

Resume

Name: Dr. Sankar Bose

Affiliation: Department of Geology
Presidency University
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Area of specialization: Metamorphic Petrology

Additional research interest Geochemistry and geochronology

Current Position: Professor and Head, Department of Geology and former Dean,
Faculty of Natural and Mathematical Sciences

Educational qualification:

- Ph.D. in Science from Jadavpur University, Kolkata, India in 2003.
- M.Sc. in Applied Geology from Jadavpur University, Kolkata in 1993 with 1st class (Rank 2, 75% marks).
- B.Sc. with Geological Sciences (Hons.) from Jadavpur University, Kolkata in 1991 with 1st class (Rank 4, 73% marks).
- Higher Secondary Examination (12th standard, WB Board) in 1987 with 1st division (75% marks).
- Secondary Examination (10th standard, WB Board) in 1985 with 1st division (79% marks).

Academic Awards:

- Awarded **National Scholarship** for the result of Secondary and B.Sc. Examination in 1985 and 1991 respectively.
- Awarded **Junior Research Fellowship** by University Grants Commission, Government of India in 1993.
- Awarded **Post-Doctoral Fellowship** from the Japan Society for the Promotion of Science (JSPS) in 2006.
- Awarded **National Geoscience Award 2012** in the field of *Basic Geoscience*.
- Awarded **DST-JSPS Bilateral Research Fellowship** for 2014-2016.
- Awarded **JSPS Bridge Fellowship** for the year 2016.
- Nominated as *Fellow* of the **West Bengal Academy of Science and Technology (WAST)** in 2019.
- Awarded **INSA Teachers Award** in 2019.
- Awarded **Shiksharatna Samman 2019** from the Government of West Bengal.

Teaching experience:

- Worked as Lecturer in Geology in Durgapur Government College, Durgapur, India during the period July 1998 - January 2003 (UG and PG courses)
- Worked as Lecturer in Geology in Presidency College, Kolkata, India during the January 2003 - December 2003 (UG and PG courses)
- Worked as Senior Lecturer in Geology in Presidency College, Kolkata, India during the period December 2003 - December 2008 (UG and PG courses).
- Worked as Reader in Geology in Presidency College, Kolkata, India during the period December 2008 – July 2010 (UG and PG courses).
- Worked as Reader in Geology in Presidency University, Kolkata, India during the period July 2010-December 2011 (UG and PG courses).
- Worked as Associate Professor of Geology in Presidency University, Kolkata, India during the period December 2011 – December 2104 (UG and PG courses).
- Working as Professor of Geology in Presidency University, Kolkata, India since December 2014 (UG, PG and Ph.D. courses)

Administrative Experience

- Working as Head, Department of Geology, Presidency University since February 2025.
- Completed tenure as Dean, Faculty of Natural and Mathematical Sciences, Presidency University, Kolkata (September 2020-September 2023). During this tenure, I was instrumental in establishing scientific collaboration by signing MoU with *S.N.Bose National Centre for Basic Sciences (Kolkata)*, *Institute of Child Health (Kolkata)* and *Atomic Minerals Directorate (Govt. of India)* for research and student exchange.

Doctoral Research

Completed doctoral research with a fellowship from UGC at Jadavpur University, Kolkata under the supervision of Prof. Somnath Dasgupta and Prof. Pulak Sengupta. The title of the thesis is “*Tectonometamorphic imprints on a suite of high Mg-Al granulites and associated rocks from Sunkarametta, Visakhapatnam District, Andhra Pradesh, India*”.

Research Interest

My area of research interest remains the evolution of lower crust from petrological study of high-grade metamorphic rocks. I am working in the Eastern Ghats Belt (EGB) of India for the last thirty years to unravel its geological history and how it relates to that of East Antarctica, its Precambrian counterpart.

- Characterization ultrahigh temperature (UHT) metamorphic process in EGB
- Geochronology of EGB
- Pressure-temperature-deformation-fluid history of the EGB
- Geological evolution of craton-margin mobile belts
- Geodynamic modeling of the orogenic belts using petrological, structural and numerical methods.

