



**Office of International Relations  
Indian Institute of Technology Kharagpur  
Kharagpur – 721 302**

DEPUTY DIRECTOR'S OFFICE  
No. 1915  
IN 21 JUL 2022  
OUT IIT KHARAGPUR

निदेशक कार्यालय  
DIRECTOR'S OFFICE  
सं/NO.: 222  
IN 01 AUG 2022  
OUT 02.08.22  
भा. प्रा. सं. खड़गपुर  
IIT KHARAGPUR

निदेशक कार्यालय  
DIRECTOR'S OFFICE  
सं/NO.: 222  
IN 21 JUL 2022  
OUT भा. प्रा. सं. खड़गपुर  
IIT KHARAGPUR

Ref: 1546/2022/OIR

Date: 20.07.2022

**Sub: Request for approval for signing the MoU with Ulm University, Germany**

IIT Kharagpur and Ulm University, Germany desire to sign an International MoU between the two Institutes in the field of academic and research collaboration.

To this end, the draft Understanding was placed at the MoU committee meeting on 31<sup>st</sup> January, 2022. The Committee recommended modifications in the scope of the MoU and requested to provide specifics and targets in the MoU Cover Form, which were incorporated in the draft MoU and MoU Cover Form, respectively. The modified drafts were placed in another MoU Committee Meeting on 05<sup>th</sup> May, 2022. The Committee approved the MoU draft in principle but suggested a slight modification in the MoU Cover Form, which was incorporated in the draft MoU Cover Form. The final drafts are now being placed for your kind approval. The MoU is proposed to be signed by the Director, IIT Kharagpur.

The approved draft of MoU and MoU Cover Form along with the minutes of the MoU committee meeting are enclosed for your kind consideration and final approval.

Associate Dean IR

  
Dean Outreach (Acting)  
Deputy Director  
Director (Acting)

*The MoU draft has been prepared as per standard template. May kindly be approved, it agreed to.*

*Approved*  
*J. C.*  
*02/08/2022*

# **MEMORANDUM OF UNDERSTANDING**

## **FOR INSTITUTIONAL COLLABORATION**

### **BETWEEN**

### **INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR**

### **(IITKGP)**

### **AND**

### **ULM UNIVERSITY (UULM)**

#### **Preamble**

Indian Institute of Technology Kharagpur (IITKGP) is a reputed institution of higher learning situated at Kharagpur, India, 721302

Ulm University (UULM) is a public research university located in Ulm, Germany.

IITKGP and UULM have agreed for institutional collaboration in education and research. The primary objective is to promote interaction and collaboration between faculty, staff and students of the two institutions through visits and exchange programmes, to carry out joint academic and research programmes and the joint supervision of doctoral and masters students on a reciprocal basis. The relationship also aims at enhancing the technological, social and cultural relations of both countries/states/regions. This document presents a general framework for such a relationship. It also includes some specifically identified areas of cooperation, which may be updated from time to time.

#### **Coordination**

Professor Dr. Robert Güttel shall be the Coordinator from UULM and Assistant Professor Koustuv Ray, Department of Chemical Engineering shall be the Coordinator from IITKGP. The participants and Coordinators may change from time to time as decided by appropriate authority of the respective institutions. The coordinators will hold a review of the activities under this MoU twice every year, preferably in January and July, and submit a short report to the Office of International Relations at IITKGP and UULM.

#### **Scope of Cooperation**

The following areas of cooperation have been identified under this MoU.

- (i) **Faculty exchange programme:** The two parties will explore opportunities for interaction among members of faculty as well as creating Visiting Faculty positions. The total duration of visits from each side is expected to be approximately equal. Each such visit shall require approval of the respective institutions.

- (ii) **Student exchange programme**: The two parties agree to participate in student exchange programme at the respective institutions. Visits under such programmes may be for a short duration, such as summer/winter terms or short courses, or for a longer duration not exceeding two semesters. For visits exceeding two semesters separate approvals will be needed. A detailed proposal document on this (including credit transfer arrangements) has to be approved by the highest academic bodies of the two institutions before implementation.
- (iii) **Joint research projects**: The two parties will explore opportunities of undertaking joint research projects and may seek research funding from external funding agencies. Each such research proposal shall require approval of the respective institutions.
- (iv) **Coordinated graduate degree programme**: Joint PhD/Masters programmes may be explored and formulated, possibly in association with other reputed academic, research or industrial organizations. A detailed document related to such programmes, including credit transfer arrangements, will be required and approved by the competent authorities of both the institutions, before implementation.
- (v) **Joint academic activities and events**: IITKGP and UULM may formulate joint academic activities such as short course, seminars, workshops or conferences based on mutual interests and available expertise in both the institutions. They may also share and carry out joint research in technology for distance and computer-based learning.

