



MEMORANDUM OF UNDERSTANDING
(hereinafter referred to as “MoU”)



BETWEEN

GEOLOGICAL SURVEY OF INDIA

MINISTRY OF MINES,

THE GOVERNMENT OF THE REPUBLIC OF INDIA

AND

**THE FLORIDA INTERNATIONAL UNIVERSITY BOARD OF TRUSTEES ON
BEHALF OF ITS**

**DEPARTMENT OF EARTH AND ENVIRONMENT, COLLEGE OF ARTS,
SCIENCES AND EDUCATION, UNITED STATES OF AMERICA**

ON

COOPERATION IN THE FIELD OF GEOLOGY

UNDER THE RESEARCH PROJECT TITLE

**STUDY OF POST-COLLISIONAL MAGMATISM IN THE INDIA-ASIA COLLISION
ZONE (LADAKH GRANITIDS, INDUS OPHIOLITE BELT) AND INTEGRATIVE
GEOLOGICAL AND GEOCHRONOLOGICAL STUDIES OF THE MISHMI
TECTONIC BELT, NORTHEASTERN INDIA (ARUNACHAL PRADESH)**

6th Oct 2021

**MEMORANDUM OF UNDERSTANDING BETWEEN GEOLOGICAL SURVEY OF
INDIA, MINISTRY OF MINES, THE GOVERNMENT OF THE REPUBLIC OF
INDIA AND THE FLORIDA INTERNATIONAL UNIVERSITY BOARD OF
TRUSTEES ON BEHALF OF ITS DEPARTMENT OF EARTH AND
ENVIRONMENT, COLLEGE OF ARTS, SCIENCES AND EDUCATION, UNITED
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GEOLOGICAL AND GEOCHRONOLOGICAL STUDIES OF THE MISHMI
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GEOLOGICAL SURVEY OF INDIA (GSI), MINISTRY OF MINES, THE GOVERNMENT OF THE REPUBLIC OF INDIA AND THE FLORIDA INTERNATIONAL UNIVERSITY BOARD OF TRUSTEES ON BEHALF OF ITS DEPARTMENT OF EARTH AND ENVIRONMENT, COLLEGE OF ARTS, SCIENCES AND EDUCATION (FIU), UNITED STATES OF AMERICA hereinafter referred to as "the Parties",

CONFIRMING their mutual interest in developing and reinforcing their cooperation in the fields of geology, on the basis of this MoU;

RECOGNIZING that this MoU establishes a framework for this cooperation in joint investigations and scientific exchanges concerning the fields of geology, on subjects of mutual interest;

DESIRING of developing cooperation in the field of geosciences between the FIU, USA and GSI, Republic of India through participation in this MoU, with the intent of reinforcing and strengthening both scientific links between the two countries;

AND BELIEVING that such co-operation shall further strengthen the existing friendly relations between the Parties;

HAVE COME to the following understanding:

ARTICLE 1

OBJECTIVE

- a. To understand the geologic and tectonic environment of the generation and emplacement of post-collisional magmatism in India-Asia Collision margin in particular and to construct a model of post-collisional magma genesis in continental collision zones in general; and
- b. To construct the geologic history and tectonics of the Eastern Himalayan Syntaxis.

ARTICLE 2

AREAS OF COOPERATION

Cooperation under this MoU may include, but are not limited to, the following areas of interest:

- a. Development of the geological knowledge, research regarding geologic and tectonic environment of post collisional magmatism in India-Asia collisional margin, geologic history and tectonics of the Eastern Himalayan Syntaxis.
- b. Developing cooperative projects in the fields of regional geological, geochemical, petrological and multi-isotopic studies related to the evolution of post collisional magmatic belts (Ladakh Plutons).
- c. Exchange of information on technology and geoscientific data.
- d. Other areas of mutual interest to be decided upon by the Parties.

