

Resume

Name: Dr. SANKAR BOSE

Affiliation: Department of Geology
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Area of specialization: Metamorphic Petrology

Additional research interest Geochemistry and geochronology

Current Position: Professor 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 the *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

- Worked as Dean, Faculty of Natural and Mathematical Sciences, Presidency University, Kolkata during September 2020-September 2023.

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 twenty seven 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:

- Sri Arnab Dasgupta has been awarded Ph.D. in Science from Presidency University in 2018. His thesis title is “*Tectono-metamorphic and geochronological evolution of the Rengali Province in the Riamal-Rengali-Khamar Sector, Odisha, India*”
- Sri Proloy Ganguly has been awarded Ph.D. in Science from Presidency University in 2019. His thesis title is “*Tectonothermal history of the granulites and gneisses around Phulbani, Odisha, India and its bearing on the evolution of the Proterozoic Eastern Ghats Belt*”.
- Smt. Sneha Mukherjee has been awarded Ph.D. in Science from Presidency University in 2019. Her thesis title is “*Stratigraphy and Nature of uranium mineralization from Precambrian Basement Granitoid – Srisailam Formation contact around Chitrial area, Cuddapah basin, Telangana*”.

- Sri Arnob Kumar Mondal has submitted his Ph.D. thesis in Science in Presidency University in 2023. His thesis title is “*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*”. Sri Mondal is waiting for the final evaluation.
- Ms. Aparupa Banerjee has successfully defended her pre-submission Ph.D. thesis entitled “*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*” in March 2024. Ms. Banerjee is preparing for submission of her Ph.D. thesis.
- Sri Shubhankar Karmakar and Sri Kaushik Garai have registered for Ph.D. at Presidency University.

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)

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)

**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 Convenor 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-convenor of the session “*Metamorphism to the Extremes: Decoding Orogenic Processes*” in Goldschmidt Conference 2022 at Hawaii, July 10-15, 2022 (session 4b, id: 3190).

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.*
- Invited as *Keynote speaker* for the session 26.2 at the International Geological Congress (IGC) 2020.
- Google scholar (Id: *UO9mftcAAAAJ*) **1634** citations with *h-index 22* and *i-10 index 36*.
- 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 “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.
2. 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
3. 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.
4. Co-chaired the session (online) *Metamorphism to the Extremes: Decoding Orogenic Processes* in Goldschmidt Conference 2022 at Hawaii, July, 2022.
5. 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”.
6. 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”.

7. 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”.
8. 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”.
9. 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”.
10. 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”.
11. 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”.
12. 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”.
13. 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”.
14. 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”.
15. 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”.
16. 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”.
17. 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.**, Sajeev, 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. Bhowmik, S.K., **Bose, S.**, Chattopadhyay, A., Karmakar, S., Pant, N.C. Proterozoic mobile belts-magmatism, metamorphism, geochronology and tectonics in the context of formation of the Greater Indian Landmass. *Proceedings of the Indian National Science Academy*, <https://doi.org/10.1007/s43538-024-00284-z>.
9. 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 Srisailam 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