The areas of cooperation may be revised by mutual consent. However, specific programmes may require separate agreements detailed out and documented as annexures to this MoU.

## **Non-discrimination**

IITKGP and UULM agree not to discriminate against any person because of age, sex, national origin, race, ancestry, color, religious creed disability or handicap, and sexual orientation. Neither institution shall impose criteria for the exchange of faculty, staff and students that would violate the principles of non-discrimination.

## **Code of Conduct**

Visiting student and faculty will abide by the codes of conduct of the host Institution.

## **Intellectual Property**

Each institution will adhere to the intellectual laws of its nation. Intellectual property developed during the visit of an exchange student/researcher/faculty/staff will be governed by the rules of the host institute unless otherwise specified.

Any Background Intellectual Property (BGIP) shall remain the sole and exclusive property of the Party to whom it belonged prior to the commencement of this MoU. If one Party receives any BGIP from the partner under a clearly defined non-disclosure agreement, necessary and reasonable care will be taken to protect the intellectual property received.

The two institutions shall jointly own results and Intellectual Property generated thereof for clearly defined collaborative projects and exchange programmes. This joint ownership of Jointly Developed Intellectual Property (JDIP) also entitles each party to explore commercialization. However, transfer or sale of JDIP and associated sharing of revenue shall be governed by a separate agreement.

## **Financing**

Both institutes will consider tuition fee waivers to the visiting students. The host institute will make arrangements for local living including accommodation, food, insurance etc. at reasonable costs to visiting students and faculty. All travel costs shall be borne by the visitors or their home institution. Additional support, if any, will be governed by separate agreements that may be drawn up for specific activities.

## **Legal Status**

This document is a statement of intent to foster genuine and mutually beneficial cooperation and is not legally binding on both the parties. Any disputes shall be resolved through mutual discussion.

## **Validity and Termination**

This MoU is valid for an initial period of five years and becomes effective from the date it is signed by the partners. The partnership period may be extended by mutual consent.

This MoU may be terminated:

- a. on either party giving the other party 6 months' prior written notice;
- b. on written notice by one of the Parties if the other Party has committed a breach of this MoU.

However, specific commitments made prior to such intimation shall be honoured by both the partners including ensuring that any student at that time participating in the Programme is able to complete the term of the assignment and be assessed for it.

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Prof. Dr.-Ing. Michael Weber  
President  
Ulm University  
Ulm, Germany

Date : \_\_\_\_\_

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Prof. Virendra Kumar Tewari  
Director  
Indian Institute of Technology Kharagpur  
Kharagpur, India

Date : \_\_\_\_\_



**Office of International Relations**  
**Indian Institute of Technology Kharagpur**

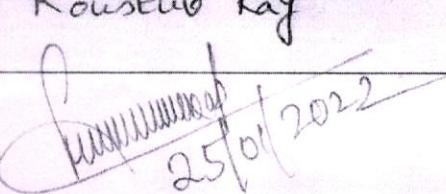
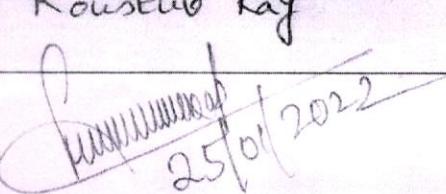
**Proposal for entering into an institutional MoU with a national/international  
partner university/ institution/ organization**

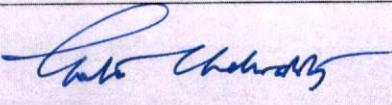
**Instructions:**

Please submit the signed hardcopy along with supporting documents to Dean IR

Please email scanned copy of this form along with softcopies of supporting documents to:  
[moutrack@adm.iitkgp.ac.in](mailto:moutrack@adm.iitkgp.ac.in), [aeanir@adm.iitkgp.ac.in](mailto:aeanir@adm.iitkgp.ac.in)

