



MEMORANDUM OF UNDERSTANDING

between

SEMICONDUCTOR LABORATORY, CHANDIGARH DEPARTMENT OF SPACE,

GOVT, OF INDIA



Semi-Conductor Laboratory
Department of Space, Government of India



And

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE (IIT ROORKEE), INDIA



AGRÉEMENT FOR JOINT COLLABORATION ON RESEARCH AND DEVELOPMENT, FACULTY ND STUDENT EXCHANGE

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SEMICONDUCTOR LABORATORY CHANDIGARH (SCL CHANDIGARH), DEPARTMENT OF SPACE, GOVT, OF INDIA

and

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE (IIT ROORKEE), INDIA

In furtherance of their mutual interest in the fields of education and research, and as a contribution to increased national cooperation, the Semiconductor Laboratory, Chandigarh, having its registered address at Semi-Conductor Laboratory, Department of Space, Govt. of India, Sector 72, S.A.S. Nagar – 160071, Punjab, India, and the IIT Roorkee having its registered address at Roorkee, Uttarakhand, Pin Code – 247667.

ARTICLE I

The agreement between the parties involves collaboration between the SEMICONDUCTOR LABORATORY, DEPARTMENT OF SPACE, GOVT. OF INDIA and the IIT ROORKEE in related disciplines.

The two institutions shall seek to promote:

- 1. The exchange of staff and students (faculty, research scholars, M.Tech/IDD/M.Sc students, B.Tech students and research project employees) regarding academics and research for the mutual benefit of both institutions.
- 2. The exchange of students for pursuing courses study and academic programs for mutual benefit of both institutions.
- 3. Collaboration in teaching, research and development, and consultancy activities.
- 4. The exchange of academic and research material and publications/IPs.
- 5. Cooperation in project proposals and research activities of mutual interest.
- 6. The provision of cultural and intellectual enrichment opportunities for the staff and students of both parties.
- 7. Collaboration in research and development in the areas of (i) Advanced VLSI device fabrication, (ii) MEMS fabrication, (iii) VLSI device/MEMS characterization, (iv) VLSI/CMOS-RF circuit design and, (v) VLSI device modeling at both IIT Roorkee and

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SCL Chandigarh. This also includes collaboration in setting up and upkeep of the relevant infrastructure in both the organizations.

- 8. Publication of research papers in international scientific journals and in the conferences.
- 9. Exchange of students for summer/winter internships
- 10. Publication of Intellectual properties (IPs) developed jointly through project/research collaboration. Such IP would acknowledge joint inventorship of personnel/students belonging to both the organizations, as applicable.
- 11. Writing books/booklets jointly in the areas listed below or in any other area of mutual interest.

ARTICLE II

The activities under this linkage will include:

Staff Exchange

Staff exchange activities cover visits to either institution for any of the following purposes:

- (i) Undertaking joint research
- Attachment of staff for purposes of curriculum development and review, (ii) attendance in courses, and the upgrading of teaching and research skills
- (iii) Participation in seminars, colloquia, and other types of academic discussions
- (iv) Contributions to teaching programmes
- (v) Co-supervision of M.Tech and Ph.D students
- (vi), Conduct study tours
- (vii) Research and joint consultancy research work
- Facilitation for higher studies (M.Tech and Ph.D) for SCL staff at IIT Roorkee (viii)
- Student Exchange:

Student exchange activities (e.g. B.Tech/M.Tech/IDD/M.Sc/Ph.D students) cover visits to either institution for any of the following purposes:

- Participation in research (i)
- Internships of 2-12 month duration for IIT Roorkee students at SCL (ii)
- 3. Exchange of Academic Materials

The exchange of relevant academic materials will be carried out subject to the mutual agreement of the parties.

ARTICLE III

The implementation of cooperation based on this Memorandum shall be dealt with between the relevant faculties and departments of both institutions. Where necessary, a specific plan shall be worked out for each activity setting forth detailed arrangements for collaboration. Such plans shall be subject to the approval of the appropriate authorities of each institution. To facilitate the development of such plans, each institution shall nominate a member of its staff to coordinate activities arising under this agreement.

Such plans are described in the annexes of this Memorandum of Understanding and should be the responsibility of the Faculty/Employee concerned.

ARTICLE IV

Both institutions agree and undertake to keep confidential at all times any information and/or data that may be exchanged, acquired and/or shared in connection with the area of cooperation as mentioned above in ARTICLE I (3) unless otherwise the same information already exists in the public domain.

ARTICLE V

Ownership of any research findings shall be vested in both parties to this Memorandum and any publications regarding the same shall only be possible after prior approval from both parties.

ARTICLE VI

The Memorandum shall remain in force for a period of 15 (FIFTEEN) years commencing from the date of signing and may be reviewed by mutual consent by serving 3 (Three) months written notice to the other party. Upon renewal, both parties shall select either to proceed with the existing or new terms of understanding.

ARTICLE VII

Both the SCL Chandigarh and the IIT Roorkee reserve the right to terminate this Memorandum by either party giving 3 (Three) months written notice to the other. Where such termination occurs, the provisions of this Memorandum shall continue to apply to ongoing activities until their completion.

ARTICLE VIII

Participating staff and students involved in any activities under this Memorandum must adhere to the law of the country and the rules and regulations of the host institutions.

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ARTICLE IX

The SCL Chandigarh and the IIT Roorkee welcome the establishment of this Memorandum for cooperation and jointly agree to the provisions as set out above. There will be four copies of this Memorandum equally valid, two for each party, effective from the date of its signing.

SCL Chandigarh

IIT Roorkee

Shri Surinder Singh Director

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सेमा - क इयदार लेकीरहरी Semi-Conductor Leboratory अंतरिक्ष विभाग, भारत सरकार

Department of Space, Govt. of India \$600071, \$1.08.68, \$707-160071, \$100, \$1004 86000-72, \$.A.S. Nagor-160071, \$2000, \$1004 Prof. P. Banerji

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SCL Chandigarh

Shri Surinder Singh

Director

सुरिन्दर वितः > Surinder Singh विकेश > Curector

सेमा कडवटर सेनेरिटरी Semi-Conductor Laboratory अंतरिस विभाग, भारत संस्कर

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Prof. P. Banerji

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Date: 20/4/2015