

## Memorandum of Understanding (MOU)

THIS MEMORANDUM OF UNDERSTANDING IS MADE ON THIS TWENTYNINTH DAY OF MAY, TWO THOUSAND AND FIFETEEN

By and Between

Centre for Nanoscience and Nanotechnology, Panjab University, Chandigarh with a mandate to work in the emerging areas of Science and Technology (hereinafter referred to as "CNSNT, PU" (represented by the Vice-Chancellor, Panjab University having its office at Sector 14, Chandigarh 160014, as one part,  
and

Institute of Nano Science and Technology (INST), Mohali (here in after referred to as "INST") an autonomous institution of Department of Science and Technology (DST) Govt. of India, with a mandate to emerge as globally competitive India's foremost research institution in Nano Science and Technology and to contribute to the society towards the applications of nanoscience and technology in the field of agriculture, water, energy, medicine and environment, represented by the Director having its office at Habitat Centre, Phase- 10, Sector- 64, Mohali, Punjab, as second part.

CNST, PU and INST being desirous of promoting academic and research co-operation between the two institutes and the objectives and scope of this memorandum will be as follows:

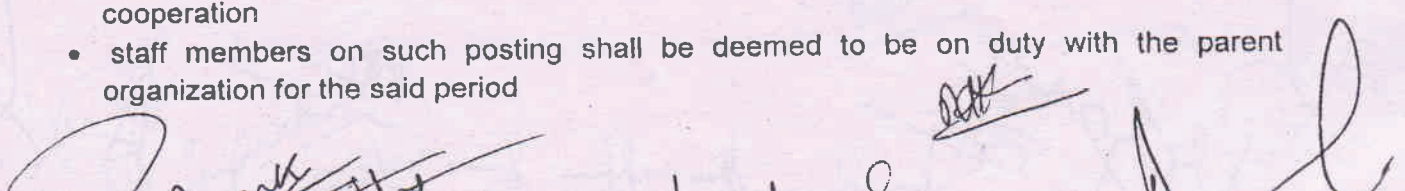
### 1. Objectives:

- INST and CNSNT, PU will undertake joint research work in the areas of mutual interest
- to formulate research projects and HRD plans for joint work with due approval of both the participating institutions by the concerned scientists of INST and corresponding faculty members of CNSNT, PU
- to impart training to staff, students and technical personnel within the area of cooperation
- to undertake joint-sponsored and consultancy projects with both long term and short term goals, keeping in view the interests and philosophies of the respective institutions.

### 2. Exchange :

Both INST and CNSNT, PU jointly agree:

- to exchange staff on full time/ part time basis for a limited period and up to one year at a time for the purpose of implementation of joint research projects within the areas of cooperation
- staff members on such posting shall be deemed to be on duty with the parent organization for the said period



- that the faculty/staff and research fellows registered for Ph.D. degree may visit other institution for a short period in connection with their research work. They shall be deemed to be on duty with the parent organization for the said period
- that the technical personnel deputed for training shall be deemed to be on duty with the parent's organization for the period of the training
- that the faculty/staff will be encouraged to deliver lectures/invited talks at the other institution. The TA/DA and the honorarium for the lectures shall be borne by the host institutions.

### 3. Joint conferences/ workshops/ courses:

Both INST and CNSNT, PU agree:

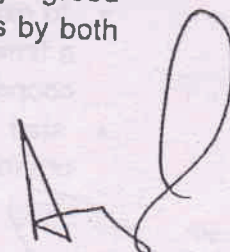
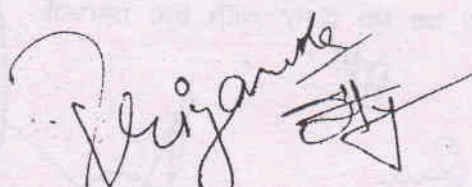
- to hold/conduct, whenever feasible, joint workshops, conferences, training courses within the areas of cooperation
- that the host institution shall provide accommodation to the participating members from the visiting institute, wherever feasible, at rates as applicable to research and academic institution.

### 4. Sharing of facilities:

- the two institutes agree to exchange software and components developed in house in the areas of cooperation within the framed rules governing the two institutes
- access to laboratory, library and other supporting facilities for the students and faculty involved in joint-M.Tech./Ph.D supervision in the areas of mutual interest, shall be provided by both institutes
- one laboratory at CNSNT, PU identified as "research laboratory 5" and one visitor's room will be given to INST to carry out independent/ joint-research activities. Similar space facilities at INST, Mohali will also be extended to students/Faculty from CNSNT, PU
- the researchers from CNSNT, PU, other than those involved in Joint supervision, shall have access to free machine time (four hours a week) in major equipment facilities such as powder X-ray diffraction, SEM and TEM etc. In all such cases, the instrument shall be operated by following INST norms.