Name and address of proposed partner	Professor Dr.-Ing. Robert Güttel  Institute of Chemical Engineering, Ulm University, Albert-Einstein-Allee 11, 89081 Ulm, Germany
National / international standing of proposed partner	<ul style="list-style-type: none"><li>- Ulm University among 150 top universities worldwide (THE world university rankings 2022) and in the rank 301-400 (Shanghai Ranking)</li><li>- Prof. Güttel is nationally leading in design of nanostructured catalysts for Fischer-Tropsch synthesis</li><li>- in the field of dynamic reactor operation Prof. Güttel is an international expert</li><li>- to date &gt; 60 publications in international referred journals in chemical reaction engineering and heterogeneous catalysis (h =23)</li></ul>
Extent of past / ongoing collaborations between IIT Kharagpur and proposed partner	<ul style="list-style-type: none"><li>- two student projects at Ulm during Summer Research Guidance 2021-22 by International Relations Cell, IIT Kharagpur</li><li>- mutual research stay (Robert Güttel/Koustuv Ray) funded by DAAD (postponed due to Covid)</li><li>- joint research on iron-based nanocatalysts for methanation (paper in preparation, scientific discussions ongoing)</li></ul>

Expected activities in the next 3 years if MoU is signed	<ul style="list-style-type: none"> <li>- research collaboration and scientific article/patents publish</li> <li>- to organize joint workshop/seminar on the relevant research field</li> <li>- to start research exchange visits for the students, faculties</li> <li>- to submit joint project proposals based on national and international call</li> </ul> <p><b>One Year Targets:</b></p> <ul style="list-style-type: none"> <li>- One international publication by the end of 2022 that would be jointly authored by both the institutions.</li> <li>- One joint workshop (preferably online mode) aimed for UG and PG students to deliver on 'Dynamic Reactor Operation' and 'Fundamentals of DFT in heterogeneous Catalysis' by the end of 2022.</li> </ul>
How the MoU will benefit IIT Kharagpur	<p>The MoU if stands to exist will attract young minds like bachelor and dual degree students for enhancing their skills and will promote an intensive research environment in the institute. The PhD and Master students will be even more encouraged to work diligently and produce quality research at the expense of available resources. Furthermore, attempts will be made to add new infrastructure to the research laboratory known as Laboratory of Catalysis and Process Engineering (LCPE).</p>
Does the proposed partner have an MoU with any other IIT? If yes, please give details	Yes/ No
Has the proposed partner accepted IIT Kharagpur's standard MoU template?	Yes/ No
If No above, has the proposed partner suggested any MoU draft? If yes, please attach	Yes/ No
MoU proposed by (Name, Designation and Signature of Proposing Faculty)	<p>Name: Dr. Koustuv Ray  Designation: Assistant Professor  Affiliation: Department of Chemical Engineering, IIT Kharagpur  Email: koustuv@che.iitkgp.ac.in  Phone: +91-3222-304582, +91-8004616428</p> <p>Signature: </p>
Recommended by Head/Dean (Signature with date and seal)	

Forwarded by Dean IR	
Approval by DD for placing at MoU Committee	
OIR Notings	

# Office of Dean, International Relations

## Indian Institute of Technology Kharagpur

Date: 31<sup>st</sup> May, 2022

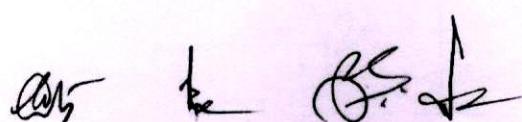
### Subject: Minutes of the MoU Committee Meeting Dated 05<sup>th</sup> May, 2022.

The MoU Committee comprising the undersigned members met on 05<sup>th</sup> May, 2022 in the Deans' Conference Room. The minutes and resolutions of the meeting are as under.

Prof. Amit Patra	Chairman, MoU Committee
Prof. Jayanta Mukhopadhyay	Dean, OR
Prof. V.R. Desai	Dean, FoEA
Prof. G.P. Raja Sekhar	Dean, FoS
Prof. Saswat Chakraborty	Dean, FoBTBS
Prof. Suman Chakraborty	Dean, SRIC
Prof. Debashish Chakravarty	Associate Dean, AA & Branding
Prof. Goutam Chakraborty	Associate Dean, IR & Ranking (Secretary & Convener)

