

[१४(१०)] CSIR-Central Electronics Engineering Research Institute (CEERI), Pilani, Rajasthan व सोलापूर विद्यापीठ, सोलापूर (मुख्यतः पदार्थविज्ञान संकुल) यांच्यामध्ये करावयाच्या सामंजस्य कराराचा मसूदा व्यवस्थापन परिषदेच्या विचारार्थ.

(टिपणी: मा. संचालक, पदार्थविज्ञान संकुल यांनी दि.२३/०९/२०१६ रोजीच्या पत्रान्वये CSIR-Central Electronics Engineering Research Institute (CEERI), Pilani, Rajasthan व सोलापूर विद्यापीठ, सोलापूर (पदार्थविज्ञान संकुल) या दोन संस्थामध्ये संशोधक विद्यार्थी, संशोधक मार्गदर्शक, शास्त्रज्ञ इत्यादींसाठी मूलभूत व अत्यावश्यक संशोधन सुविधा, शैक्षणिक व संशोधन बाबीवरील चर्चा, कल्पना, प्रशिक्षण कार्यक्रम आणि संशोधन विकास प्रकल्प (Mutual Research Projects), चर्चासत्र, कार्यशाळा यांचे आयोजन करणे, इ. सदर सामंजस्य करारानुसार संशोधक, विद्यार्थी व शिक्षक संबंधित दोन्हीही संस्थांना भेटी देवून विचारांची आदान प्रदान करणे यासाठी सामंजस्य करार (MoU) करण्याबाबत विनंती केली आहे.

सबब, सदर सामंजस्य कराराचा मसूदा (Memorandum of Understanding) व्यवस्थापन परिषदेच्या अवलोकनार्थ व विचारार्थ).

ठराव: CSIR-Central Electronics Engineering Research Institute (CEERI), Pilani, Rajasthan व सोलापूर विद्यापीठ, सोलापूर (मुख्यतः पदार्थविज्ञान संकुल) यांच्यामध्ये सामंजस्य करार प्रस्तावित मसूद्याप्रमाणे करण्यास सर्वानुमते मान्यता देण्यात आली.



Memorandum of Understanding

Between



**CSIR-CENTRAL ELECTRONICS ENGINEERING
RESEARCH INSTITUTE, PILANI- 333 031, RAJASTHAN**

And



**SOLAPUR UNIVERSITY, KEGAON, SOLAPUR - 413 255,
MAHARASHTRA**

December 2016

This Memorandum of Understanding (hereinafter referred to as MoU) is made on this 16th day, of the month of **December** in the year 2016 by and between the CSIR-Central Electronics Engineering Research Institute (CEERI), Pilani, Rajasthan having its head Office at Pilani, Rajasthan [herein after called " CSIR-CEERI/First party], a constituent Research Institution of the Council of Scientific and Industrial Research (CSIR), New Delhi-110001 on the ONE PART and the SOLAPUR UNIVERISTY, SOLAPUR on the OTHER PART (who for the purpose of this MoU are hereinafter collectively referred to as the parties).

Both the parties, having discussed fields of common research interests and allied activities between the two institutions, have decided to enter into long-term collaboration for promotion of students' training and quality research in cutting edge areas in accordance with the provisions contained in the guidelines issued by Govt. of India *vide* Letter No. 2-8/2012-HRD, dated 11th December, 2012 and as will be revised from time to time.

WHEREAS the "First Party" is involved in the R&D on Nano Technology of Materials, Sensors and Wireless Sensing Networks (specific mandated domain within the approved disciplines/divisions).

AND WHEREAS the "Second Party", was established by the state of Maharashtra in the year 2004 for promoting Higher Education and Research in this part of the state to global standards. AND WHEREAS it has been considered expedient to agree in writing to participate jointly in the projects requiring expertise and logistics from both the parties.

Article 1. Scope

1.1 Both the parties will sign on the contract of MOU for mutual exchange between the research students and staff/supervisors for sophisticated facilities, discussions and exchange of ideas, training programs and R & D proposals of common / mutual interest.