ARTICLE 3
FORMS OF COOPERATION

- a. Exchange of scientists, experts, delegations and training of personnel for enhancing capacity building in the fields of geo-sciences.
- b. Promote joint collaborative projects on the study and research in their respective territories/ countries of mutual interest.
- c. Transfer of technology like techniques of data collection, synthesis of data, advanced techniques of petrological and geochemical analysis, isotopic and other laboratory studies as well as data interpretation in support of collaborative projects.
- d. Visits by geoscientific experts engaged in research programs of mutual interest or specific to a particular collaborative program of research as identified under this MoU.
- e. Participate in workshops, conferences and exhibitions, aimed at attracting sharing of geoscientific knowledge in their respective territories.
- f. During the planned visit of FIU scientists to GSI under the MoU, and as to be agreed to in separately executed agreements by the Parties, short field visit/s of the GSI and FIU geoscientists to Himalaya shall be involved for understanding the geological set-up of the Eastern Himalayan Syntaxis and other areas of scientific interest for better understanding the Himalayan tectonics.
- g. During course of the research study, and as to be agreed to in separately executed agreements by the Parties, FIU will arrange for laboratory studies in USA; GSI will extend laboratory facilities in India; FIU will arrange for office space. GSI will arrange for field visits in India for visiting scientist/s from FIU. Both parties will jointly provide secretarial and office facilities in their respective facilities. Both parties will jointly collaborate in the research and in the production of the report.
- h. Exchange of information on research and development, where appropriate.
- i. Other forms of cooperation as may be mutually decided upon by the Parties from time to time.

ARTICLE 4
CENTRAL AUTHORITY

The organisations/Parties responsible for implementation and execution of the present MoU are:

- a. Geological Survey of India, the Ministry of Mines, the Government of the Republic of India
- b. The Florida International University Board of Trustees, USA.

ARTICLE 5
IMPLEMENTATION AND JOINT WORKING GROUP

- a. The terms and conditions of implementation of each collaborative programme undertaken under this MoU as part of the envisaged co-operation shall be agreed to by the Parties in separate agreements executed by the Parties in accordance with their respective policies and procedures.
- b. Within the framework of this MoU, in order to exchange views and draw a roadmap for enhancing cooperation as well as to keep watch/vetting of sensitive data/information/profile which may be exchanged, a Joint Working Group (JWG) may be constituted with representatives from each Party and Ministry of Home affairs (MHA). Such a Joint Working Group may conduct periodical meetings and reviews, preferably annually or whenever required in the respective countries/through videoconference alternately for effective implementation of the MoU.
- c. The venue, agenda and date of the meetings of the Working Groups shall be determined mutually by the Parties.

ARTICLE 6
FINANCIAL ARRANGEMENT

Funding arrangement for the exchange of scientists and other personnel will be set forth by the Parties in separate agreement(s) to be executed by the Parties for such exchanges once the details are known.

ARTICLE 7
EXECUTION OF SEPARATE AGREEMENTS

a) If the Parties agree, based on each Party's policies and procedures, that they desire to collaborate on any particular project or to exchange personnel between the Parties' institutions, the Parties shall negotiate in good faith to enter into a separate written agreement for each such project or personnel exchange, which agreement shall contain appropriate terms, including but not limited to, as applicable, intellectual property rights, funding terms and scope of work. Neither Party is obligated to enter into an agreement to which it does not accept the terms. Mutually agreed upon agreements must be executed by each Party's authorized official before any project or personnel exchange may commence. For cooperation requested by either of the Parties that extends to subjects outside of their special expertise, the Parties may, upon their mutual consent, include the participation of other organization in the collaboration in the development of activities falling within the scope of this MoU.

b) It is anticipated that the separate agreements executed by the Parties for the particular projects or personnel exchange as described in this Article 7(a), shall provide that the Parties will share and jointly publish the scientific and technical results of cooperative projects conducted pursuant to the separately executed agreements under this MoU or hold in confidence in accordance with the specific provisions identified in those separately executed agreements for the associated collaborative projects. The use of name, logo and/or official emblem of the Parties on any publication, document and/or paper will require prior permission of both Parties. It may however, be ensured that the official emblem and logo are not misused.

c) It is also anticipated that the separate agreements executed by the Parties for the particular projects or personnel exchange, will provide that, subject to the applicable rules and regulations of the two Parties, information, including derived data, maps and reports arising from collaborative activities undertaken under the executed project agreement may only be released on the written consent of both Parties in the written agreement.

d) The Intellectual Property Rights of all background IPR including, but not limited to, information, maps, reports and all data in analogue or electronic forms supplied by either Party for the purposes of this MoU is and will remain vested with the owning Party.

e) If the activities under the MoU give rise to intellectual property (IP), the Parties shall enter into separate agreement that will specifically provide for ownership, management and commercialization of such rights to such IP in line with rules and regulations of each Party and other multilateral agreements to which the countries of both Parties are party to.

f) Any usage of either Party's background IPR will be subject to separate license arrangements being agreed with the other Party. No transfer of the ownership of either Party's background IPR arises from or is implied under this MoU.

g) Each Party's access to field data, different analysis data and results of the studies will be detailed in the separate agreement executed by the Parties for each project or personnel exchange.

h) It is anticipated that the separate project or personnel exchange agreements will provide that GSI will be the primary repository of the samples with the understanding that small pieces of duplicate samples can be taken out of India with the permission of the DG, GSI for laboratory studies in labs in USA.

i) The separate project or personnel exchange agreements will provide for the repository of data and publication rights.

