

## DEBADITYA BANDYOPADHYAY

Date of Birth: 16<sup>th</sup> May, 1990

### Institutional Address:

[Institute of Earth Sciences, Academia Sinica](#)  
[128, Sec. 2, Academia Road, Nangang,](#)  
Taipei 11529, Taiwan  
Institute Email: [debaditya@earth.sinica.edu.tw](mailto:debaditya@earth.sinica.edu.tw)



### Permanent Residential Address:

48/4 South Sinthee Road, Kolkata  
INDIA, PIN-700050  
Email: [debaditya.b2r@gmail.com](mailto:debaditya.b2r@gmail.com)  
Phone: +919874547899; +8860910621421

## I. APPOINTMENTS:

**August, 2023 – Present:** Postdoctoral Research Fellow; Institute of Earth Sciences, Academia Sinica [Host Supervisor - Prof. Sun-Lin Chung]

**October, 2022 – July, 2023:** Post-doctoral Fellow; Dept. of Geology, University of Calcutta. [Host Supervisor – Dr. Biswajit Ghosh]

**August, 2022 – September, 2022:** Visiting Researcher; Earthquake Research Institute, the University of Tokyo. [Host Supervisor – Prof. Hikaru Iwamori]

**July, 2021 – August, 2022:** Post-doctoral Fellow (Project Researcher); Earthquake Research Institute, the University of Tokyo. [Host Supervisor – Prof. Hikaru Iwamori] [[Introduction webpage](#)] (16.07.2021 to 15.08.2022)

**July, 2019 – June, 2021:** Assistant Professor (contractual) in Dept. of Geology, University of North Bengal, India.

**April, 2018 – June, 2019:** Guest Faculty in Dept. of Earth Sciences, JIS University, India.

**February, 2015 – January, 2018:** DST-INSPIRE Fellow (SRF) in Dept. of Geology, University of Calcutta.

**February, 2013 – January, 2015:** DST-INSPIRE Fellow (JRF) in Dept. of Geology, University of Calcutta.

### Short term:

**11<sup>th</sup> Feb, 2021 – 30<sup>th</sup> June, 2021:** Member, Board of Studies of Dept. of Earth Sciences and Dept. of RS-GIS, JIS University, India.

**21<sup>st</sup> May, 2019 – 25<sup>th</sup> May, 2019 & 15<sup>th</sup> November, 2018 – 23<sup>rd</sup> November, 2018:** Guest Faculty in Dept. of Geology, University of North Bengal, India.

**7<sup>th</sup> June, 2017 – 14<sup>th</sup> July, 2017:** Guest Researcher at the Department of Earth Sciences, Utrecht University. [Host Supervisors – Dr. Douwe J. J. van Hinsbergen, Dr. Alexis Plunder]

**3<sup>rd</sup> November, 2016 – 29<sup>th</sup> November, 2016:** Short-Term Research Internship in the Department of Natural History Science, Hokkaido University. [Host Supervisor – Dr. Marie Python]

**April, 2015 – March, 2019:** Assistant Secretary, The Geological, Mining and Metallurgical Society of India.

**September, 2013 – February, 2014:** Students' Representative for PhD. Course Work in the Dept. of Geology, University of Calcutta.

**October, 2012 – January, 2013:** Research Scholar in Dept. of Geology, University of Calcutta.

## II. EDUCATION:

**2020 - Ph.D. in Geology,** University of Calcutta, Kolkata, India

**Topic of Doctoral Research:** Archean Sittampundi Layered Anorthosite Complex and Cretaceous Andaman Ophiolite: Contrasting Geodynamic History of Indian Plate from Petro-Geochemical Study [*Supervisor: Dr. Biswajit Ghosh*].

Full text thesis is available from Shodhganga repository <http://hdl.handle.net/10603/358930>

**2012 - M.Sc in Applied Geology** [University of Calcutta, Kolkata, India] (**1<sup>st</sup> Rank in the University**).

**M.Sc Thesis:** Origin and Thermobarometric Evolution of Symplectites and Kelyphites from Sittampundi Layered Anorthosite Complex, Tamil Nadu, India. [*Supervisor: Dr. Biswajit Ghosh*].

**2010 - B.Sc in Geology (Honours)** [Asutosh College, University of Calcutta, Kolkata, India].

## III. RESEARCH INTEREST:

Unsupervised machine learning and data-driven approaches in geochemical discrimination.