The second party will recognize the first party as an Institute for conducting research related work leading to the thesis requirements of the research students for capacity building on controlled experiments in nano materials, sensors, wireless sensing networks and related electronic and instrumentation. Following are few of the goals under this MOU.

i.	To setup the prototype models and facilities for development of Wireless Sensor Networks for monitoring of fruits-vegetables (quality) / agriculture water irrigation (low cost soil parameters monitoring sensors with autonomous system for scheduled irrigation) / gas leakage detection, alert and control systems.
ii.	To develop a smart system (E-Nose) for recognition of freshness of fruits and vegetables using a wireless system based on LabVIEW.
iii.	To develop a water irrigation system for precision irrigation and rational water utilization strategies for farmers (water management and its control being important).
iv.	Development of a controlled device for water management for farmers for agriculture purpose based on Android, LabVIEW and Raspberry pi based IOT controlled systems.
v.	To develop a dynamic WSN – based gas leakage detection system for home/industry safety applications (Android and Lab VIEW based IOT controlled systems.)
vi.	Development/synthesis of Zr-based Aero Gels for catalytic/fuel cell applications
vii.	To synthesize and develop polymer-semiconductor/ferrite based gas prototype sensors for detection of toxic gases.
viii.	To initiate MEMS technology based on discrete micro and nano sensors for a variety of applications.
ix.	To organize Hands-on training programmes (at least of 6 months) at Solapur University (Second party).
x.	Development of infrastructure facilities for clean room culture.
xi.	Organizing conferences and mutual visits.
xii.	Joint Ph.D. supervision.
xiii.	Optimal usage of facilities.

The second party will recognize scientists of the CSIR-CEERI Institute, as recommended by its Director in accordance with the UGC, New Delhi and Solapur University rules and regulations, for guiding students working for the relevant degrees.

1.2 Operational details of research effort and collaboration in common research programs and/or projects restricted to specific mandated domain within the approved disciplines/divisions will be made.

1.3 Research instrumentation facility and library facilities available with the first party and the second party will be made available to the faculty and research scholars. However, the costs of specific consumables will be borne by the respective organizations.

1.4 During exchange visits, accommodation in the Hostels/ Guest houses shall be arranged, wherever possible, as per the existing rates of the institutes. The duration of exchange visits will be determined by mutual consent between both the parties.

Article 2. Management

2.1 Director of the first party and the Head of the Institution of the second party will be responsible to work out operational details of co-operation between the two organizations and ensure proper and effective implementation of this MoU.

2.2 The Advisory Committee will meet every six months or as and when required; in the institutions of the first party and the second party to review the activities. This meeting shall include presentation on the academic and research activities, which should be open to the students, faculty and scientists.

Article 3. Exchange of Information

3.1. The term "Information" includes scientific or technical data, results and/or methods of investigation, and other information intended to be provided, exchanged, or arising under project, the description entered into pursuant to this MoU.

3.2. The parties shall support the widest possible dissemination of information. Each party, in a joint project, shall be given the right to use, disclose, publish or disseminate such information for any and all purposes.

Article 4. General Provisions

4.1 It is understood that the first party and the second party shall subscribe to the principle of equal opportunity and shall not discriminate any such action on the basis of race, sex, age, caste or religion. Both the institutions shall abide by these principles in the administration of this agreement and neither party shall impose criteria for exchange of scholars or students that will violate principles of non-discrimination.

4.2 Both parties understand that all financial agreements shall be negotiated separately depending on the availability of funds.

4.3 Both parties acknowledge that exchange of students from one party to the other shall be subject to the availability of funds and shall comply with the regulations and policies of the first party and the second party.

4.4 Any research publications arising shall be jointly published in accordance with the provisions laid down in the guidelines for their degree program as trainees at CSIR-CEERI institutions as notified by the Govt. of India *vide* Letter No. 2- 8/2012-HRD, dated 11th December, 2012 or revised guidelines, if any, as may be issued from time to time.

4.5 A copy of the thesis/dissertation shall be submitted to the First Party after the award of the degree by the second party, when the student gets the degree under joint programme.

4.6 All questions related to this MoU arising during its execution period shall be settled by the parties with mutual agreement. Disagreements at the operating level shall be forwarded to the respective higher officials for appropriate resolution, failing which an arbitrator of mutual acceptance may be identified for the settlement of dispute, if any.

4.7 All questions not foreseen related to this MoU shall be handled by the parties with mutual agreement.

4.8 Nothing in this MoU is intended to affect the other cooperation or collaborations between the parties.

Article 5. Intellectual Property Rights

5.1 Rights regarding publications, patents, royalty, ownership of software/design/products developed etc shall be decided by two parties by mutual consent.

Article 6. Admission and Fees

6.1 All those who wish to register as trainees at the respective institutions under this MoU must apply for admission to research degree at the Second party as per rules and procedures. The allocation of Major Guide/Advisor would be finalized before the registration and shall be governed by the provisions laid down in items of the guidelines for the students to conduct research for their degree programs as trainees at CSIR-CEERI institutions as notified by the Govt. of India vide its Letter No.2-8/2012-HRD, dated 11th December, 2012 or revised guidelines, if any, as may be issued from time to time, for the students form within CSIR-CEERI and outside.