### Signed Reporting Items:

Sl	Partner	Partnership	Coordinator	D/S/C
1.	African-Asian Rural Development Organisation	MoU	Prof. Rintu Banerjee	AgFE
2.	Centre for Adivasi Research and Development, Odisha	MoU	Prof. Rintu Banerjee	AgFE
3.	Research For Resurgence Foundation, Nagpur	MoU	Prof. Rintu Banerjee/ Prof. Joy Sen	AgFE/ ARP
4.	University of Torino (UNiTO), Italy	MoU	Prof. Manish A. Mamtani	GG
5.	Garden Reach Shipbuilders & Engineers Ltd.	MoU	Prof. S K Pal	CoE- AMT





6.	IITKG Foundation USA Scholarship Programme for International Internship	MoU	Prof. Goutam Chakraborty, Adean	IR&R
7.	National Tsing Hua University, Taiwan	MoU & SEA	Prof. Dipanwita Roy Chowdhury	CSE

### Action Items:

1. New MoU with *ParisTech, France*: Prof. Goutam Chakraborty, Asso. Dean, IR & Ranking

**Resolution:** The earlier MoU that was signed between ParisTech and IIT Consortium on 6<sup>th</sup> December 2010, was expired in 2015. A new MoU between ParisTech and IIT Kharagpur was placed. The draft MoU was approved by the committee and may be placed for signatures. The Associate Dean, IR & Ranking was requested to attach a report on the activities that happened during 2010 to 2015 with the MoU Cover Form that would be placed for Director's approval.

2. New Agreement with *Aston University, UK (Going Global Partnership)*: Prof. Pradip Kumar Ray, VGSoM

**Resolution:** The draft agreement has been approved in principle. The final agreement may be placed for Director's approval after getting clearance from the legal cell.

3. Amendment of MoU with *Warwick Manufacturing Group, UK*: Prof. Goutam Chakraborty, Asso. Dean, IR & Ranking

**Resolution:** The earlier MoU that was signed on 04<sup>th</sup> March 2015, was expired in 2020. It is now proposed to renew the MoU with some extensions. The document was approved by the committee and now may be placed for signatures. Associate Dean, International Relations and Ranking was requested to know the name and designation of the signatory authorities from WMG.

4. New MoU with *Ulm University, Germany*: Prof. Koutav Ray, CHE

**Resolution:** The MoU has been approved by the committee and may be placed for signatures. However, the committee has suggested a slight modification in the MoU Cover Form, under the section of expected activities in the next three years: "One International publication by the end of 2022 that would be jointly authored by both the institutions". Prof. Koutav Ray has been requested to send the modified MoU Cover Form.

5. New MoU with *Oil and Natural Gas Corporation, India*: prof. Subrata Chattopadhyay, ARP

**Resolution:** The earlier MoU that was signed between ONGC and Pan-IIT Forum on 19<sup>th</sup> January, 2015, was expired in 2020. A new MoU between ONGC and IIT Kharagpur focusing mainly on the collaborating activities in building planning and designing, was placed before the committee. The draft MoU has been approved by the committee for signatures. It was suggested that the Dean of Research and Development Prof. Suman Chakraborty would be the signatory.

*(Signature)* *(Signature)* *(Signature)* *(Signature)*

6. New MoU with *India Japan Laboratory, Keio University, Japan* and *RIKA Institute, India*: Prof. Abraham George. ARP

**Resolution:** The committee made the following observation:

- (a) Sufficient details about the collaborating organisations (Know Your Collaborator- KYC) are lacking in the draft MoU.
- (b) The deliverables for one year that would be engendered under the MoU are to be mentioned in the MoU Cover Form.
- (c) Provisions for carrying out big projects should be kept under the scope of the MoU.
- (d) The responsibilities of IIT Khargapur, RIKA Institute and India Japan Laboratory should be clearly spelt out.
- (e) The representatives from each institution/organisation should be clearly mentioned in the draft MoU.

Prof. Abraham George was requested to modify the draft MoU in the light of the above observations and present to the Committee for further review.

## Discussion Items:

### 1. University Technology Mara, Malaysia

University Technology Mara (UiTM) Malaysia expressed interest in signing an MoU for institutional collaborations in education and research for promoting interaction and collaboration between the two institutions on a reciprocal basis.

**Resolution:** The committee recommended to explore the possibility of UiTM's faculty members visiting IIT Kharagpur for a minimum period of 3 months or for a semester.

### 2. Edith Cowan University, Australia

Edith Cowan University (ECU) Australia expressed their interest in working with IIT Kharagpur specifically they are looking at offering student at least one year of research abroad with concurrent enrolment at both institutions and exploration of opportunities for a collaborative PhD/Masters programmes and participating in Scheme for Promotion of Academic and Research Collaborations (SPARC).

