

MEMORANDUM OF UNDERSTANDING

BETWEEN

**THE LNM INSTITUTE OF INFORMATION TECHNOLOGY (LNMIIT),
JAIPUR – 302031, RAJASTHAN, INDIA**

AND

**CSIR – CENTRAL ELECTRONICS ENGINEERING RESEARCH
INSTITUTE (CSIR-CEERI) - 302031, RAJASTHAN, INDIA**

**MEMORANDUM OF UNDERSTANDING
(FOR INSTITUTIONAL COLLABORATION)**

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**THE LNM INSTITUTE OF INFORMATION TECHNOLOGY
(LNMIIT), JAIPUR 302031, RAJASTHAN, INDIA**

AND

**CSIR – CENTRAL ELECTRONICS ENGINEERING RESEARCH
INSTITUTE (CSIR-CEERI), PILANI 333031, RAJASTHAN, INDIA**

This Memorandum of understanding (hereinafter referred to as “MoU”) entered into on this 03 day of August, 2023 by and between:

The LNM Institute of Information Technology, Jaipur is a higher learning autonomous Institute, a deemed to be University, having its office at Jaipur – 302031, Rajasthan, India

AND

CSIR – Central Electronics Engineering Research Institute, Pilani is a constituent establishment of the Council of Scientific and Industrial Research, New Delhi, having its campus and administrative office in Pilani – 333 031, Rajasthan, India.

The LNM Institute of Information Technology (LNMIIT), a tertiary-level institution with a location in Jaipur, was established in 2003 as a public-private partnership venture between the LNM Foundation and the Rajasthan Government. It is a non-profit institution that is recognized to be a research-driven university. At present, LNMIIT is running with four AICTE-approved B. Tech programs, namely, Computer and Communication Engineering (CCE), Computer Science Engineering (CSE), Electronics and Communication Engineering (ECE), and Mechanical Engineering (ME). LNMIIT is recognized by the UGC with a NAAC grade of A.

CSIR - Central Electronics Engineering Research Institute (CSIR-CEERI), Pilani is a premier research Institute in the field of Electronics, established in 1953 under the aegis of **Council of Scientific & Industrial Research (CSIR)**. It is devoted to R&D activities in three areas, namely: (1) Advanced Electronic Systems: Image processing and DSP, Internet of Things (IoT), Embedded System Design, Electronic Instrumentation, Industrial Control & Automation, Power Electronics, Robotics, VLSI Design (Digital, Analog, Mixed Signal), etc.; (2) Advanced Semiconductor Electronics: MEMS, Micro-sensors, Opto-electronic Technologies, Photonic Devices and Sub-systems, Nano-electronics, LTCC and Advanced Packaging technologies, etc.; (3) Microwave Tubes: Klystron, Magnetron, Travelling Wave Tubes, Gyrotron, Plasma Tubes, Tera Hertz devices etc. CSIR-CEERI also has Centres at Chennai and Jaipur.

Collectively hereinafter referred to as “institutions”

This MoU is based on the principal of reciprocity and expresses the interest of both institutions in exchanging scholars, students, academics information and materials in the belief that the research and educational process at both institutions will be enhanced and that mutual understanding between their respective scholars and students will be increased by the establishment of such exchange programs as per CSIR Guidelines.

1. The institutions agree to encourage the development of the following exchange programs based on their respective academic and educational needs:

- Exchange of scientific staff
- Exchange of students (undergraduate and/ or graduate)
- Joint supervision of M. Tech, M.S. and Ph.D. students
- Exchange of academic information and materials
- Exchange of periodicals and other publications
- Organization of joint research programs
- Organization of joint conferences and societal programs
- Organization of other academic exchanges agreeable to both institutions
- Use of laboratory facilities on mutually agreed terms and conditions
- Virtual incubation and entrepreneurial programs for technology related capacity enhancement programs

Areas to start this collaboration are listed in Annexure 1. Both the institutions can revisit this list after mutual consultation. The above activities shall be undertaken as per CSIR guidelines.

2. The parties recognize that the implementation of any exchange program will depend upon the academic interests and expertise of individual staff members and upon the availability of financial resources. Accordingly, the implementation of

each exchange program based on this agreement shall be separately examined and determined by both institutions. The institutions shall enter into separate agreements regarding the individual exchange programs.

3. Faculty/ Scientists of either of the institute initiating collaborative work will take care of the usage of their institute resources and conduction of activities as per institute norms. A faculty member from LNMIIT Jaipur will coordinate with a scientist from CSIR-CEERI for the implementation of this initiative.
4. Each institution will adhere to the intellectual laws of India. Intellectual property developed during the visit of an exchange student/researcher/faculty/staff will be governed by the rules of the host institute unless otherwise specified. The two institutions shall jointly own the results of clearly defined collaborative projects and exchange programs. This joint ownership also entitles each party to explore commercialization. However, the transfer of jointly developed technology and associated sharing of revenue shall be governed by a separate agreement. This cost of IP filing will be equally shared by both Institutions.