Early earth geodynamics - Stagnant lid to mobile lid transition and petrological manifestation.

Petrological and geochemical modelling (e.g., Metamorphic phase equilibria, numerical melting experiments).

Morphology and thermobarometric quantification of various reaction and alteration microstructures

In-depth petrological, geochemical and geochronological investigation of ophiolite complexes to understand broad scale geodynamic framework, subduction initiation mechanisms.

#### IV. AWARDS AND ACHIEVEMENTS:

1. Fully funded post-doctoral fellowship for 12 months in the Earthquake Research Institute (ERI), The University of Tokyo (2021 Fiscal Year)
2. Served as team member (with Dr. Biswajit Ghosh, and GSI team) in 36<sup>th</sup> IGC field trip project “**Geological Studies in parts of Andaman Islands towards generating field/laboratory database of the IGC 2020 field excursion along the route Port Blair-Chidiyatapu-Baratang-Havelock Island**” [ER010]
3. **University of Calcutta Travel Grant** to attend Goldschmidt Conference (held at Paris, France; from 13<sup>th</sup> Aug. to 18<sup>th</sup> Aug, 2017)
4. **GOLDSCHMIDT 2017 STUDENT AND EARLY CAREER GRANTS.**
5. **University Gold Medal** for standing **first in Class I** in M.Sc Curriculum (Applied Geology) – 2012
6. **Poster Prize** in the **EMU school** on "Mineral reaction kinetics: microstructures, textures, chemical and isotopic signatures" (held at the University of Vienna, AUSTRIA; from 19<sup>th</sup> Sep. to 23<sup>rd</sup> Sep, 2016).
7. **Financial grant (International Travel Support Scheme)** to attend 2nd European Mineralogical Conference [Science and Engineering Research Board, Government of India]
8. Selected in **Japan-Asia Youth Exchange Program in Science (Sakura Exchange Program in Science (Host Organization – Kanazawa University, Japan)** administered by Japan Science and Technology Agency. (28th Oct, 2015 – 12th Nov, 2015)
9. **Prof. Nirmal Nath Chatterjee Medal (2015) [The Asiatic Society].**
10. **Prof. N.N. Chatterjee Memorial Book Grant [The Geological, Mining and Metallurgical Society of India].**
11. **Kalyan Mukherjee “61 Geology” Medal (2011-12) [The Mining, Geological and Metallurgical Institute of India].**
12. **INSPIRE Fellowship (5<sup>th</sup> Advertisement, dt. 16<sup>th</sup> Jan, 2013) [Department of Science and Technology (DST)].**
13. **FERMOR FUND (The Geological Society, London) supported field excursions.**
14. **Club HP Special Efforts Scholarship (2005) [Hindustan Petroleum Corporation Limited.**
15. **Somenath Bose Memorial Award (2003) [Paschimbanga Vigyan Mancha - Sinthee Unit Committee].**

#### V. MEMBERSHIP:

1. **Sakura Science Club** (since Nov, 2015)
2. **The Geological, Mining and Metallurgical Society of India** (Life Member)

#### VI. WORKSHOPS ATTENDED:

1. **EMU school on "Mineral reaction kinetics: microstructures, textures, chemical and isotopic signatures"** [MRK-2016] held at the University of Vienna, AUSTRIA from 19<sup>th</sup> Sep. to 23<sup>rd</sup> Sep, 2016. [http://mrk16.univie.ac.at/]
2. **Summer School on Crystallography, Mineralogy, Thermodynamics and Mantle Petrology** organised by National Centre for High Pressure Studies, Indian Institute of Science Education and Research Kolkata during 6<sup>th</sup> – 17<sup>th</sup> June, 2016.
3. Two Days Workshop on **FESEM with EDS and EBSD Facility** organised by **JEOL INDIA PVT LTD** at the Centre for Research in Nanoscience and Nanotechnology (CRNN), University of Calcutta, July, 2013.
4. **Pre-Conference (Granulites and Granulites 2013)** workshop on “**Calculating Metamorphic Mineral Equilibria**” held at the Indian Institute of Technology - Kharagpur on 8–10 January, 2013.