**Resolution:** The committee recommended to explore the possibility of faculty mobility where the faculty members of Edith Cowan University would be invited to visit IIT Kharagpur for a minimum period of 3 months or for a semester. It was also suggested that the HoD of the Departments/Centres/Schools such as Electrical Engineering, Electronics and Electrical Communication Engineering, Advanced Manufacturing Centre, Mechanical Engineering, Water Resources, Civil Engineering, Mining Engineering, etc. should be contacted for their opinion on the possibility of research collaboration.

*Abraham George*

*SPARC*

**3. Saint Petersburg Electrotechnical University "LETI"**

ETU "LETI" is interested in collaboration with our Institute in the fields of mutual interests. ETU "LETI" is the first Electrotechnical Institute established in Europe in 1886, the university is well known in the fields of Radio Engineering and Telecommunications, Electronics, Electrical Engineering, Computer Science and Biomedical Engineering. ETU offers about 100 major educational programs and over 46 Ph.D. courses.

**Resolution:** The committee has requested Associate Dean, International Relations and Ranking Prof. Goutam Chakraborty to contact the HoD of Department of Electrical Engineering & Department of Electronics and Electrical Communication Engineering to see the possibility of the research collaborations and faculty mobility (inflow) for a minimum period of 3 months or for a semester.

**4. National Tsing Hua University, Taiwan- Joint Doctoral Programme**

The partner institute has expressed their interest to enter into a Joint Doctoral Program.

**Resolution:** The committee has recommended that IIT Kharagpur may proceed for Joint Doctoral Programme with NTHU. The Associate Dean of International Relations and Ranking has been requested to contact Prof. Tarun Bhattacharya and Prof. Kaushal Bhagwat from the Advanced Technology Development Centre for requesting them to be the coordinator.

**5. Visit of Sri Lankan Navy Officers to IIT Kharagpur for M. Tech Degree Programme**

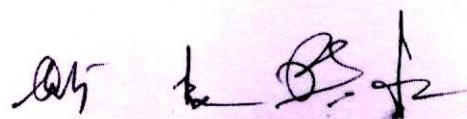
The Sri Lankan Navy Officer had revealed their interest for taking admission in M. Tech Degree Programme. In this regard, the Director had already given in principle approval. Due to lacking of a format regarding student mobility (in-flow) agreement, a new and fresh draft needs to be prepared. It has been placed to the committee for their advice.

**Resolution:** The committee has recommended to follow the AARDO template, which is an agreement for MS (By Research) programme for preparing a similar agreement for M. Tech Degree Programme.

**6. NVIDIA**

IIT Kharagpur and NVIDIA Corporation (located in Santa Clara, California) wished to sign an MoU for setting up an Accelerated Computing Lab in the Centre for Computational and Data Sciences. The final draft MoU was placed to the Director for his approval. The Director expressed his concern over signing an MoU with a Foreign based organisation. Meanwhile, it was made known that a similar MoU was signed by IIT Hyderabad with NVIDIA Bangalore Office i.e. NVIDIA Graphics Pvt. Ltd.- Bengaluru, Karnataka, India. It has been communicated to the Committee for their suggestions.

**Resolution:** The committee has suggested to sign an MoU with the Indian Subsidiary Company of NVIDIA i.e. NVIDIA Graphics Pvt. Ltd. situated in Bengaluru, Karnataka, India. In this regard, Prof. Somnath Roy needs to communicate with NVIDIA, for their concurrence.



*Goutam Chakraborty*  
**Goutam Chakraborty**  
Associate Dean,  
INTERNATIONAL RELATION &  
RANKING (SECRETARY &  
CONVENOR)

ABSENT  
**Debashish Chakravarty**  
Associate Dean, ALUMNI  
AFFAIRS AND BRANDING

*G P Raja Sekhar*  
**G P Raja Sekhar**  
Dean, FACULTY OF SCIENCES

ABSENT  
**Suman Chakraborty**  
Dean, RESEARCH &  
DEVELOPMENT

*V R Desai*  
**V R Desai**  
Dean, FACULTY OF  
ENGINEERING AND  
ARCHITECTURE

*Saswat Chakrabarti*  
01.06.2022  
**Saswat Chakrabarti**  
Dean, FACULTY OF  
BIOTECHNOLOGY &  
BIOSCIENCES