Post-Doctoral Research Fellowships

- A prestigious Post-Doctoral fellowship was awarded by Japan Society for the Promotion of Science (JSPS) for two years during the tenure May 2007-April 2009. The title of the research scheme is “*Ultrahigh temperature lower crustal process: a case study from the Eastern Ghats Belt, India*” with **Prof. Makoto Arima** (Host Researcher) at the Yokohama National University, Japan.
- A follow-up visit to Yokohama National University from the invitation of **Prof. Makoto Arima** for 14 days in 2013.

- Worked with **Prof. Hiroshi Hiadaka** of Nagoya University and **Dr. Kaushik Das** of Hiroshima University, Japan with **JSPS-Bridge Fellowship** in 2016 for 45 days.

Research project carried out:

National level

- (1) Completed the UGC-sponsored Minor Research Project entitled “*Characterization of the petrogenetic processes in the lower continental crust through the study of mafic and felsic orthogneisses from parts of the Northern Eastern Ghats Belt, India*” during March 2001-August 2003 with a grant of Rs. 45,000/=
- (2) Completed the DST-sponsored Major Research Project entitled “*Characterization of deep crustal processes from high-grade granulites around Chilka Lake area, Eastern Ghats Belt, India*” as PI during October 2006–January 2010 with grant of approx.. Rs. 13 lakhs.
- (3) Completed CSIR-sponsored Major Research Project entitled “*Mobilization of an Archean craton margin during Proterozoic orogenic event(s) and its implication in crustal evolution: a case study from the Eastern Ghats Mobile Belt – Singhbhum Craton boundary zone around Tamka-Rengali, Orissa*” as PI during April 2011 –March 2014 and grant of approx. Rs. 18 lakhs.
- (4) Completed CSIR major research project entitled “*Characterization of fluids during the evolution of granulites of Eastern Ghats Belt, India: estimations from solid assemblages and fluid inclusion study*” as PI during April 2015-March 2018 with grant of approx. Rs. 13 lakhs.
- (5) Completed two year fieldwork project entitled “*Eastern Ghats Belt, India: a type locality of ultrahigh temperature Proterozoic orogenic system*” with a grant of Rs. 4 lakhs from the IGC Secretariat (June 2018-March 2020).
- (6) Completed MoES-sponsored major research project entitled “*Geochronological study across the Singhbhum and Bastar Craton-northern Eastern Ghats Belt transects, India*” as PI with grant of Rs. 28 lakhs (June 2018 – December 2021).

International level

- (1) Completed Indo-Japanese (DST-JSPS) collaborative project entitled “*Archean craton-margin orogenic events and SHRIMP age dating: geodynamic significance of India during Ur and Columbia supercontinents*” as Indian PI (Prof. Hiroshi Hidaka of Hiroshima University Japanese PI) during June 2014-March 2016 with a grant of approx. Rs. 7 lakhs from the Indian side.
- (2) Completed Indo-Japanese (DST-JSPS) collaborative project entitled “*Study of fault architecture, deformation mechanisms and evolution of fault zone rocks with implications for seismicity in the upper and lower crust*” as Indian Co-PI (Prof. Junichi Ando of Hiroshima University Japanese PI) with tenure June 2019-June 2022 with a grant of approx. Rs. 16 lakhs from the Indian side.

Supervision of Ph.D. thesis:

1. Mr. Arnab Dasgupta (2018): Title “*Tectono-metamorphic and geochronological evolution of the Rengali Province in the Riamal-Rengali-Khamar Sector, Odisha, India*”
2. Mr. Proloy Ganguly (2019): Title “*Tectonothermal history of the granulites and gneisses around Phulbani, Odisha, India and its bearing on the evolution of the Proterozoic Eastern Ghats Belt*”.

3. Ms. Sneha Mukherjee (2019): Title “*Stratigraphy and Nature of uranium mineralization from Precambrian Basement Granitoid – Srisailem Formation contact around Chitral area, Cuddapah basin, Telangana*”.
4. Mr. Arnob Kumar Mondal (2024): Title “*Geological evolution of the mafic and felsic granulites from the central and northwestern parts of the Eastern Ghats Province in the context of Grenvillian-age tectonics*”.
5. Ms. Aparupa Banerjee (2025): Title “*Metamorphic evolution of the high-grade rocks of Angul-Tikarpara area, Eastern Ghats Belt, India and its implications on the tectonic development of the India-East Antarctica sector*”.
6. Mr. Shubhankar Karmakar (2025): Title “*Deformation, metamorphism and geochronological evolution of the high-grade Proterozoic rocks around Boudh, Odisha: Implications on development of structural-kinematic domains and assembly of the Northern Eastern Ghats Belt*”.
7. Mr Kaushik Garai has registered for Ph.D. at the Presidency University in 2023.
8. Mr. Kamruzzaman Mondal has enrolled for Ph.D. in Presidency University in March 2023.
9. Ms. Pritha Seth has enrolled for Ph.D. in Presidency University in March 2024.
10. Ms. Moubani Biswas has enrolled for Ph.D. in Presidency University in September 2024.

