



# MEMORANDUM OF AGREEMENT (MOA) TO THE ACADEMIC AND EDUCATIONAL EXCHANGE BETWEEN FACULTY OF SCIENCE, UNIVERSITY OF DELHI, DELHI, INDIA AND GRADUATE SCHOOL OF SCIENCE, HIROSHIMA UNIVERSITY, JAPAN

Faculty of Science, University of Delhi (hereinafter referred to as "FS-DU"), India and Graduate School of Science, Hiroshima University (hereinafter referred to as "GSS-HU"), Japan hereby agree to determine each item concerning the implementation of the undergraduate and graduate student exchange (hereinafter referred to as "exchange students") and academic staff exchange, based on Memorandum of Understanding which both institutions concluded.

The scope of activities of the MOA shall include:

#### A. ACADEMIC STAFF EXCHANGE PROGRAM

- Both institutions encourage academic staff exchange for the mutual benefit to collaborate with each other in teaching and research. Suitable arrangements for the exchange of academic staff may be separately negotiated and agreed in writing depending on the availability of funds. In the absence of any specific agreement to the contrary, all expenses of salary, travel and living and allied costs will be the responsibility of the academic staff's home university.
- 2. The host university will provide the visiting academic staff with access to research facilities and access to university libraries, and other assistance and advice when necessary.
- 3. The host university will assist the visiting academic staff in finding accommodation and provide the appropriate documents to apply for a visa for the length of time equivalent to the duration of stay in the country where the host university is located.

#### **B. STUDENT EXCHANGE PROGRAM**

- 1. The number of students exchanged shall not exceed two per academic year. Exchange students shall be permitted to stay at the host institution no longer than one year.
- 2. Exchange students will not be subject to examination, admission, or tuition fees at the host institution.
- 3. Exchange students shall be given authorization and appropriate documents by the host institution to apply for visas for the length of time equivalent to the exchange term in the country where the host institution is located.
- 4. At GSS-HU, undergraduate exchange students shall be accepted with the status of Special Auditing Students and graduate students shall be accepted with the status of Special Auditing Students or Special Research Students.
  - At FS-DU, exchange students shall be accepted with the status of regular exchange students.

Selection of exchange students will be subject to the authority and discretion of the host institution.

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- 5. Exchange students (except Special Research Students) may enroll in all courses (classes) offered by each institution, except specific courses determined by the host institution.
- 6. Both institutions agree to endeavor to transfer credits earned by exchange students at the host institution, subject to their regulations and procedures.
- 7. Both institutions shall endeavor to help exchange students to find appropriate housing.
- 8. Concerning the implementation of the exchange, particulars shall be discussed and agreed upon by both institutions when necessary.
- 9. This MoA shall commence on the day both parties have signed this MoA and shall remain effective for five years with an option to renew for similar period. The MoA may be amended by mutual consent of the parties by giving six (6) months prior notice in writing and supplemented by detailed subsequent agreement between the two institutions. Amendments and/or supplements will be appended as annexure.
- 10. Either institution may terminate this MoA by giving at least one (1) year prior notice in writing to the other institution. The rights and liabilities of the parties with respect to any ongoing project/training/exchanges shall remain unaffected by the termination. The same shall be completed as if no such termination has taken place. For conditions not covered by this MoA, both parties undertake to refrain from unilateral action and to consult and negotiate mutually acceptable decisions.

For and on Behalf of

The University of Delhi, India

Professor Farun Kumar Das

Registrar

Date 12 - Feb 2027

For and on Behalf of Hiroshima University, Japan

Professor Manabu Abe

Dean

**Graduate School of Science** 

Date 19. Dec. 2019





## MEMORANDUM OF UNDERSTANDING BETWEEN FACULTY OF SCIENCE, UNIVERSITY OF DELHI, DELHI, INDIA AND

#### GRADUATE SCHOOL OF SCIENCE, HIROSHIMA UNIVERSITY, JAPAN

Faculty of Science, University of Delhi, India and Graduate school of Science, Hiroshima University, Japan hereby agree to establish a memorandum of understanding (hereinafter referred to as MoU) in order to promote exchange of information and academic materials that are of mutual interest for the two countries and between the two Institutions through educational and academic collaboration and exchange, and to contribute to the advancement and progress of learning.

#### **Contents of the Exchange Programme:**

- 1. Both institutions agree to cooperate in the following areas:
  - (1) Promotion of joint research
  - (2) Exchange of academic faculty, administrative staff and other staff as mutually agreed upon
  - (3) Exchange of undergraduate and graduate students
  - (4) Visiting scholars
  - (5) Exchange of research outcomes, academic publications, and other academic information
  - (6) Other academic and educational exchange programs approved as suitable by both institutions

#### Implementation of Exchange programs

- 2. The two institutions shall decide through consultation the specific areas and details of cooperation within the framework of this MoU, and shall consult from time to time, at the request of either institution, for the purpose of reviewing the operation of this agreement.
- 3. The financial arrangements involved in the implementation of this MoU shall be settled through consultation between the two institutions in respect of each program of co-operation for which separate agreement shall be signed after obtaining appropriate approval from relevant competent authorities of each party.