Furthermore, if one institution receives any information from the partner under a clearly defined non-disclosure agreement, necessary and reasonable care will be taken to protect the intellectual property received.

5. This MoU is not intended to be a legally binding document. It is meant to describe the nature and to suggest the guidelines of the cooperation described above. Nothing therefore shall diminish the full autonomy of either institution, nor will any constraints be imposed by either upon the other in carrying out the agreement. Any disputes shall be resolved through mutual discussion between the highest officials of the respective institutions.
6. Any addition, deletion and /or alteration to this MoU may be effected by writing. A document containing the additions, deletions and /or alterations, and signed by all Parties hereto, shall form an annexure to and be deemed to be a part of this MoU.
7. The agreement shall become effective on the day representatives of both institutions affix their signatures and seals, will be in force for a period of 5 years, and is subject to revision or modification by mutual agreement. It is also understood that either institution may terminate the agreement at any time, although it is assumed that such action would only be taken after mutual consultation at least six months in advance in order to avoid any possible inconvenience to the other institution.

IN WITNESS WHERE OF, the institutions hereto have offered signatures:

For: The LNM Institute of
Information Technology, Jaipur

For: CSIR – Central Electronics
Engineering Research Institute, Pilani

Signature: R Banerjee

Signature: Datu

Name: Dr. Rahul Banerjee, Director

Name: Dr. Manish Mathew

Date: 16-08-2023

Date: 16/08/2023

Seal:



Seal:

प्रमुख, प्रौद्योगिकी व्यवसाय विकास यूनिट
Head, Technology Business Development Unit
सीएसआईआर-सीरी / CSIR-CEERI,
पिलानी (राज.) भारत / Pilani (Raj.) 333031 INDIA

Witness:

Signature: Navneet Upadhyay

Witness:

Signature: Pranod Tanwar

Name: Dr. Navneet Upadhyay

Name: PRANOD TANWAR

Designation: Faculty, DoECE, LNMIIT Jaipur

Designation: PRINCIPAL SCIENTIST

Signature: N Sharma

Signature: Gaurav Purohit

Name: Dr. Nikhil Sharma

Name: Dr. Gaurav Purohit

Designation: HOD-ECE

Designation: Senior Scientist

HOD
Department of ECE
The LNMIIT, Jaipur

Annexure 1

For MoU between LNMIIT, Jaipur and CSIR-CEERI, Pilani

Technical Areas from LNMIIT (but not limited to)

1. Signal Processing: Speech and Audio Signal Processing, Image and Video Signal Processing, Multimedia, Biomedical Signal Processing
2. Machine Learning, Natural Language Processing Deep Learning, Artificial Intelligence, Computer Vision
3. 6G, Wireless Communication, Wireless Sensor Network, Energy-Efficient Communication Protocols
4. IoT and Smart Embedded systems
5. VLSI Design and CAD
6. Sensors Design & Fabrication
7. Solid state microwave and Plasma Devices & Systems
8. Semiconductor Design and Fabrication
9. Power Electronics & Industrial Engineering
10. Nano Electronics
11. Energy Harvesting Systems

Technical Areas from CSIR-CEERI (but not limited to)

1. Machine Learning and Artificial Intelligence Algorithms
1. Computer Vision, Machine Learning and Artificial Intelligence Algorithms
2. Signal Processing
3. Instrumentation & Optimization Techniques
4. IoT Technology and systems.
5. Medical Systems
6. Real time Embedded and IoT

and execute semiconductor labs related training at CSIR-CEERI, as per CSIR Guidelines on chargeable basis. CSIR-CEERI shall demonstrate following to the students:

- Demonstration of Semiconductor Unit processes
- Unit process integration, to realize a devices/ device structure
- Unit Process Characterizations and
- Device characterization

CSIR-CEERI would offer a bouquet of programs with duration varying from one week to one month for UG and PG students of affiliated/ constituent institutes of LNMIIT. A calendar of the courses and programs would be made available to the institutes. LNMIIT, will proliferate it and motivate the target students to take maximum advantage of these facilities.

UG, PG and PhD students enrolled at LNMIIT would be exposed to the facilities at CSIR-CEERI, in order to take suitable topics of their curriculum/ research where they can harness the facilities of CSIR-CEERI.

Under various schemes, LNMIIT and CSIR-CEERI would coordinate joint Faculty Development Programs for the engineering teachers.