#### VII. GEOLOGICAL FIELD WORKS:

- 2022: (i) In and around **Mount Fuji**, JAPAN; (ii) In and around **Jogashima and Hamamoroiso, Miura Peninsula**, JAPAN
- 2021: (i) In and around **Mount Fuji and Hakone volcano**, JAPAN; (ii) **Andaman Ophiolite**, Andaman and Nicobar Islands; (iii) In and around **Mayodia Pass, Dibang Valley district**, Arunachal Pradesh
- 2020: (i) In and around Balotra and Sirohi, **Rajasthan** [as student instructor] mentioned in [GSI Bhuvismavd](#), (ii) In and around **Sung valley, Shillong, Meghalaya**.
- 2019: (i) In and around Deogarh, **Odisha**, (ii) **Andaman Ophiolite**, Andaman and Nicobar Islands.
- 2018: (i) In and around **Dibang Valley district (Mayodia, Hunli, Etalin)**, Arunachal Pradesh, (ii) In and around Deogarh, **Odisha**

- 2017: (i) **Sittampundi Layered Anorthosite Complex**, Tamil Nadu; (ii) **Andaman Ophiolite**, Andaman and Nicobar Islands [Summary in [Douwe J.J. van Hinsbergen's webpage](#); [travelinggeologist.com](http://travelinggeologist.com)]
- 2015: (i) **Naga Ophiolite**, Nagaland; (ii) **Andaman Ophiolite**, Andaman and Nicobar Islands; (iii) In and around **Bhuj Area, Gujarat**.
- 2014: (i) In and around **Bhuj Area, Gujarat**; (ii) In and around **Rangpo, Sikkim** [Detailed Structural and lithological mapping, as student instructor].
- 2013: **Eastern Ghats**, Andhra Pradesh. [Pre-Conference (**Granulites and Granulites 2013**) Fieldtrip]
- 2012: **Kondapalle Layered Igneous Complex**, Andhra Pradesh.
- 2011: (i) **Dalli-Rajhara**, Chhattisgarh [Industrial Training under SAIL in fields of mining and exploration lithological mapping, structural mapping, slice mapping, grade calculation, and reserve estimation in iron ore mines]; (ii) **Granite-Greenstone belts of Chitradurga**, Karnataka [Structural and lithological mapping as a part of M.Sc curriculum]
- 2009: **Joda Iron ore Mines and Manganese Mines** (Tata Steel); Orissa. **Chaibasa (Limestone quarry)**, Jharkhand and **UCIL (Uranium mines Narwapahar, Jaduguda)**, Jharkhand [as a part of B.Sc Economic geology field work curriculum]
- 2008: **Delhi Supergroup, Baewar**, Rajasthan [as a part of B.Sc Structural mapping field work curriculum]
- 2007: In and around **Purulia, West Bengal**. [as a part of B.Sc geological field work curriculum]