ARTICLE 8
PROTECTION OF CONFIDENTIAL INFORMATION

- a. During the term of this MoU, the Parties may exchange confidential information. When confidential information is disclosed by one party to the other in writing and clearly identified as confidential, disclosure of such information shall be restricted to the Parties' employees who are directly participating in this MoU. In the event of termination of MoU or the period of validity being over, the classified/confidential information if any, which has been transferred or resulted from cooperation shall continue to be treated in confidence until the parties cancel the security classification for the same.
- b. During exchange of sensitive data/information/profile and technical information, it should be ensured that:
 - i. Such exchange does not adversely impact national interest of the respective Parties;
 - ii. Sensitive research data/information should be vetted appropriately before being exchanged;
- c. The obligation with respect to handling confidential information, as set forth in this MoU, is not applicable to the following:
 - i. Information that is now in, or hereafter enters, the public domain through no fault of the receiving party;
 - ii. Information that was previously known to the receiving party independently of the disclosing party;
 - iii. Information that is independently developed by the receiving party;
 - iv. Information that is disclosed with the written approval of the other party or as required by applicable law or judicial order;
 - v. Information that is received from other sources provided such other sources did not receive it due to a breach of this MoU.

- d. Provisions for the protection and distribution of intellectual property created or furnished in the course of cooperative activities under this MoU shall be governed by Annex I of the Science & Technology Agreement (STA). Provision for the protection of classified information and unclassified export-controlled information and equipment shall be governed by Annex II of STA.
- e. No license to the other party, under any trademark, patent or copyright is either granted or implied by the conveying of information to that party. None of the information which may be submitted or exchanged by the respective parties shall constitute any representation, warranty, assurance, guarantee or inducement by any party to any other party with respect to the infringement of trademarks, patents, copyrights or any right of privacy, or other rights of third persons.
- f. Any and all property or equipment of whatever nature or kind furnished by either Parties in connection with work under this MoU will remain the property of the Participant furnishing such property or equipment.
- g. FIU designates Neptune Srimal as the only point of contact for exchanging all confidential information between the parties pursuant to this MoU. GSI designates ADG & NMH-IV (at present Dr. S.Raju) as the only point of contact for exchanging all confidential information between the parties pursuant to this MoU. Any change of the foregoing individuals will be communicated to the other party in writing. Oral disclosures of confidential information must be identified as confidential at the time of disclosure, followed by written confirmation within ten (10) business days. Any confidential information given to anyone other than to the designated individuals stated above will not fall under the protection of this MoU. All confidential information and all copies thereof shall be returned to the disclosing party upon written request.

ARTICLE 9

REVISION AND AMENDMENT

This MoU may be amended only by mutual consent of the Parties, provided any and all such amendment shall be in writing and signed by the authorized representatives of both Parties.

However, any amendment in the MoU should not affect the arrangements for IPRs and confidential information as mentioned in Article 7&8.

ARTICLE 10

SETTLEMENT OF DISPUTES

a) Any dispute between the Parties arising out of the interpretation or implementation of this MoU shall be settled amicably through consultation or negotiation between the Parties to the dispute.

b) Activities pursuant to this MoU shall be governed and construed in accordance with laws and regulations of the respective countries of the Parties where activities are taking place as well as by the policies and procedures applicable to the subject party.

ARTICLE 11

ENTRY INTO FORCE, DURATION AND TERMINATION

a) This MoU shall enter into force on the date of last signature thereof by the "Parties."

b) The MoU shall remain in force for an initial period of **three (3) years** unless extended or terminated by the Parties in writing through mutual consent depending upon the need/progress of work. Either Party may terminate this MoU upon providing three (3) months prior written notice of termination to the other Party.

c) The termination of the MoU shall not affect the validity or duration of specific collaborative programs already being undertaken thereunder unless decided otherwise by the Parties by mutual consent.

d) A Party terminating this MoU shall remain bound to contractual relationships to which it is a party and to its obligations there under, until they are fulfilled unless that separate contractual relationship is terminated pursuant to its terms.

