Curriculum Vitae ***Dewashish Upadhyay***

Currently: Professor, Dept. of Geology and Geophysics, Indian Institute of Technology, Kharagpur
Address: Department of Geology and Geophysics, Indian Institute of Technology, Kharagpur 721302, India
Phone: +91-3222-283398 (O) *E-Mail:* dewashish@gg.iitkgp.ac.in; dewashish7778@gmail.com

Academics

Degree/Examination	Institution	Year
Ph.D.	Mineralogisch-Petrologisches Institut, Universität Bonn, Germany	2002-2005
M.Sc. (Applied Geology)	Indian Institute of Technology (IIT), Kharagpur, India	2000-2002
B.Sc. (Hons) Geology	University of Delhi, India	1997-2000
Senior Secondary Examination (AISSCE)	Delhi Public School, Delhi, India	1996
Secondary Examination (ICSE)	St. Joseph's College, Darjeeling, India	1994

Positions

Position	Institution	Period
Professor	Dept. of Geology and Geophysics, IIT, Kharagpur	Dec 2022-present
Associate Professor	Dept. of Geology and Geophysics, IIT, Kharagpur	Mar 2016-Dec 2022
Assistant Professor	Dept. of Geology and Geophysics, IIT, Kharagpur	May 2009-Mar 2016
Senior Post doctoral researcher	Institut für Mineralogie, University of Münster, Germany	Jan 2006-Apr 2009

Honors/awards

- Member (2026-2028), European Association of Geochemistry (EAG) Council Nominations committee
- Fellow, West Bengal Academy of Science & Technology (WAST), 2025
- Empaneled expert, All India Council for Technical Education (AICTE)
- Member, DST-INSPIRE Faculty selection expert committee 2022-24 and 2024-26
- Co-convener (2023-26) CSIR-UGC NET Examination for Earth, Atmospheric, Ocean and Planetary Sciences
- Member, Nominations Committee (2021-23) and Chair Nominations Committee 2023, Geochemical Society
- Alexander von Humboldt Fellowship (Germany) for experienced researchers, 2019
- IIT Kharagpur Faculty Excellence Award, 2017
- National Geoscience Award, 2014
- K.R. Gupta Gold Medal-2015, Geological Society of India
- Prof. C Naganna Gold Medal-2015, Mineralogical Society of India
- Best teacher award of IIT Kharagpur for academic sessions Autumn 2014-15, 2015-16, and 2018-19
- Institute Silver medal, M.Sc. (Applied Geology)-2002, IIT Kharagpur
- University Gold medal, B.Sc. (Hons) Geology-2000, University of Delhi
- All India rank 4 (98.7 percentile) in Graduate Aptitude Test in Engineering (GATE)-2002
- Junior Research Fellowship (JRF) of the Council for Scientific and Industrial Research (CSIR) (not availed)

Ph.D. thesis

Title: Mesoproterozoic rifting and Pan-African continental collision: Evidences from alkaline complexes along the Craton-Eastern Ghats Belt suture in Peninsular India
Supervisor: Prof. Michael M. Raith, University of Bonn, Germany

Research areas

- Geochemistry, geochronology, isotope geology, petrology, ore geology, cosmochemistry

Current research interests

- Petrogenesis of strategic and green energy critical metal deposits (rare earth elements, uranium, tungsten, lithium, gold, boron)
- U-Th-Pb geochronology using LA-ICPMS (zircon, rutile, monazite, baddeleyite, apatite)
- Radiogenic and non-traditional stable isotope measurements using LA-MC-ICPMS (Hf in zircon, B-Li in tourmaline, mica, pyroxene, amphibole, Sr in apatite)
- LA-ICPMS measurements of trace elements in ore fluid inclusions in minerals
- The Hadean/Archean crustal evolution of the Indian shield
- Proterozoic crustal accretion and growth of the Indian Shield
- Applications of artificial intelligence (AI) and machine learning (ML) in petrology and ore geology
- Terrestrial impact craters

Teaching, research and departmental responsibilities

- In-charge of (1) Diamond Jubilee Radiogenic Isotope LA-MC-ICPMS laboratory, IIT Kharagpur, (2) Geochemical laboratory, (3) Rock and mineral processing laboratory; (4) Co-in charge DST sponsored Electron Probe Micro Analyzer (EPMA) National Facility
- Teaching: Geochemistry (Theory + Laboratory), Igneous Petrology (Theory + Laboratory), Field Geology
- Faculty advisor MSc (Geology)
- Member Departmental Academic Committee, Administrative Committee