## VIII. PUBLICATIONS (including submitted, under review, in preparation): [[google scholar](#), [ResearchGate](#)]

### **PEER REVIEWED** (\* = Corresponding Author / equal contribution with first author)

1. Neogi, S., Pal, T., **Bandyopadhyay, D.** (2022) - Late Mesoproterozoic to early Neoproterozoic evolution of the Meghalaya Gneissic Complex, NE India: significance in Rodinia assembly. *International Geology Review [in Press]* [\[DOI: 10.1080/00206814.2022.2140210\]](https://doi.org/10.1080/00206814.2022.2140210)
2. Koley, M., Ghosh, B., **Bandyopadhyay, D.**, Roy, S., Dhar, A., Chattopadhyaya, S., Kar, R., Bhattacharya, S. (2022) - Unraveling the pre-metamorphic cooling history of the Koraput Alkaline Complex, India: constraints from feldspar exsolution texture. *Mineralogy and Petrology* vol-116, pp. 493-513. [\[DOI: 10.1007/s00710-022-00795-x\]](https://doi.org/10.1007/s00710-022-00795-x)
3. Dhar, A., Ghosh, B., **Bandyopadhyay, D.**, Morishita, T., Tamura, A., France, L., Nguyen, D.K., Boulanger, M., Koley, M., Roy, S., Chattopadhyaya, S. (2022) The lower oceanic crust at ultraslow-spreading Southwest Indian Ridge: the inside story. *Gondwana Research*, vol-111, pp. 223-248. [\[DOI: 10.1016/j.gr.2022.08.008\]](https://doi.org/10.1016/j.gr.2022.08.008)
4. Roy, S., **Bandyopadhyay, D.**, Morishita, T., Dhar, A., Koley, M., Karmakar, A., Chattopadhyaya, S., Ghosh, B. (2022) Microtextural evolution of chrome spinels in dunites from Mayodia ophiolite complex, Arunachal Pradesh, India: Implications for a missing link in the “two-stage” alteration mechanism. *Lithos*, vol-420-421, 106719. [\[DOI: 10.1016/j.lithos.2022.106719\]](https://doi.org/10.1016/j.lithos.2022.106719)
5. Chattopadhyaya, S., Ghosh, B., **Bandyopadhyay, D.**, Koley, M., Dhar, A., Roy, S. (2022) Multistage evolution of subcontinental lithospheric mantle of Northwestern Deccan Volcanic Province, India: Constraints from the ultramafic xenoliths in alkali magma. *Journal of Earth System Science*, vol-131(53) [\[DOI: 10.1007/s12040-021-01793-x\]](https://doi.org/10.1007/s12040-021-01793-x)
6. Bandyopadhyay, P.C., van Hinsbergen, D.J.J., **Bandyopadhyay, D.**, Licht, A., Advokaat, E.L., Plunder, A., Ghosh, B., Dasgupta, A., Trabucho-Alexandre, J.P. (2022) Paleogeography of the West Burma Block and the eastern Neotethys Ocean: constraints from Cenozoic sediments shed onto the Andaman-Nicobar ophiolites. *Gondwana Research*, vol-103, pp. 335-361 [\[DOI: 10.1016/j.gr.2021.10.011\]](https://doi.org/10.1016/j.gr.2021.10.011)
7. Chatterjee, S., **Bandyopadhyay, D\***, Takazawa, E., Michibayashi, K. (2021) Orthopyroxene-magnetite symplectite in olivine gabbros from the lower crustal Oman Ophiolite: Oman Drilling Project, Hole GT2A. *Journal of Mineralogical and Petrological Sciences*, vol-116(3), pp. 170-175. [\[DOI: 10.2465/jmps.201130f\]](https://doi.org/10.2465/jmps.201130f)
8. **Bandyopadhyay, D\***, Ghosh, B., Guilmette, C., Plunder, A., Corfu, F., Advokaat, E.L., Bandyopadhyay, P.C., van Hinsbergen, D.J.J. (2021) Geochemical and geochronological record of the Andaman Ophiolite, SE Asia: From back-arc to forearc during subduction polarity reversal? *Lithos*, vol-380-381, 105853. [\[DOI: 10.1016/j.lithos.2020.105853\]](https://doi.org/10.1016/j.lithos.2020.105853)
9. Plunder, A., **Bandyopadhyay, D.**, Ganerød, M., Advokaat, E.L., Ghosh, B., Bandyopadhyay, P.C., van Hinsbergen, D.J.J. (2020) History of subduction polarity reversal during arc-continent collision: constraints from the Andaman Ophiolite and its metamorphic sole. *Tectonics*, vol-39, e2019TC005762, [\[DOI: 10.1029/2019tc005762\]](https://doi.org/10.1029/2019tc005762)
10. **Bandyopadhyay, D.**, van Hinsbergen, D. J. J., Plunder, A., Bandyopadhyay, P. C., Advokaat, E., Chattopadhyaya, S., Morishita, T., and Ghosh, B. (2020) Andaman Ophiolite: An Overview. In: Ray, J. S. and Radhakrishna, M. (eds.), *The Andaman Islands and Adjoining Offshore: Geology, Tectonics and Palaeoclimate*, Springer International Publishing, Cham, pp.1-17. [\[DOI: 10.1007/978-3-030-39843-9\\_1\]](https://doi.org/10.1007/978-3-030-39843-9_1)
11. Ghosh, B., Mukhopadhyay, S., Morishita, T., Tamura, A., Arai, S., **Bandyopadhyay, D.**, Chattopadhyaya, S., Ovung, T.N. (2018) Diversity and evolution of suboceanic mantle: constraints from Neotethyan ophiolites at the eastern margin of the Indian plate. *Journal of Asian Earth Sciences*, vol-160, pp.67-77. [\[DOI : 10.1016/j.jseaes.2018.04.010\]](https://doi.org/10.1016/j.jseaes.2018.04.010)