Supervision of M.Sc. dissertation:

1. Anupam Mukherjee (University of Burdwan, 1999)
2. Bhaswati Duttagupta (University of Burdwan, 2000)
3. Subrata Chakraborty (University of Burdwan, 2002)
4. Karabi Sarkar (University of Calcutta, 2004)
5. Soumitra Banik (University of Calcutta, 2005)
6. Sayani Sarkar (University of Calcutta, 2007)
7. Debarchan Pawali (Presidency University, 2012)
8. Jasodhara Chaudhury (Presidency University, 2012)
9. Swagata Mukherjee (Presidency University, 2014)
10. Ipsita Mitra (Presidency University, 2014)
11. Pritha Seth (Presidency University, 2015)
12. Moumita Ghosh (Presidency University, 2015)
13. Amitava Saha (Presidency University, 2016)
14. Shreyashi Das (Presidency University, 2017)
15. Arnab Guha (Presidency University, 2017)
16. Nandini Biswas (Presidency University, 2018)
17. Arthana Ghosh (Presidency University, 2018)
18. Rahul Kanti Nag (Presidency University, 2019)
19. Archishman Dasgupta (Presidency University, 2020)
20. Kamrujjaman Mondal (Presidency University, 2020)
21. Soumen Mallick (Presidency University, 2021)
22. Sinjan Roy (Presidency University, 2021)
23. Shubhadeep Roy (Presidency University, 2022)
24. Sayantika Ghosh (Presidency University, 2022)
25. Ankan Bhattacharya (Presidency University, 2023)
26. Nilanjan Mondal (Presidency University, 2024)
27. Debopriyo Eshore (Presidency University, 2025)

Mentorship in Summer Internship programme:

1. Arindam Chakrabarti (IIT Roorkee-2011)
2. Kuntal Chaudhuri (IISER Kolkata-2013)
3. Prabhati Sen (Jadavpur University-2013)
4. Somdipta Chatterjee (Jadavpur University -2013)
5. Srijita Chatterjee (Jadavpur University -2013)
6. *Abaan Ahmed Momin (IIT Bombay-2015)
7. Aditi Biswas (Jadavpur University-2016)
8. Ankita Nandi (Calcutta University-2017)
9. *M.S. Parvathy (University of Kerala-2017)
10. *Shafquat Arfa (Patna Science College-2018)
11. *Shanan D'Silva (St. Xavier's College, Mumbai-2020)
12. *Soumya Sucharita Panda (Dharanidhar Autonomous College, Keonjhor, 2023)
13. Sharmila Green (Smith College, Massachusetts, USA, 2024)
14. *M Ramesa Gokul (Cochin University of Science and Technology – 2025)
15. *Archana Nikita Kispotta (Banaras Hindu University – 2025)

**Funded by Indian Academy of Sciences Summer Internship programme*

Organizing scientific meeting

- Organized National Seminar and Workshop “*Crust, ancient life and mineral resources: recent researches and future challenges*” as Joint Convener at Presidency University, Kolkata during October 24-25, 2017.
- Organized Japan-India Forum International Symposium “*Progress and perspective of the studies on the crustal evolution of the Indian Peninsula from the Archean to the present days by geochemical, chronological and geological approaches*” as Joint Coordinator from Indian side at Nagoya University, NIPR and Niigata University, Japan during March 7-16, 2019.
- Co-convener of the session “*Metamorphism to the Extremes: Decoding Orogenic Processes*” in Goldschmidt Conference 2022 at Hawaii, July 10-15, 2022 (session 4b, id: 3190).
- Organizing National Seminar “*Dynamic processes of the Earth – from deep interior to surface*” as Joint Convener at Presidency University, Kolkata during March 21-22, 2025 (upcoming).