### 5. Project work of students:

Depending upon availability of space and facilities, a few selected students of M.Sc. and M. Tech in the respective areas of specialization of CNSNT, PU will be allowed to carry out short term project at INST, maximum up to one year on mutually agreed projects. The students shall work in the areas of mutually agreeable divisions by both the institutes.



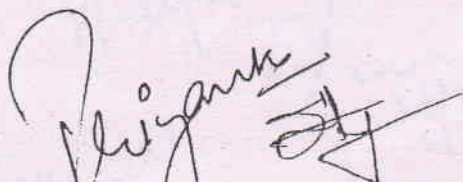


## 6. Ph.D registration

- In case the student is working at INST, Mohali, the eligible INST scientist having Ph.D degree will be the 1<sup>st</sup> supervisor (Supervisor) and one of the teachers from PU recognized by RDC of CNSNT working in the collaborative research field will be the 2<sup>nd</sup> supervisor (Co-supervisor). Similarly, a student working at CNSNT, PU can have eligible INST scientist as 2<sup>nd</sup> supervisor (Co-supervisor). For appointment of the Ph.D. supervisor, the INST scientist must fulfill the PU norms
- At least one scientist from INST, Mohali, shall be part of the Research & Development Committee of CNSNT, PU
- INST, Mohali and CNSNT, PU will jointly provide all the necessary laboratory facilities including expenditure on account of research consumables to the jointly-supervised student
- In case of joint publications, data obtained from joint work will be published as per mutual agreement by the concerned faculty of INST and CNSNT, PU. Any dispute arising will be amicably settled between Director INST and Vice Chancellor, PU
- The selection of joint Ph.D. students will depend upon the research programme within the scope and mandate of INST, Mohali and CNSNT, PU along with the willingness of concerned 1<sup>st</sup> supervisor/ 2<sup>nd</sup> supervisor (Supervisor/ Co-supervisor) from either of the institutions.

## 7. Validity of MOU:

The MOU shall be effective from the date of its signing by both the parties and shall remain in operation until either party serves notice to the other for its intention to terminate it. In such events, the MOU shall stand terminated at the end of three calendar months from the date of issue of such notice. In case both the parties agree to terminate the MOU, the ongoing thesis or research work shall be allowed to be completed.







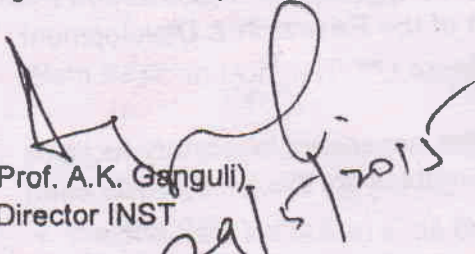





**8. Areas of Co-operation :**

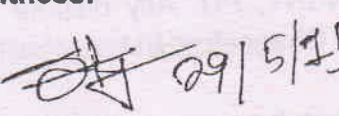
The areas of Co-operation will be defined and modified from time to time by a coordination Committee comprising of two members from CNSNT, PU and two from INST, Mohali to be set up for the purpose.

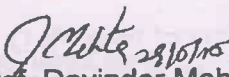
Signed on this day: 29<sup>th</sup> May, 2015

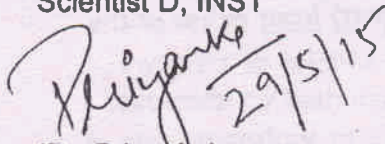
  
(Prof. A.K. Ganguli)  
Director INST  
29/5/2015

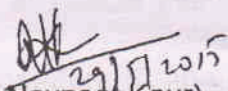
  
(Prof. Arun K. Grover)  
Vice-Chancellor, PU

**Witness:**

  
(Dr. Suvankar Chakraverty)  
Scientist D, INST  
29/5/15

  
(Prof. Devinder Mehta)  
Co-ordinator, CNSNT, PU

  
(Dr. Priyanka)  
Scientist C, INST  
29/5/15

  
(Dr. Navneet Kaur)  
Faculty, CNSNT, PU  
29/5/2015