12. Chattopadhyaya, S., Ghosh, B., Morishita, T., Nandy, S., Tamura, A., **Bandyopadhyay, D.** (2017) Reaction microtextures in entrapped xenoliths in alkali basalts from the Deccan large igneous province, India: Implications to the origin and evolution. *Journal of Asian Earth Sciences*, vol-138, pp.291-305. [DOI : [10.1016/j.jseaes.2017.01.028](https://doi.org/10.1016/j.jseaes.2017.01.028)]
13. Ghosh, B., **Bandyopadhyay, D.**, Morishita, T. (2017) Andaman-Nicobar ophiolites, India: Origin, Evolution and Emplacement. In: Bandyopadhyay, P. C. and Carter, A. (eds). *The Andaman–Nicobar Accretionary Ridge: Geology, Tectonics and Hazards. Geological Society, London, Memoirs*, vol-47, pp.95–110. [DOI : [10.1144/M47.7](https://doi.org/10.1144/M47.7)]
14. Ghosh, B., Morishita, T., Gupta, B., Tamura, A., Arai, S., **Bandyopadhyay, D.** (2014) Moho Transition Zone in the Cretaceous Andaman ophiolite, India: a passage from the mantle to the crust. *Lithos*, vol-198-199, pp.117-128. [DOI : [10.1016/j.lithos.2014.03.027](https://doi.org/10.1016/j.lithos.2014.03.027)]

#### **In preparation:**

1. Chattopadhyaya, S., Ghosh, B., Liu, C.Z., **Bandyopadhyay, D.**, Roy, S., Dhar, A., Koley, M., Kumar, D. - Intraplate alkali basalts related to End-Cretaceous Deccan magmatism: Implications to tectonomagmatic processes
2. **Bandyopadhyay, D.**, Ghosh, B., Palin, R.M., Schorn, S., Chakraborti, S., Nandy, S., Narahari, S.T., Morishita, T. - Microstructural evolution of retrogressed garnet-websterite from the Precambrian Sittampundi Layered Anorthosite Complex, India