Academic assignments abroad

- Post-Doctoral Fellow at Yokohama National University, Japan (2007-2009)
- Visiting Scientist at Hiroshima University, Japan (2012).
- Visiting Scientist at Yokohama National University, Japan (2013).
- JSPS-Bridge Fellow at Hiroshima University and Nagoya University, Japan (2016).
- Visiting Scientist at the Polish Academy of Sciences, Krakow (2017)
- Attended and presented lecture in the joint-meeting of the Hiroshima Institute of Plate Convergence Regions Research (HiPeR) at Hiroshima University, Japan (2018).
- Visited Nagoya University, NIPR and Niigata University, Japan to organize joint-meetings at the Japan-India Science Forum symposium (2019).

Other academic information

- Acted as reviewer of research articles for *Journal of Petrology*, *Journal of*

Metamorphic Geology, Journal of the Asian Earth Science, Gondwana Research, Lithos, Precambrian Research, Episodes, Journal of the Geological Society of London, Journal of the Earth System Sciences, Journal of Geodynamics, Journal of Mineralogical and Petrological Sciences, Arabian Journal of Geosciences, Geochemistry and Journal of South American Earth Sciences, Current Science.

- Invited as *Keynote speaker* for the session 26.2 at the International Geological Congress (IGC) 2020.
- Google scholar: **1875** citations with *h-index* **24** and *i-10 index* **41**.
- Vidwan-Id 58065 with score **9.3**.
- Selected member of the panel of *Mentors* in the *Summer Internship Programme* by *Indian Academy of Sciences*.
- Member of the Advisory Committee of the Editorial Board of the *Indian Journal of Geosciences*.
- Member of the Sectional Committee, West Bengal Academy of Science and Technology (WAST) (2021 onwards)
- Member of the International Association of Gondwana Research (1999-2004).
- Life member of the Geological Society of India (2012 onwards).
- Member of the Geological Society of Japan (2007-2008).
- Member of Asia Oceania Geoscience Society (AOGS) (2014 onwards)
- Member of Japan Geoscience Union (JpGU) (2013 onwards)
- Member of the Japan Association of Mineralogical Sciences (2008-2009, 2016).
- Life Member, Chairman (2010-2017) and Convener (2022-2025) of the East Chapter of the Indian JSPS Alumni Association.
- Founder member of the Indian Scientists in Japan (2008-2009).
- Member of American Geophysical Union (AGU) in 2008 and 2013.
- External reviewer of the Term Review Meeting, Geological Survey of India, 2015.
- External examiner of Ph.D. thesis of IISc Bengaluru, IIT Kharagpur, IISER Tirupati, Jadavpur University and Hiroshima University (Japan).
- External examiner of the M.Sc Dissertation paper of IIT Kharagpur (2024).
- External examiner of the M.Tech Dissertation paper of AMD, Jamshedpur (2024).
- Selection committee **chairperson** (Geology and Geoinformatics) of the **Embassy of Japan in India** for the MEXT scholarship since 2022.

Membership of International Research Group

Core member of the “**Hiroshima Institute of Plate Convergence Regions Research (HiPER)**” since 2017 (<http://hiper.hiroshima-u.ac.jp/organization/>).

Invited lectures and/or chaired any scientific International conference/symposia:

1. Invited to deliver a lecture titled “Targeting critical minerals: the future directions of research and teaching in India” at the *National Conference on Magmatism, Metamorphism and Metallogeny* at National Centre for Earth Science Studies (NCESS), February 16-18, 2025.
2. Invited to deliver a lecture titled “Lasting impression of late stage fluids on lower crustal rocks: the curious case of the Eastern Ghats Province, India” at the national seminar on *Geoscience Education in India: Bridging Industry Needs and Advancing Sustainable Development Goals* at IIT Bombay, October 18-19, 2024.