10. 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*, <https://doi.org/10.1093/petrology/egad065>.
11. 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).
12. 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 Srisailam Quartzite Formation, Cuddapah Basin, India: Implications for depositional age, correlation and provenance. *Precambrian Research*, 106978, **387**, doi.org/10.1016/j.precamres.2023.106978
13. 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.
14. **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).
15. 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).
16. **Bose, S.**, Ghosh, G., Kawaguchi, K., Das, K., Mondal, A.K., Banerjee, A., 2021. Zircon and monazite geochronology from the Rengali-Eastern Ghats Province: implications for the tectonic evolution of the eastern Indian terrane. *Precambrian Research*, **355**, 106080 (doi: 10.1016/j.precamres.2020.106080)
17. Ganguly, P., Ghosh, G., **Bose, S.** Das, K., 2021. Polyphase deformation and ultrahigh temperature metamorphism of the deep continental crust: Implications for tectonic evolution of the northern Eastern Ghats Belt, India. *Journal of Structural Geology*, **143**, 104250 (doi: 10.1016/j.jsg.2020.104250)
18. **Bose, S.**, Mondal, A.K., Bakshi, A.K., Jose, J.R., 2020. Petrogenetic re-examination of spinel + quartz assemblage in the Larsemann Hills, East Antarctica. *Polar Science*, **26**, 100588.
19. **Bose, S.**, Das, K., Torimoto, J., Dunkley, D.J., 2020. Origin of orthopyroxene-bearing felsic gneiss in the perspective of ultrahigh temperature metamorphism: an example from the Chilka Lake migmatite complex, Eastern Ghats Belt, India. *Mineralogical Magazine*, **84**, 712-737.
20. Ghosh, G., **Bose, S.**, 2020. Deformation and metamorphic history of the Singhbhum Craton vis-à-vis peripheral mobile belts, eastern India: implications on Precambrian crustal processes. *Journal of Mineralogical and Petrological Sciences*, **115**, 70-87.
21. **Bose, S.**, 2020. Geology of the Proterozoic Eastern Ghats Belt: recent developments and outstanding issues. *Special issue of the Proceedings of the Indian National Science Academy: 36th IGC 2020 Geoscience Research in India: The Indian Report to IUGS 2016-2020* (Eds. Banerjee, D.M., Jain, A.K., Dasgupta, S. and Bajpai, S.) **86**, 87-97.
22. Mondal, A.K., **Bose, S.**, 2019. Lower crustal fluid evolution in the realm of ultrahigh temperature conditions: constraints from silicate-oxide-sulphide assemblages of mafic granulites of the Eastern Ghats Belt, India. *Journal of Earth System Science*, **128**, 190.

23. Mukherjee, S., Ghosh, G., Das, K., **Bose, S.**, 2018. Geochronological and geochemical signatures of the granitic rocks emplaced at the north-eastern fringe of the East Dharwar Craton, South India: implications for Late Archean crustal growth. *Geological Journal*, **53**, 1781-1801.
24. Ganguly, P., Das, K., **Bose, S.**, Ghosh, G., Hayasaka, Y., Hidaka, H., 2018. U-Pb zircon and U-Th-total Pb monazite ages from the Phulbani Domain of the Eastern Ghats Belt, India: Time constraints on high-grade metamorphism and magmatism in the lower crust. *Precambrian Research*, **316**, 1-23.
25. **Bose, S.**, Dasgupta, S., 2018. Eastern Ghats Belt, Grenvillian-age tectonics and the evolution of the Greater Indian Landmass: a critical perspective. *Journal of the Indian Institute of Science*, **98**, 345-363.
26. Ganguly, P., **Bose, S.**, Das, K., Torimoto, J., Ghosh, G., 2017. Origin of spinel + quartz assemblage in a Si-undersaturated ultrahigh temperature aluminous granulite and its implication in the P-T-fluid history of the Phulbani domain, Eastern Ghats Belt, India. *Journal of Petrology*, **58**, 1941-1974.
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Conference Abstracts/Proceedings

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2. Banerjee, A., Ganguly, P., **Bose, S.**, Socar, N., Mukherjee, S., Das, K., 2024. Reaction textures in titanite-bearing mafic granulite: Constraints on the metamorphic evolution of Angul –Tikarpara domain of the Eastern Ghats Province, India. *Abstract no. EGU24-2374* accepted and presented in *EGU General Assembly* at Vienna, Austria, 14–19 April 2024.
3. Karmakar, S., **Bose, S.**, Ghosh, G., Sorcar, N., Mukherjee, S., 2023. 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. *Abstract no. EGU23-2040* accepted and presented in *EGU General Assembly* at Vienna, Austria, April 23-28, 2023.
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