#### **PUBLISHED ABSTRACTS** († = Presenting Author)

1. **Bandyopadhyay, D.**†, Ghosh, B., Iwamori, H. (2023) - Constraining the plate interface fluid composition during subduction infancy – an attempt by linking the metamorphic sole and peridotite from Andaman Ophiolite, India. *GOLDSCHMIDT 2023* (held in Lyon, France from 9<sup>th</sup> Jul to 14<sup>th</sup> Jul, 2023, attended remotely) (oral). [<https://conf.goldschmidt.info/goldschmidt/2023/meetingapp.cgi/Paper/14616>]
2. Dhar, A., Ghosh, B., **Bandyopadhyay, D.**, Morishita, T., Tamura, A., M., Koley, M., Roy, S. (2023) Development of oxy-symplectites in the oceanic lower crust at Atlantis Bank Oceanic Core Complex, Southwest Indian Ridge- manifestation of fluctuating oxidation state. *EGU General Assembly 2023, EGU23-440, updated on 22 Feb 2023*. [DOI: [10.5194/egusphere-egu23-440](https://doi.org/10.5194/egusphere-egu23-440)] (poster)
3. **Bandyopadhyay, D.**†, Katsuki, Y., Sakata, S., Iwamori, H. (2022) - What spinel composition in rocks tells us: a combined approach from data-driven and physics-based modelling. *Japan Geoscience Union Meeting 2022 (Hybrid mode Makuhari Messe, Inc., JAPAN from 22<sup>nd</sup> May to 27<sup>th</sup> May, 2022)* (oral)
4. Chatterjee, S., **Bandyopadhyay, D.**, Takazawa, E., Michibayashi, K. (2021) - Oxidation controlled symplectitic formation in olivine gabbros from Oman ophiolite, Oman Drilling Project, Hole GT2A. *Japan Geoscience Union Meeting 2021* (online from 30<sup>th</sup> May to 6<sup>th</sup> June, 2021) [<https://confit.atlas.jp/guide/event/jpgu2021/subject/SCG41-02/crosssearch>]
5. **Bandyopadhyay, D.**†, van Hinsbergen, D.J.J., Plunder, A., Ghosh, B., Corfu, F., Guilmette, C., Advokaat, E.L., Bandyopadhyay, P.C. (2020) - Clues to Cretaceous subduction initiation in South-East Asia - A geochronological and geochemical perspective from the Andaman Ophiolite. *JpGU-AGU Joint Meeting 2020 (Virtual conference from 12<sup>th</sup> July to 16<sup>th</sup> July, 2020)* [abstract: <https://confit.atlas.jp/guide/event/jpgu2020/subject/SCG56-17/crosssearch>; iPoster: <https://jpgu-agu2020.ipostersessions.com/?s=AF-61-EC-77-15-73-53-1D-C0-7F-BD-AC-EB-F0-6A-B4#>] (oral & iPoster)
6. Chattopadhyaya, S., Ghosh, B., **Bandyopadhyay, D.**, Morishita, T. (2019) Identifying the Source Characteristics of Intraplate Alkali Basalts, Hosting the Lithospheric Mantle Xenolith from Kutch Area, Western India. *GOLDSCHMIDT 2019* (held in Barcelona, SPAIN from 18<sup>th</sup> Aug to 23<sup>rd</sup> Aug, 2019) [<https://goldschmidt.info/2019/abstracts/abstractView?id=2019002143>] (poster)
7. Plunder, A., **Bandyopadhyay, D.**, Advokaat, E., Guilmette, C., Ganerød, M., Bandyopadhyay, P., van Hinsbergen, D. (2018) The metamorphic sole of the Andaman-Nicobar Islands: insights from petrology geochemistry and geochronology. *Geophysical Research Abstracts, Vol. 20, EGU2018-6169-1, 2018, EGU General Assembly 2018* [<https://meetingorganizer.copernicus.org/EGU2018/EGU2018-6169-1.pdf>] (poster)
8. **Bandyopadhyay, D.**†, Ghosh, B., Bera, A., Morishita, T., Tamura, A. (2017) Clue to the Subduction Initiation from Andaman-Nicobar Ophiolite: A Computational Petrologic Approach. *GOLDSCHMIDT 2017* (held in Paris, FRANCE from 13<sup>th</sup> Aug to 18<sup>th</sup> Aug, 2017) [<https://goldschmidt.info/2017/abstracts/abstractView?id=2017003407>] (poster)
9. **Bandyopadhyay, D.**†, Ghosh, B., Nandy, S., Palin, R.M. (2016) Thermobarometric evolution of reaction microstructures in “arclogite” – a case study from the Sittampundi Layered Anorthosite Complex, India. *2nd European Mineralogical Conference* (held in Rimini, ITALY from 11<sup>th</sup> Sep to 15<sup>th</sup> Sep, 2016) [<http://emc2016.socminpet.it/abstracts/abstracts-lists/111-programme/218-s10-mineral-reaction-kinetics-microstructures,-textures,-chemical-and-isotopic-signatures.html>] (poster)
10. **Bandyopadhyay, D.**†, Ghosh, B., Nandy, S. (2013). Symplectites from garnetiferous metabasites, Sittampundi Layered Anorthosite Complex, Tamil Nadu, India – Relationship between morphology and thermobarometric evolution. *National Workshop on “Modern Geological and Geophysical Methods and Their Applications”* (under aegis of IGU) (oral & poster)



11. Chattopadhyaya, S., Chatterjee, S., **Bandyopadhyay, D.** (2013). Magmatic evolution and geodynamic setting of Kondapalle Layered Complex, Andhra Pradesh, India – Insights from chromitite and associated mafic-ultramafic rocks. *National Workshop on “Modern Geological and Geophysical Methods and Their Applications”* (under aegis of IGU) (poster)

#### **OTHER PUBLICATIONS**

1. Pal, T., Bhattacharya, A., Ghosh, B., Koley, T., Tripathi, S.K., **Bandyopadhyay, D.**, Banerjee, K. (2020) ANDAMAN ISLANDS: An Anatomy of the Accretionary Prism in an Active Burma-Andaman-Java Subduction Zone. *Field Excursion Guide Book for 36th International Geological Congress 2020, Delhi (NCR) [IGC Code ER010]*

### **IX. SERVICE TO THE SCIENTIFIC COMMUNITY**

#### **PEER REVIEW**

Reviewer for the journals: *Geoscience Frontiers*; *Geological Journal*; *Geosystems and Geoenvironment*.