3. Invited to deliver a lecture titled “Conceptualization, incubation and eventual public exposure: Journey of a scientific article” in the training programme Art of Publication and Presentation Skills in Geosciences for Technical Officers of GSI, ER, Geological Survey of India, Eastern Region, Kolkata, August 27, 2024.
4. Invited to deliver a lecture titled “Proterozoic Eastern Ghats Belt: a chronicler of Earth’s middle age” at *Refresher Course in Metamorphic Petrology*, Regional Training Division (RTD), Geological Survey of India, Eastern Region, Kolkata, March 1, 2024.
5. Invited to deliver a lecture titled “The Eastern Ghats-Rayner conundrum: new data and emerging tectonic scenarios” at National workshop on *Geodynamic Evolution of South India-Eastern Ghats-Antarctica: Current perspectives and future prospects*, National Centre for Earth Science Studies (NCESS), Trivandrum, September 11-12, 2023
6. Invited to deliver a lecture titled “Changing thermal and tectonic regimes of lower continental crust through Archean-Proterozoic eras: evidence from the Eastern Ghats-Rengali Provinces and their Antarctic neighbors” at *National Centre for Earth Science Studies* (NCESS), Trivandrum, March 1, 2023.
7. Co-chaired the session (online) *Metamorphism to the Extremes: Decoding Orogenic Processes* in Goldschmidt Conference 2022 at Hawaii, July, 2022.
8. Delivered an invited lecture in the *National Symposium on Changing Dimensions of Geology and Mineral Exploration in Singhbhum-Orissa Craton* (November, 2022) at AMD Jamshedpur with title “Neoarchean deep crustal recycling of the Singhbhum craton along its southern margin: evidence from the tectonothermal history of the Rengali Province, Eastern India”.
9. Delivered an invited lecture in the *Online International Symposium on Processes in the Continental Crust* at IISER Kolkata (October, 2021) with title “Contrasting styles of UHT metamorphism in the northern part of the Eastern Ghats Belt and their implications on regional tectonics and supercontinent cycles”.
10. Delivered an oral presentation in the *International Conference on Emerging Area of Science and Technology (IC-EAST)* at New Delhi, India (September, 2019) with title “Monazite, a potentially important tracer for rock dating: recent developments”.
11. Delivered an invited lecture in the *JSPS-DST Forum Symposium for Advanced study* at Nagoya University, Japan (March, 2019) with title “Prolonged geological evolution of a craton margin mobile belt: Evidences from the Rengali Province-Singhbhum Craton sector, Eastern India”.
12. Delivered an oral presentation in the *Annual Meeting of the Japan Association for Mineralogical Sciences (JAMS)* at Kanazawa University, Japan (September, 2016) with title “Multistage melting in lower crust and its significance in orogenesis: an example from the Proterozoic Eastern Ghats Belt, India”.
13. Delivered an oral presentation in the *XII International Symposium on Antarctic Earth Sciences* at Goa, India (July, 2015) with title “The ca. 780 Ma reworking of the UHT metamorphosed lower crust of the Eastern Ghats Belt and its implication for the breakup of Rodinia”.
14. Delivered an oral presentation in the *AOGS meeting* at Sapporo, Japan (July-August, 2014) with title “Growth and evolution of craton margin mobile belt: evidence from Rengali Province, eastern India”.
15. Delivered an oral presentation in the *International Symposium on Precambrian Accretionary Orogens* at University of Delhi, India (February, 2011) with title “Paleo-Mesoproterozoic tectonothermal events in the Eastern Ghats Belt: a possible record of accretionary orogeny during the assembly of Columbia”.

16. Delivered an oral presentation in the 28th *Symposium on Polar Geosciences* at NIPR, Tokyo, Japan (October, 2008) with title “Proterozoic thermal events in the Eastern Ghats Belt and their implication on the Indo-Antarctic correlation”.
17. Delivered an oral presentation in the *Annual Meeting of the JAMS* at Akita University, Japan (September, 2008) with title “U-Pb zircon SHRIMP ages from the Eastern Ghats Belt, India and their implications on the evolution of the composite Eastern Ghats-Rayner orogenic belt”.
18. Delivered an oral presentation in the 4th *International Symposium on Gondwana to Asia* at Kyushu University, Fukuoka, Japan (November, 2007) with title “Melt-rock interaction during Meso-Neoproterozoic reworking of isobarically cooled crust: textural and compositional evidences from Eastern Ghats Belt, India”.
19. Delivered an oral presentation in the 114th *Annual Meeting of the Geological Society of Japan* at Hokkaido University, Sapporo, Japan (September, 2007) with title “Solid-melt-fluid interaction during reworking of the lower crust: evidence from the Eastern Ghats Belt, India”.
20. Delivered an oral presentation in the *National Seminar on Proterozoic Systems of India: Evolution and Economic Potential* at Indian School of Mines, Dhanbad, India (November, 2005) with title “Stability relations of sapphirine + quartz in contrasting textural modes from the Eastern Ghats Belt, India”.