ARTICLE 12
ADDITIONAL TERMS

A. Independent Contractors: This MoU does not constitute a joint venture, partnership or any other form of legal business arrangement or organization. Each party is and shall act as an independent contractor and not as an agent or partner of the other party for any purpose whatsoever, and no party shall act or represent itself, directly or by implication, in any such capacity in respect of the other party or in any manner which seeks to assume or create any obligation on behalf of, or in the name of, the other party without that party's prior express written consent. The employees of one party shall not be deemed the employees of any other party. Except as specifically authorized in this MoU, each party agrees not to use the name, trademarks or logos of any other party or the name of any other party's employees, officers, board members or agents in any way including but not limited to, in sales promotion, advertising materials, applications or proposals without that party's prior express written consent.

B. Notices: All notices permitted or required under this MoU shall be in writing and shall be delivered by personal delivery, electronic mail, or by certified or registered mail, return receipt requested, to each Party's respective contact listed in Article 9 above, and will be deemed given upon personal delivery, five (5) days after deposit in the mail, or upon acknowledgment of receipt of electronic transmission. Notices of intent to terminate this MoU shall be provided to the applicable contact listed in Article 9 above.

C. Severability: If any term, provision, covenant or condition of this MoU is held by a court of competent jurisdiction to be invalid, void or otherwise unenforceable, the remainder of the provisions of this MoU will remain in full force and effect.

D. Non-Exclusivity: This MoU is nonexclusive and does not affect any party's ability to contract or enter into projects with other entities.

E. Waiver: Failure or delay by any party to insist upon strict performance of any of the provisions of this MoU, or any party's failure or delay in exercising any rights or remedies provided herein or by law, shall not be deemed a waiver of any rights of such party to insist upon strict performance hereof or of any of such party's rights or remedies under this MoU or law, and shall not operate as a waiver of any of the provisions hereof.

F. Assignability: No party may assign any interest in this MoU without the prior written consent of the other parties. Any attempted assignment shall be void and of no effect if not in accordance with this MoU.

G. Counterparts: This MoU may be executed in electronic scan, facsimile, PDF or original document form, and in any number of counterparts, each of which shall be considered an original for all purposes, and all of which when taken together shall constitute one MoU binding on the parties, notwithstanding that both parties are not signatories to the original or the same counterpart but provided that the MoU shall not be effective until all Parties have signed.

H. No Funding: Nothing in this MoU shall be construed as providing for the sharing of profits or losses arising out of the efforts of any of the parties. Each party shall bear its own costs for its efforts with respect to this MoU and no party shall provide any monetary support to any other party relative to this MoU.

I. Applicable Law and Policies and Procedures: The parties' obligations here under are subject to and contingent upon the availability of funds and each party's policies and procedures and applicable law.

J. Visit of Foreign officials: The visit of any official/s associated with the research from outside the country of the individual Party should be subjected to prescribed clearances and the individual/s may not be allowed to enter restricted and protected areas wherever applicable and other sensitive installations without obtaining Restricted Area Permit (RAP)/Protected Area Permit (PAP).

K. Entire MoU: This MoU, and all exhibits, comprise the entire and complete understanding and MoU among the parties pertaining to the subject matter herein, and supersedes any and all prior MoUs or understandings, whether oral or written, relating to the subject matter hereof.

L. Headings: Title and paragraph headings are for convenience only and shall not be construed as revising the content of the terms therein.

IN WITNESS WHEREOF the undersigned, being duly authorized by their respective Parties, have signed this Memorandum of Understanding.

Done at 6th on Oct. day of _____ 2021 in two originals, each in the Hindi and the English language. All texts being equally valid. In case of divergence in interpretation, the English text will prevail.

FOR THE GEOLOGICAL SURVEY OF
INDIA, THE GOVERNMENT OF
THE REPUBLIC OF INDIA



Name: Rajendra Singh Garkhal

Designation: Director General, Geological
Survey of India

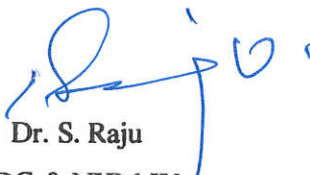
FOR THE FLORIDA
INTERNATIONAL UNIVERSITY
BOARD OF TRUSTEES



Name: Robert M Gutierrez

Designation: Assistant Vice President for
Research, Office of Research & Economic
Development

Read and Acknowledged by:



Dr. S. Raju

ADG & NHM-IV

Geological Survey of India

Read and Acknowledged by:



Dr. Neptune Srimal

Teaching Professor

Department of Earth & Environment