ABSENT  
**Jayanta Mukhopadhyay**  
Dean, OUTREACH & ALUMNI  
AFFAIRS

*01/06/22*  
**Amit Patra**  
DEPUTY DIRECTOR  
Chairman, MoU COMMITTEE

**Office of the Dean, International Relations  
Indian Institute of Technology Kharagpur**

Date: 31<sup>st</sup> January, 2022

**Subject: Minutes of the MoU Committee Meeting Dated 27<sup>th</sup> January, 2022.**

The MoU Committee comprising the undersigned members met on 27<sup>th</sup> January, 2022 through Online Mode. The minutes and resolutions of the meeting are as under.

Prof. Amit Patra	Chairman, MoU Committee
Prof. Jayanta Mukhopadhyay	Dean, OR
Prof. V.R. Desai	Dean, FoEA
Prof. G.P. Raja Sekhar	Dean, FoS
Prof. Saswat Chakraborty	Dean, FoBTBS
Prof. Suman Chakraborty	Dean, SRIC
Prof. Debashish Chakravarty	Associate Dean, AA & Branding
Prof. Goutam Chakraborty	Associate Dean, IR & Ranking (Secretary & Convener)

**Signed Reporting Items:**

Sl. No.	Partner	Partnership	Coordinator	D/S/C
1	California State University (Sacramento State)	MoU	Priyadarshi Patnaik	HSS

**Action Items:**

1. New MoU with **African-Asian Rural Development Organization**: Prof. Rintu Banerjee, AgFE

**Resolution:** The committee recommended preparation of the draft MoU.

It was suggested that Prof. Rintu Banerjee be the coordinator of this MoU.

Prof. Rintu Banerjee was requested to prepare the draft MoU with specific clauses including Intellectual Property Rights, Technology Transfers, etc.

It was further recommended that one faculty from the Rajiv Gandhi School of Intellectual Property Law be included as well.

2. New MoU with **AIIMS- Bhuvaneshwar**: Dr. Anirban Mukherjee, EE

**Resolution:** The draft MoU in its present form was not approved.

The Committee suggested a broad-based MoU highlighting extended strengths and capabilities.

The Committee would accord its approval in signing the MoU in the light of further detailed and specific information received from the coordinator.

3. New MoU with **ULM University, Germany**: Dr. Koutav Ray, CHE

**Resolution:** The Committee recommended modifications in the scope of the MoU.

Dr. Koustav Ray was requested to provide specifics and targets before the document is placed for Director's approval.

4. Renewal MoU with **Paris Tech, France**: TBD

**Resolution:** The MoU may be put up in the next committee meeting after the draft has been created.

It was recommended that Prof. Goutam Chakraborty (Associate Dean, IR & R) be the coordinator of this MoU.

5. Renewal MoU with **HTKGP Foundation (Internship)**: Prof. Goutam Chakraborty, ADean IR & R

**Resolution:** The MoU Committee recommended extension of the MoU. The draft may be placed for renewal signatures.

6. Renewal MoU with **National Tsing Hua University (NTHU), Taiwan**: Prof. Dipanwita Roy Chowdhury, CSE

**Resolution:** The MoU and Student Exchange Agreement are approved for signatures.

7. **Shraman Foundation**: Discussion

**Resolution:** The Committee observed that there is a need to institutionalize such scholarships and streamline the funding processes.

It was recommended that the Office of Alumni Affairs will handle such funding opportunities. The Committee requested Prof. Goutam Chakraborty (Associate Dean, IR & R) to discuss further with Prof. Debasish Chakravarty (Associate Dean, AA & B).

*Goutam Chakraborty*  
**Goutam Chakraborty**  
Associate Dean, IR (Secretary  
& Convener)

**ABSENT**  
**Debashish Chakravarty**  
Associate Dean, AA

*G.P. Raja Sekhar*  
**G.P. Raja Sekhar**  
Dean, FoS

**ABSENT**  
**Suman Chakraborty**  
Dean, SRIC

*V.R. Desai*  
**V.R. Desai**  
Dean, FoEA

*Saswat Chakraborty*  
08.02.2022  
**Saswat Chakraborty**  
Dean, FoBTBS

*J*  
**Jayanta Mukhopadhyay**  
Dean, OR

*Amit Patra*  
**Amit Patra**  
Chairman, MoU Committee