Complete list of publication:

E-content

- Composed the Chapter of “*Quantitative geothermobarometry: P-T evolution paths of metamorphic rocks*” in the course work of Metamorphic Petrology (module M-14) under the program e-PG-Pathasala (UGC). Both e-content and video are available online.

Field guide book

- **Bose, S.** and Nanda, J.K., 2020. Eastern Ghats Belt, India: a type locality of ultrahigh temperature Proterozoic orogenic system. *Field guide book ER012, 36th International Geological Congress (IGC)*, New Delhi, November 9-16, 2020.

Book chapters

1. Dey, B., Das, K., Dasgupta, N., **Bose, S.**, Hidaka, H., Ghatak, H., 2019. Zircon U-Pb (SHRIMP) ages of the Jahazpur granite and Mangalwar gneiss from the Deoli-Jahazpur sector, Rajasthan, NW India: A preliminary reappraisal of stratigraphic correlation and implications to crustal growth. In: Mondal, M.E.A. (ed.) *Geological Evolution of Precambrian Indian Shield. SES Series, Springer*, 39-56.
2. **Bose, S.**, Seth, P., Dasgupta, N., 2017. Meso-Neoproterozoic mid-crustal metamorphic record from the Ajmer –Shrinagar section, Rajasthan, India and its implication to the assembly of the Greater Indian Landmass during the Grenvillian-age orogenesis. In: Pant, N.C. & Dasgupta, S. (eds) *Crustal Evolution of India and Antarctica: The Supercontinent Connection. Geological Society, London, Special Publications, 457*, 291-318
3. Dasgupta, S., **Bose, S.**, Bhowmik, S.K., Sengupta, P., 2017. Eastern Ghats Belt, India in the context of supercontinent assembly. In: Pant, N.C. & Dasgupta, S. (eds) *Crustal Evolution of India and Antarctica: The Supercontinent Connection. Geological Society, London, Special Publications, 457*, 87-104.

4. Chatterjee, A., Das, K., **Bose, S.**, Ganguly, P., Hidaka, H., 2017. Zircon U-Pb SHRIMP and monazite EPMA CHIME geochronology of granulites of the western boundary, EGB, India: new evidence for Neoproterozoic exhumation history. In: Pant, N. C. & Dasgupta, S. (eds) *Crustal Evolution of India and Antarctica: The Supercontinent Connection. Geological Society, London, Special Publications*, **457**, 105-140.
5. Saha, D., Bhowmik, S.K., **Bose, S.**, Sajeew, K., 2016. Proterozoic tectonics and Trans-Indian mobile belts: a status report. *Special Issue of the Proceedings of the Indian National Science Academy*, **82**, 445-460 (doi: 10.16943/ptinsa/2016/48460).
6. **Bose, S.**, Das, K., Chakraborty, S., Miura, H., 2011. Petrology and geochemistry of metamorphosed basic intrusives from Chilka Lake granulites, Eastern Ghats Belt, India: implications for Rodinia breakup. In: *Dyke swarms: keys for geodynamic interpretation* (Ed: Srivastava, R.K.), p. 241-262, Springer-Verlag, Heidelberg.
7. Pal, S., **Bose, S.**, 1997. Mineral reactions and geothermo-barometry in a suite of granulite facies rocks from Paderu, Eastern Ghats Granulite Belt: A reappraisal of the P-T trajectories. In: *Eastern Ghats granulites, Special volume for the Proceedings of the Earth and Planetary Science* (Ed. Sen, S.K.), Indian Academy of Sciences, **106**, 77-89.