#### Term of the MoU

4. This MoU shall become effective on the last date indicated hereunder when the representatives of both institutions sign below and shall remain effective for a period of five (5) years with an option to renew for similar period.

#### **Revision and Termination of MoU**

5. The MoU may be amended by mutual consent of the parties by giving six (6) months prior notice in writing and supplemented by detailed subsequent agreement between the two institutions. Amendments and/or supplements will be appended as annexure.







6. Either institution may terminate this Agreement by giving at least one (1) year prior notice in writing to the other institution. The rights and liabilities of the parties with respect to any ongoing project/training/exchanges shall remain unaffected by the termination. The same shall be completed as if no such termination has taken place. For conditions not covered by this Agreement, both parties undertake to refrain from unilateral action and to consult and negotiate mutually acceptable decisions.

Should any question or any part of this agreement arise, both institutions must consult with one another to find a solution.

Professor Tarun Kumar Das

Registrar

University of Delhi

India

Date 12th feb 2020

Professor Manabu Abe

Dean

Graduate School of Science

Hiroshima University

Japan

Date 19, Dec. 2018

### A report of Collaborative research with the Hiroshima University, Japan and activities following the MOU between the Science faculty, DU and Faculty of Science, HU

For a few years (especially since 2013-14), some teachers of the Dept. of Geology, Delhi University were in active research collaboration (through informal, but regular, academic interactions) with the researchers of the Department of Earth and Planetary Systems Science of Hiroshima University, Japan. This have led to the following events:

- 1. Student exchange for JST Sakura Student exchange program in December 2015 (2 students from DU visited Hiroshima University).
- 2. HiPeR (Research incubation centre, Hiroshima University) invited 3 Professors (viz., A. Chattopadhyay, P.P. Chakraborty, A. Saikia) and 3 students from Dept. of Geology, DU to participate and make research presentations in the 1<sup>st</sup> HiPeR International Conference in January 23-30, 2018.
- 3. Active research collaborations continuing between Prof. Partha Pratim Chakraborty (DU) with Prof. Fumito Shiraishi and Kaushik Das of HU from 2017 on the basin evolution and sediment-life interaction. Prof. Shiraishi visited Indian field areas with Partha P. Chakraborty in 2018 and 2019.
- 4. Research collaboration between Prof. Anupam Chattopadhyay of DU, Prof. Jun-ichi Ando and Prof. Kaushik Das of HU on earthquake generating mechanisms from rock records. Jun-ichi Ando and Kaushik Das took three students from HU side for field study in Rajasthan in December 2018 along with Prof. Chattopadhyay.
- 5. Geochronological investigation of some critical granitic rocks from the Central Indian Tectonic Zone (CITZ) was carried out through the joint work of Prof. A. Chattopadhyay (DU) and Prof. Kaushik Das (HU) from 2015 onwards.
- 6. A joint DST-JSPS Asia Seminar was organized in Japan in 2018 with active participation of students and faculty members of DU which was organized By the Nagoya University, National Institute of Polar Research, Niigata University with organizational participation from HU. Prof. P.P. Chakraborty of DU coordinated from the Indian side.

All the above activities led to the necessity of a **MoU between HU and DU**, the process was initiated between the Faculty of Science of HU and DU in late 2019 and a final MoU was completed in 2020.

Since the MoU was signed, the following activities have taken place:

- 1. Prof. P.P. Chakraborty, Department of Geology, DU joined as the external member of the Life-Earth and Planetary materials group of Hiroshima Institute of Plate Convergence Region Research of the HU. He is continuing as a member at present.
- 2. Prof. A. Chattopadhyay is acting as an external (foreign) co-supervisor of one student (Junya Okazaki) of HU who is pursuing his Ph.D. working on seismic fault zone rocks in Rajasthan, India.

- 3. Student exchange and joint field-based research could not be done due to Covid-related restrictions. However, data generations in laboratories from both sides led to several joint research paper publications (10 papers in peer-reviewed, renowned international journals in last 5 years). Many of these were first-authored by the doctoral course students from DU and also from HU. From DU side, three doctoral course students actively participated in the joint research with HU and awarded Ph.D. (one is also ongoing). From HU side, one student has already received doctoral degree after working on such collaboration and one is ongoing.
- 4. One student from Department of Geology, DU has applied for doctoral course admission in Hiroshima University (under MEXT) and the process is ongoing for consideration towards April 2023 intake.
- 5. Three online discussions between student participants from both sides involving teachers were conducted in last two years of COVID period.