Sponsored projects and consultancy work

Project title	Investigators	Sponsor/Client	Duratio	Value (Rs.)
12. Petrological and Geochemical characterization of rock and coal samples from the Barra block to assess their Rare Earth Element (REE) and critical metal potential	PI: D. Upadhyay	Maheshwari Mining Private Limited	2025	14,16,000
11. Source of the ore fluid and timing of gold mineralization in the Dharwar Craton: constraints from U-Pb/Sm-Nd geochronology and Sr-B-Li-Hf isotopes	PI: D. Upadhyay	Ministry of Earth Sciences	2022-2025	65,50,265
10. LAICPMS analytical facility various users	PI: D. Upadhyay	Various Govt. and Private Agencies	2013–2024	88,39,588 as on 05.05.25
9. EPMA-SEM National Facility for testing	PI: SK Bhowmik CI: D. Upadhyay	Various Govt. and Private Agencies	2023-2026	2,09,65,494 as on 01.08.24
8. Gd-Zn-Li isotope analyses BARC, Mumbai	PI: D. Upadhyay	BARC, Mumbai	2018–2019	10, 00, 000
7. Major, minor and bulk REE analysis for coal and related samples	PI: D. Upadhyay	TATA Steel	2018–2019	5, 66, 400
6. Assessment of Greigite (Fe_3S_4) formation by hydrothermal alteration and partial melting of base-metal sulfide deposits as a potential mechanism contributing to groundwater As-pollution	PI: K.L. Pruseth CI: D. Upadhyay	Department of Science and Technology	2018–2021	33, 40, 000

5. Hadean and Archean continental crust formation and evolution: constraints from U-Pb dating and Hf isotope measurements from ancient meta-igneous and supracrustal sequences in the Singhbhum and Western Dharwar Cratons	PI: D. Upadhyay	Department of Science and Technology	2016–2019	34, 46, 000
4. Petrogenesis and Rare Earth Element potential of Kamthai and Amba Dongar carbonatites	PI: B. Mishra CI: D. Upadhyay, K.L. Pruseth	Department of Science and Technology	2016–2019	1, 60, 20, 000
3. Geodynamics of crustal accretion, growth and related mineralization across the craton-Eastern Ghats Belt contact: an integrated geological and seismic investigation	PI: A. Singh CI: D. Upadhyay, K.L. Pruseth, C. Singh	Ministry of Earth Sciences	2015–2018	78, 05, 000
2. Evaluating the potential of Malani Igneous Suite rocks, Rajasthan for Uranium mineralization using petrological and geochemical proxies	PI: D. Upadhyay CI: K.L. Pruseth	Board of Research in Nuclear Sciences	2011–2015	34, 28, 000
1. Crust formation and terrane amalgamation in eastern India-constraints from enclaves in the Chhotanagpur Gneissic Complex	PI: D. Upadhyay	IIT Kharagpur	2009–2013	5, 00, 000

Ph.D., M-Tech and MSc supervision

- Ph.D. supervision
  Completed-14: Independent guidance-*7*: Dr. Sabyasachi Chattopadhyay, Dr. Tuhin Chakraborty, Dr. Suman Mondal, Dr. Sameer Ranjan, Dr. Urmi Ghosh, Dr. Kumar Abhinay, Dr. Tapasya Singh
  Joint guidance-7: Dr. Rupashree Saha, Dr. Rachit Parihar, Dr. Ajay Kumar Singh, Dr. Sarita Patel, Dr. Prabhakar Naraga, Dr. Rekha S; Dr. Surath Panda)
  Ongoing-5: Shailendra Yadav (UGC JRF), Priyabrata Mohanty (PMRF), Dipanjal Deka (CSIR JRF), Debajyoti Pati (on temporary withdrawl), Violina Gogoi (Institute Fellowship)
- M-Tech thesis supervision: completed-9
- MSc thesis supervision: completed-33, ongoing-5

Post-Doctoral fellow mentoring

- Dr. Jyoti Chandra-Institute PDF
- Dr. Abu Said Baidya-National PDF
- Dr. Seema Kumari-DST Inspire Faculty

Details of PhD theses supervised

S. No.	Thesis title	Name of student	Year	Remark	Current position
14	Fluid mediated alteration and associated Nb-Ta-REE mineralization in A-type granites near Jharsiguda, western margin of Singhbhum Craton, India	Surath Panda	2025	Degree awarded	
13	Data-driven investigation of igneous processes: application to crust-mantle evolution and tectonic setting–source discrimination	Rupashree Saha	2024	Degree awarded	Post-doctoral Researcher, University of Alaska Fairbanks, USA
12	In-situ measurement of mineral and fluid inclusion chemistry and Li isotope composition-application to REE and Cu mineralization and pegmatite petrogenesis	Tapasya Singh	2024	Degree awarded	National Post-doctoral Research Fellow, National Geophysical Research Institute, Hyderabad