Peer-reviewed papers

8. Karmakar, S., Ghosh, G., **Bose, S.**, Mukherjee, S., Sarkar, D.P., Sorcar, N., Das, K., 2025b. A record of Grenvillian-age deep crustal thrusting and terrane juxtaposition from the Proterozoic Eastern Ghats Province, India and its implication on subduction polarity reversal during India–East Antarctica amalgamation. *Tectonophysics*, 911, 230833; <https://doi.org/10.1016/j.tecto.2025.230833>
9. Karmakar, S., **Bose, S.**, Ghosh, G., Das, K., Sorcar, N., Mukherjee, S., 2025a. Evidence of high-pressure metamorphism along the Mahanadi Shear Zone in the Eastern Ghats Province, eastern India: implications on tectonics and continental assembly involving India and East Antarctica. *Journal of Metamorphic Geology*, 43, 123–160; DOI:10.1111/jmg.12797.
10. Mallick, S., **Bose, S.**, 2025. Partial melting of metasedimentary rocks near the Archean–Paleoproterozoic boundary and formation of strongly peraluminous granites: a theoretical study. *Journal of Earth System Science*, 134, p.19; DOI: 10.1007/s12040-024-02476-z. page 1-24.
11. Mukherjee, S., Ghosh, G., **Bose, S.**, Tomson, J.K., 2024. Pre-Himalayan tectono-metamorphic impresses in the Bajjnath klippe, Kumaun Himalaya, northwest India: implications on a veiled saga of Paleoproterozoic – Neoproterozoic crustal evolution and thermal history of the northern Indian cratonic margin. *Geological Society of America Bulletin*, 137, 848-861; Doi:10.1130/B37719.1.
12. Bhowmik, S.K., **Bose, S.**, Chattopadhyay, A., Karmakar, S., Pant, N.C., 2024. Proterozoic mobile belts-magmatism, metamorphism, geochronology and tectonics in the context of formation of the Greater Indian Landmass. In: Dasgupta, S. (Ed.), *Proceedings of the Indian National Science Academy*, 90, 209-240; <https://doi.org/10.1007/s43538-024-00284-z>.
13. Mukherjee, S., Das, P., Ghosh, G., **Bose, S.**, Dev, J.A., Das, K., Tomson, J.K., 2023. Reply to Comments on “Petrography, geochemistry and detrital zircon geochronology of the Srisaillam Quartzite Formation, Cuddapah Basin, India: Implications for depositional age, correlation and provenance” of Mukherjee et al. (2023). *Precambrian Research*, 399, 107237. Doi: 10.1016/j.precamres.2023.107237
14. Banerjee, A., Ganguly, P., Sorcar, N., Das, K., **Bose, S.**, 2023. Contrasting styles of lower crustal metamorphism from a granulite suite of rocks from Angul, Eastern Ghats

- Belt, India: Implications for the India-Antarctica correlation. *Journal of Petrology*, 64, <https://doi.org/10.1093/petrology/egad065>.
15. Mondal, A.K., **Bose, S.**, Sorcar, N., Tomson, J.K., Dev, J.A., Mukherjee, S., 2023. Petrological, geochemical and geochronological evolution of massif type charnockite from the Eastern Ghats Province, India: implications on the regional tectonics of the Rayner-Eastern Ghats orogeny. *Precambrian Research*, **387**, 106994 (doi: 10.1016/j.precamres.2023.106994).
 16. Mukherjee, S., Das, P., Ghosh, G., **Bose, S.**, Dev, J.A., Das, K., Tomson, J.K., 2023. Petrography, geochemistry and detrital zircon geochronology of the Srisailem Quartzite Formation, Cuddapah Basin, India: Implications for depositional age, correlation and provenance. *Precambrian Research*, 106978, **387**, doi.org/10.1016/j.precamres.2023.106978
 17. Ghosh, G., Ganguly, P., Karmakar, S., **Bose, S.**, Mukopadhyay, J., Ghosh, S., 2022. Development of crustal-scale shear zones at the Singhbhum Craton – Eastern Ghats Belt boundary region: a critical review of the Mesoarchaean – Neoproterozoic odyssey. *Lithosphere*, doi: 10.2113/2021/9455812.
 18. **Bose, S.**, Sorcar, N., Das, K., Ganguly, P., 2022. Pulsed tectonic evolution in long-lived orogenic belts: an example from the Eastern Ghats Belt, India. *Precambrian Research*, **369**, 106522 (doi: 10.1016/j.precamres.2021.106522).
 19. Das, K., **Bose, S.**, Torimoto, Hayasaka, Y., Dunkley, D., 2021. Tracking C-O-H fluid-rock interactions in reworked UHT granulite: Tectonic evolution from ca. 990 Ma to ca. 500 Ma in orogenic interior of Eastern Ghats Belt, India. *Lithos*, **398-399**, 106287 (doi: 10.1016/j.lithos.2021.106287).
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Conference Abstracts/Proceedings

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