6.2 Admission of the students and award of degrees for different programs shall be the responsibility of the Second party as per the rules and regulations.

6.3 Allotment of the students at the First party will be done by the approval of Director of the first party and Head of the Institution of the Second party.

6.4 Both the parties shall have the right to screen the student's eligibility for admission based on their academic record.

6.5 The project management and evaluation Cell of the first party in consultation with the representative of the second party shall decide the location and sharing quantum of research work.

6.6 The number of students at any particular time shall be subjected to the availability of research facilities and time of scientists to guide research work at the institution of First party.

6.7 Any student admitted to the first party for training/research, if found violating the rules and regulations laid down by the first party or indulged in such activities that amount to tarnishing the image of the Institute, or cause damage to the property, the registration of such students would be summarily terminated. The Second party will not complete the formalities of issuing the certificates to such students until they compensate the losses to the First party.

6.8 Fees shall be charged to the students by the first party / second party as per their guide lines from time to time. However, a student registered with first / second party will deposit the fees as decided by training programme.

Article 7. Entry into effect, modification and termination

7.1. This MoU shall become effective on the date it is signed by the parties and shall be valid for three years extendable for additional two more years. Both parties shall review the status of the MoU at the end of third/fifth year to determine any modification, if necessary. The period of validity of this MoU may be extended by mutual consent up to five years. This MoU may be amended by mutual written agreement and may be terminated at any time by either party upon written notification signed by the competent authority of the party initiating termination. Such notification must be given to the other party at least six months in advance from the effective date of termination.

7.2. All joint activities not completed at the time of expiry or termination of the MoU may be continued until their completion under the terms of this MoU.

7.3 No amendment or modification of the MoU shall be valid unless the same is made in writing by both the parties or their authorized representatives and specifically stating the same to be amendment of the MoU. The modifications/changes suggested shall become part of the MoU and shall be effective from the date on which they are made /executed, unless otherwise agreed too.

This MoU has been executed in two originals, one of which has been retained by the First party and the other by the Second party IN WITNESS WHERE OF, the parties have executed this MoU and represent that they approve, accept and agree to the terms contained herein.

(Name and Address of the First Party)
CSIR-Central Electronic Engineering
Research Institute, Pilani Rajasthan – 333031
Rajasthan State, India

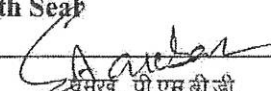
(Name and Address of the Second Party)
Solapur University, Solapur
Solapur -Pune National Highway,
Kegaon, Solapur-413255.(Maharashtra)
Maharashtra State, India

Name of Signing Authority of the institution
of the First Party

Dr S.A. Akbar
Head, PMBD,
CSIR-CEERI, Pilani-333 031
Rajasthan
Tel No.01596-242242/252244
M-09587923861
Fax – 01596-242393

Date 16/12/2016

Signature with Seal


प्रमुख, पी.एम.बी.डी.
Head PMBD
सी.एस.आई.आर.-केंद्रीय इलेक्ट्रॉनिकी अभियांत्रिकी अनुसंधान संस्थान
CSIR-Central Electronics Engineering Research Institute
पिलानी-333031, (राजस्थान) / Pilani-333031, (Rajasthan)

Witness 1
Signature and name (Dr. Jamil Akhtar)

Witness 2 ...
Signature and name (Dr. Ing. Nidhi Chaturvedi)

Name of Signing Authority of the Institution
of the Second Party

Shri B. P. Patil
REGISTRAR
SOLAPUR UNIVERSITY, SOLAPUR
Tel. No. 0217-2744776, FAX (2744770)
M- 07774043982

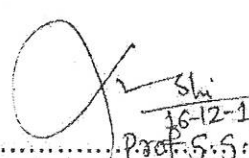
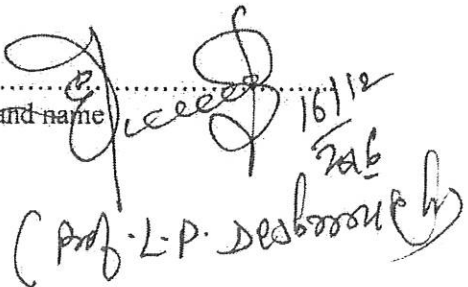
Date 16/12/2016

Signature
Registrar
Solapur University,
Solapur.



Witness 1
Signature and name Prof. S. S. Suryavanshi

Witness 2
Signature and name


16-12-16
Prof. S. S. Suryavanshi

16/12
2016
Prof. L. P. Deshpande