



**Italian National Agency for New Technologies
Energy and Sustainable Economic Development**



**Madan Mohan Malaviya
University of Technology**

MEMORANDUM OF UNDERSTANDING FOR SCIENTIFIC COOPERATION

BETWEEN

**THE ITALIAN NATIONAL AGENCY FOR NEW TECHNOLOGIES, ENERGY AND
SUSTAINABLE ECONOMIC DEVELOPMENT (ENEA)**

AND

THE MADAN MOHAN MALAVIYA UNIVERSITY OF TECHNOLOGY (MMMUT)

The National Agency for New Technologies, Energy and Sustainable Economic Development (an Italian Government sponsored research and development agency with its registered office at Lungotevere Thaon di Revel 76, Rome) hereinafter referred to as "ENEA", represented by, Prof. Federico Testa on the one hand

And

The Madan Mohan Malaviya University of Technology, established by an Act of U.P. State Government, India, based at Gorakhpur (U.P.) - INDIA, hereinafter called "MMMUT", represented by Vice-Chancellor, Prof. Onkar Singh, on the other hand.

Hereinafter referred to individually as « Party » or collectively as « Parties ».

WHEREAS ENEA is an Italian leading research agency with mainly focused on the fields of energy, the environment and new technologies;

WHEREAS ENEA promotes, in the sectors in which it operates, collaboration with the organizations and institutions of other countries in the scientific and technological spheres, defining technical


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Vice-Chancellor

**M.M.M. University of Technology,
Gorakhpur-273010 (U.P.) India**



standards, taking part in major research programmes and international organizations and providing specific expertise on request;

WHEREAS MMMUT Technical University founded in 2013 after reconstituting the erstwhile Madan Mohan Malaviya Engineering College, Gorakhpur, which was established in 1962, has been pursuing academic activities in multidisciplinary scientific and technical fields covering energy, the environment and sustainable development;

WHEREAS MMMUT is an academic institution with a global vision and local focus, and has been at the forefront of researching, formulating and implementing sustainable development strategies for the largest state of India, The Uttar Pradesh;

WHEREAS Italy and India signed, in November 2003, a Scientific and technological collaboration Agreement.

Desiring to further strengthen their scientific and technological cooperation, ENEA in Italy and MMMUT in India have agreed upon the following Memorandum of Understanding (hereinafter referred to as MoU).

Article I

Framework of cooperation


I.1. Scope:

Through the present MoU, ENEA and MMMUT aim at fostering mutual relations and promoting scientific cooperation.

I.2. Fields of cooperation

The activities under this MoU shall cover the specific fields of innovative technologies such as:

1. solar thermal for space heating / cooling;
2. biomass gasification for both thermal and electric power generation;
3. production of both ethanol from lignocellulosic materials and biodiesel;
4. precious metal recovery from wastes;
5. Assistance by ENEA for a training course on renewable energy to be organized at MMMUT (India).


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Further details on the activities covered by the MoU will be established on an individual basis by specific Technical Agreements or Implementation Agreements (hereinafter referred to as "Technical Agreements").

Article II

Modes of cooperation

The modes of cooperation and the duration of the activities will be punctually defined by means of dedicated written Technical Agreements in the fields identified in article 1.

In the framework of these Technical Agreements the mutual duties of the Parties will be identified, both in terms of human and financial resources.

Parties agree that the cooperation will be developed by the following means:

1. Identification of R&D areas of possible future collaboration on activities in the fields identified in article I.
2. Feasibility study, design of a small-scale plant for on-site applications in agricultural farms.
3. Identification of private investors and private enterprises, in India and in Italy, interested in the fields identified in article I.
4. Organisation of workshops and conferences in the scientific and technological sectors identified in the present MoU;
5. Exchange of researchers for scientific work and training;
6. Exchange of scientific personnel for lectures, consultations and exchange of experience;
7. Exchange of scientific and technical information and documentation.

Article III

Roles of the Parties

The two Parties should perform the following roles:

1. to identify priority fields for cooperation, in addition to those listed in Article I, in consultation with each other, and taking into account both technical and financial feasibility;
2. to establish the framework of cooperation for each selected field (key stakeholders, key persons, forms of cooperation, financing, etc.);

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- 3. to review on-going programmes consulting each other about the continuation. This review and consultation will be carried out biennially by the reference persons identified below;
- 4. to maintain close mutual exchange of information;
- 5. to ensure that the cooperation will bring real benefits to both Parties.