### **X. LIST OF PRESENTATIONS:**

1. Lecture cum demonstration for the training program on **Refresher Course on Phase Equilibria Modelling in Petrology** - organized by Regional Training Division, Eastern Region, Geological Survey of India, Kolkata from 29<sup>th</sup> May, 2023 to 31<sup>st</sup> May, 2023. (Invited lecture) [[announcement](#)]
2. Lecture cum demonstration for the training program on “**Advanced Course on Metamorphic Petrology with special reference to Geothermobarometry and Pseudosection Modelling**” conducted by the Petrology Division, Geological Survey of India, Training Institute, Hyderabad – delivered online from 26<sup>th</sup> April, 2023 to 28<sup>th</sup> April, 2023. (Invited lecture) [[announcement](#)]
3. **Tracing back the geodynamic history of the Cretaceous Andaman Ophiolite, SE Asia – A case of subduction polarity reversal?** – Seminar organized by Geodynamics group, Earth Sciences Institute of Orléans on 18<sup>th</sup> October, 2022. (Invited lecture)
4. **Earth as an evolving planet** - a special lecture organised by Department of Geography, North Bengal St. Xavier's College on 14<sup>th</sup> December, 2021. (Invited lecture) [[announcement](#)]
5. **Deciphering subduction polarity reversal from the Cretaceous Andaman Ophiolite, SE Asia** – Earthquake Research Institute, The University of Tokyo Friday Seminar on 29<sup>th</sup> October, 2021. (Invited lecture) [[announcement](#)]
6. **Subduction polarity reversal in rock record – story from Andaman Nicobar Island** - the 13th edition EGU GMPV (Geochemistry, Mineralogy, Petrology and Volcanology division) ECS Campfires – Special Edition on Subduction Zones! on 13<sup>th</sup> October, 2021. (Invited lecture) [[announcement](#); in twitter [1](#), [2](#)]
7. **Phase equilibria modelling (pelitic & mafic rocks) using Perple\_X program** – delivered on 26<sup>th</sup> June, 2021 as a part of the e-training programme entitled “Refresher Course on Igneous, Sedimentary and Metamorphic Petrology” organized by Regional Training Division, Eastern Region, Geological Survey of India, Kolkata from 21<sup>st</sup> June, 2021 to 28<sup>th</sup> June, 2021. (Invited lecture) [[announcement](#)]
8. **Andaman Ophiolite: New data and tectonic model** - Sakura-Science Program ONLINE SEMINAR – 2021 (22<sup>nd</sup> February, 2021). (Invited lecture)
9. **Phase Equilibria Modelling in Petrology – Practical approach using Perple\_X** - e-Training organized by Regional Training Division, Eastern Region, Geological Survey of India, Kolkata from 27<sup>th</sup> January, 2021 to 29<sup>th</sup> January, 2021. (Invited lecture) [[announcement](#); [Course report](#)]
10. **Evolution of the Earth's Crust** – Webinar organised by the **Department of Earth Sciences, JIS University** on 7<sup>th</sup> May, 2020. (Invited lecture) [[JIS University announcement](#); [post](#)]
11. **Microstructural evolution of a retrogressed garnet-websterite – Clue to delamination driven deep crustal recycling, melting and resurfacing in Precambrian Indian Peninsula** – Solid Rock Seminar (SRS) in the **Department of Earth Sciences, Utrecht University** on 7<sup>th</sup> July, 2017.
12. **Thermobarometric evolution of reaction microstructures in “arclogite” – a case study from the Sittampundi Layered Anorthosite Complex, India** - in the **Department of Earth and Planetary Sciences, Hokkaido University** on 11<sup>th</sup> November, 2016.
13. **Plate Tectonics –Our recent understandings - Training Program** for JTA (Geology) and Lab Assistant Gr. I (Geology) of **Geological Survey of India** on 13<sup>th</sup> Oct, 2015. (Invited lecture)
14. **Understanding Symplectic Morphology - Present Status and Future Prospects** - Regional Brain Storming Session titled “**36th IGC: A Unique Opportunity for Advancement of Geosciences**” organized by 36th International Geological Congress, WOCS held at Saha Institute of Nuclear Physics, Kolkata on 21-22 March, 2014. (Invited as Young Geoscientist).