any other statutory authority.
- d) Before the termination takes effect, the Parties will make efforts to cooperate amicably to finish any key pending tasks.

This MoU has been executed in two originals; one shall be retained by SCTCE and other by CSIR-NIIST.

In witness whereof, the parties have executed this MoU and represent that they approve, accept and agree to the terms contained herein.

For SCTCE



**Dr. K. B. Radhakrishnan**  
Professor & Head, BT & BCE, SCTCE


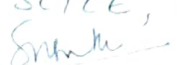
For CSIR-NIIST




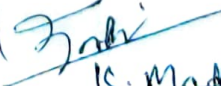
**Dr. P. Nishy**  
Head, Business Development Division  
CSIR-NIIST

डॉ. पी. निशी  
Dr. P. NISHY  
प्रधान, व्यापार विकास प्रभाग  
Head, Business Development Division  
CSIR-NIIST  
Science and Technology (NIS)  
Thiruvananthapuram

Signed in the presence of  
Witnesses

1.   
Anitha  
Assistant Professor, Dept of PT & BC  
SCTCE, TUM-18
2.   
Suemitha Kumari S  
Assistant professor, Dept of PT & BC  
SCTCE TUM-18

Signed in the presence of  
Witnesses

1.   
R. S. Suresh K  
Principal, CSIR-NIIST
2.   
K. Madhava Narayanan  
Chief Scientist, CSIR-NIIST