Article IV

Financial regulations

The Present MoU should not be interpreted in the sense of creating a financial relationship between the two Parties. It constitutes a declaration of intent, the purpose of which is to promote a genuine relationship of mutual benefit, which is in the essence of that scientific collaboration.

The implementation of the cooperation is subject to the available budget assigned to each participant and to the applicable laws and regulations of each Party. No participant is obliged to perform any activities under this MoU unless and until adequate and appropriate funding has been secured.

Unless otherwise agreed in a separate Technical Agreement, each Party will bear its own costs to realize the joint activities related to this MoU.

The cooperation activity and the detailed technical provisions for carrying out activities will be defined in the Technical Agreements, depending on the decided funding scheme and related involved Participating Entities.

Article V

Means of communication

Both Parties shall maintain frequent contacts by means of mutual visits, videoconferences, telephone, email and fax.

Article VI

Reference Persons

The reference persons, for the actual follow-up of the activities of this MoU, are:

for the Italian National Agency for New technologies, Energy and the Environment (ENEA), Italian Expert

- Dr. Vinod Kumar SHARMA

[Handwritten signature]
28/09/2016

for The Madan Mohan Malaviya University of Technology (MMMUT), Vice Chancellor

- Prof. Onkar SINGH,

[Handwritten signature]
28/09/2016

(Prof. Onkar Singh)
Vice-Chancellor
M.M.M. University of Technology,
Gorakhpur-273010 (U.P.) India

[Handwritten signature]
28-09-16
Prof. V.K. Goyal



The reference persons of the Parties or their designated representatives shall correspond or meet whenever necessary to discuss the implementation of this MoU.

Article VII

Confidentiality Undertakings

With respect to all information concerning activities of the Parties relating to this MoU disclosed in confidence to one Party by the other, the said Party will not use any such information for any purpose other than the implementation of its activities under the MoU.

Each Party will keep and/or treat the information as confidential and not disclose it to any outside third entity without written consent of the concerned Party.

Confidentiality of information exchanged in connection with this MoU shall be maintained for a period of 5 (five) years after termination of the MoU.

Article VIII

Intellectual Property

ENEA and MMMUT agree to respect each other's rights to intellectual property. Further, the intellectual property rights that arise as a result of any collaborative research or activity under this MoU will be worked out on a case-by-case basis, and will be regulated in specific successive agreements.

Article IX

Binding nature

This MoU creates not legally binding obligation on any of the Parties, except as specifically set out in the present document. Any other further arrangement is subject to the negotiation and execution of a legal agreement, comprehensive of specific provisions concerning the management of intellectual property rights (IPR).

Article X

Non-exclusivity

The Parties agree that this MOU is entered into on a non-exclusive basis and that both parties remain free to enter into similar agreements with third parties.

Article XI

Performance and Modification of the MoU

The present MoU may be amended with the written agreement of the Parties. Termination by any Party must be communicated in writing to the other with at least three (3) months advanced notice.

U.S. 20/2/16
(Prof. Onkar Singh)
Vice-Chancellor

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Article XII

Law applicable and disputes settlement

Any dispute between ENEA and MMMUT relating to the interpretation or application of this MoU, or any document or arrangement relating thereto, shall be resolved by mutual negotiation between the Parties.

Final Clause

This MOU shall enter into force upon the date of the last signature from both Parties and will be valid for a period of five years; it can be extended for a period of five years with written agreement of the Parties. Termination by any parties must be communicated in writing to the other with at least three months advanced notice. This MoU is signed in English in 2 (two) copies, each having equal legal force and authenticity.

DATE 01 AGO 2016

PLACE Rome

For ENEA

ENEA
Agenzia Nazionale
per le Nuove Tecnologie, l'Energia,
e lo Sviluppo Economico Sostenibile
Il Presidente
(Prof. Federico Testa)

For MMMUT

(Onkar Singh)
28/09/2016
(Prof. Onkar Singh)
Vice-Chancellor
M.M.M. University of Technology,
Gorakhpur-273010 (U.P.) India

(S.K. Srivastava)
28.09.16
(Prof. S.K. Srivastava)

(V.K. Gini)
28-09-2016
(Prof. V.K. Gini)