

MEMORANDUM OF UNDERSTANDING

BETWEEN

**NORTH CAROLINA STATE UNIVERSITY
RALEIGH, NORTH CAROLINA,
UNITED STATES OF AMERICA**

AND

**INDIAN INSTITUTE OF TECHNOLOGY KANPUR
KANPUR, UTTAR PRADESH
INDIA**

In order to enhance the educational capabilities of North Carolina State University and Indian Institute of Technology Kanpur, it is proposed that collaborations and exchanges be initiated in fields of Engineering and Science, including Nuclear Engineering, Mechanical Engineering, Materials Science and Environmental Engineering and other allied fields as may become beneficial. The programs to be initiated through this agreement are based on a spirit of cooperation and reciprocity and will be of mutual benefit to both parties. The agreement is intended as the starting point for collaboration to exploit the complementary nature of the strengths of research, teaching and enterprise and shall focus primarily on student and faculty exchanges, joint research and educational programs and research contracts. It is envisaged that each institution will manage its own costs and will seek to share the benefits gained through this cooperation.

Party(ies), University(ies) and Institution(s) are same for the purpose of this agreement.

GENERAL AREAS OF AGREEMENT

1. Both institutions agree to academic exchanges in various areas of education, research, and extension.
2. Both institutions will make every effort to exchange faculty, scholars, and students, as well as educational, research, and extension materials appropriate to the areas of collaboration.
3. Specific details of exchanges noted above will be negotiated subject to the approval of each institution.
4. Prior to engaging in any Collaborative Activity, as set forth in "Specific Areas of Collaboration" below, each institution shall obtain the prior written agreement of:
a) the Head of the Institution or designee; b) the relevant Faculty Dean or Head of Department; and c) the Faculty members in question

5. All background intellectual property used in connection with any collaborative activity shall remain the property of the party creating such intellectual property.
6. Any intellectual property discovered, made or conceived in the further development of and/or performance of any collaborative activity shall be determined by the terms of specific research agreements negotiated by the parties. The parties will endeavor to reach an agreement regarding intellectual property rights prior to the creation of the intellectual property. If the parties cannot reach an agreement, the intellectual property shall be deemed joint intellectual property with the parties sharing equally in rights thereto.
7. Subject to the governing law of each Institutions' jurisdiction regarding public records, the Institutions agree not to use or disclose to anyone information belonging to the other party which is disclosed in connection with this MOU which is of confidential nature and agree not to make any announcements of any nature in respect of this MOU without the consent of the other party hereto except for the mandatory governmental disclosures.

SPECIFIC AREAS OF COLLABORATION

1. Research Collaboration

Joint research programs will be developed, which will lead to joint research projects, joint publications, and faculty and graduate student exchanges. Traveling and accommodation expenses for exchanges or visits involving faculty will be the responsibility of the University, or Faculty or Department of that University, whose staff are undertaking the exchange or visit. The initial funding for research, faculty exchange and graduate student research projects will be the responsibility of each institution, but the parties will endeavor to develop joint funding opportunities in the future (e.g. US NSF, USDA and other relevant federal agencies and private institutions). Faculty of both institutions will identify projects of mutual interest. The specific areas of research collaboration will initially focus on Nuclear Engineering, Mechanical Engineering, Materials Science and Environmental Engineering and related sciences. Other joint projects will be developed to benefit both parties. These specific programs will be negotiated under separate agreements.

2. Faculty Exchange

As a part of research collaboration, both parties will provide opportunities and convenience for faculty exchanges. Such programs, to the greatest extent possible, will be conducted on a reciprocal basis, providing commensurate opportunities for the faculty of both institutions. The specific terms for funding such faculty exchanges will be negotiated under separate and specific agreements.

3. Student Exchange

The institutions may consider the development of opportunities for student exchange relating to educational and cultural enrichment. This exchange will follow the terms defined in a separate agreement.

4. Educational Training

Academic courses of mutual interest may be developed at the senior undergraduate and master's degree level at both institutions to be offered to students from the other institution. Prior to doing so, the two institutions will develop additional MOAs describing terms and conditions for student exchange, course and/or degree development, course articulation and the terms for awarding of credit.

5. Graduate Student Exchange

Both parties will provide opportunities and convenience for a "Sandwich-type" graduate program for qualified candidates, meaning that candidates will be sent to work on a particular research project for 6-12 months in a laboratory at the visiting institution that corresponds to his/her chosen field involving supervisors from both parties towards quality research leading to publication. The specific terms for funding such graduate student exchanges, including the graduate student qualifications, specific duration of the exchange and type of supervisory involvement from each institution, will be negotiated under separate and specific agreements.

6. Research and Internship Experiences

Subject to the governing law of each Institution's jurisdiction, both parties will provide assistance for students looking for industry internships. Internships are an integral part of the graduate programs, and the partner institutions agree to facilitate connecting qualified students with corporate opportunities. The specific terms relating to the internship process will be negotiated under separate and specific agreements.

7. Dual Degree Program

Collaborative development and transfer of courses as described in Item 4 and 5 above may lead to the development of dual or joint degree programs between the parties for students of the two institutions under separate, specific agreements after careful review and required approvals are obtained by each institution's governing board.

8. Enterprise and Entrepreneurial Activity

The parties may consider the development of possible enterprise and entrepreneurial activities, including the promotion of international technology transfer and exchange. Any activity will be negotiated under separate and specific agreements.

MISCELLANEOUS

1. This MOU will remain in effect for five (5) years from the date of signing, and is renewable thereafter for five-year terms subject to mutual consent in writing. Either party may terminate this MOU by giving at least six months notice in writing to the other party.
2. This MOU sets out the basic terms of the proposed Collaboration and is not intended to be exhaustive.

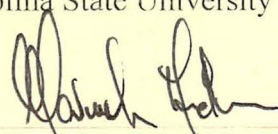
Specific units involved at North Carolina State University:

College of Engineering

SIGNATURES

Provost and Executive Vice Chancellor
North Carolina State University

Signature:

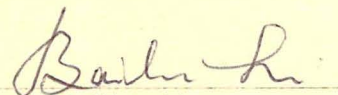

Dr. Warwick Arden

Date:

10/14/14

Vice Provost for International Affairs
North Carolina State University

Signature:

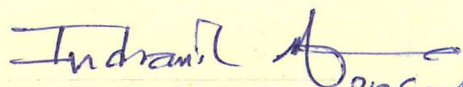

Dr. Bailian Li

Date:

10/15/14

Director
Indian Institute of Technology Kanpur

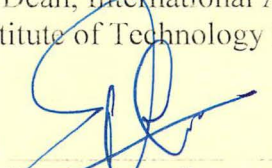
Signature:


Prof. Indranil Manna 20 Sept 2014

Date:

Associate Dean, International Affairs
Indian Institute of Technology Kanpur

Signature:


Dr. Anupam Saxena

Date:

20/9/14