11	Zircon U-Pb-Hf isotope constraints on Paleo-Mesoproterozoic crustal evolution in the Bihar Mica Belt, Central Indian Tectonic Zone, and its link to the Columbia supercontinent	Kumar Abhinay	2023	Degree awarded	
10	Melt-assisted sulfide ore remobilization at Sindesar Khurd, Rajasthan	Rachit Parihar	2023	Degree awarded	Assistant Professor, Department of Geology, University of Rajasthan, Jaipur, India
9	Genesis of uranium mineralization in the Singhbhum Shear Zone: constraints from the chemical and isotopic composition and geochronology of hydrothermal minerals	Sarita Patel	2023	Degree awarded	Post-doctoral fellow, NCESS, India
8	Ore-genetic processes in the Proterozoic Tungsten-belts and skarns of western India: constraints from trace element and B-Li isotope chemistry of ore and gangue minerals	Urmi Ghosh	2022	Degree awarded	Digital Mineralogist, James Hutton Institute, Aberdeen, United Kingdom
7	Eoarchean to Neoarchean crustal evolution of the Singhbhum and the Western Dharwar cratons of India: constraints from U-Pb-Hf isotope and trace element chemistry of zircon	Sameer Ranjan	2021	Degree awarded	Assistant Professor, Department of Earth Sciences, Indian Institute of Technology Bombay, Mumbai, India
6	Hydrothermal Alteration and Rare Earth Element Mineralization in Peralkaline Granites and Fe-Rich Carbonatites-Case Studies from The Malani Igneous Suite and The Kamthai Carbonatite Complex, Western India	Suman Mondal	2021	Degree awarded	
5	The Gangpur Schist Belt, Eastern India: A window into the Proterozoic formation of The Greater Indian Landmass	Tuhin Chakraborty	2020	Degree awarded	Postdoctoral Research Fellow, School of Biological Earth and Environmental Science, University College Cork, Ireland
4	The Simlipal Complex, Singhbhum Craton, eastern India: Remnant of a large Mesoarchean impact crater	Ajay K. Singh	2020	Degree awarded	Scientist, CSIR National Geophysical Research Institute, Hyderabad, India
3	The Geological Evolution of the Paleoarchean Tonalite–Trondhjemite–Granodiorite Crust and the Neoarchean Malayagiri Supracrustal Rocks, Singhbhum Craton, eastern India	Sabyasachi Chattopadhyay	2016	Degree awarded	Post-doctoral researcher, Institute of Applied Geosciences (AGW); Karlsruhe Institute of Technology
2	Archean and Neoproterozoic structure, metamorphic phase equilibria and monazite geochronology in and across the Singhbhum Craton, eastern India	Prabhakar Naraga	2013	Degree awarded	Professor, Department of Earth Sciences, Indian Institute of Technology, Bombay, India
1	Tectonics of Paleoproterozoic to Mesoarchean crystalline rocks along the western (Konkan) coast, India: relevance to Gondwanaland and Columbia supercontinent	Rekha S	2013	Degree awarded	Professor, National Institute of Technology (NIT), Rourkela, India

Member of Professional bodies

- Member, Geochemical Society
- Member, European Association of Geochemistry
- Life member, Geological Society of India
- Life member, Mineralogical Society of India

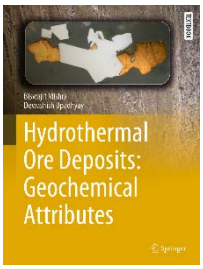
Member, Editorial board

- Associate Editor, Geochemistry (Elsevier), 2015-present
- Associate Editor, Terra Nova (Wiley), 2020-present

- Associate Editor, European Journal of Mineralogy, September 2021-present

Guest Editor (special issue)

- New insights into carbonatite petrogenesis and metallogenesis (Geochemistry, Elsevier)
- Probing the Earth: Use of artificial intelligence (AI) in Mineralogy, Petrology and Geochemistry (European Journal of Mineralogy, Copernicus Publication)



List of publications

Textbook

1. Mishra, B., **Upadhyay, D.** (2025). Hydrothermal Ore Deposits: Geochemical Attributes, Springer Textbooks in Earth Sciences, Geography and Environment.

Peer-reviewed journal articles (IF = impact factor at the time of publication)

1. Gogoi, R., Hazarika, P., **Upadhyay, D**. (2026). Phase equilibria modelling and geochronology of Ediacaran-Cambrian granites in West Garo Hills, Assam-Meghalaya Gneissic Complex, NE India: implications for East Gondwana assembly, *Contributions to Mineralogy and Petrology*, 181, 6. ***(IF = 4.0)***
2. Pandey, O.P., Zwan, F.M.V.D., Zivadinovic I., Malallah, M.Y.A., **Upadhyay, D.**, Chandra, J., Mezger, K. (2026). Geochemical and petrogenetic evolution of the basement rocks of the Ha'il terrane, Arabian Shield: A snapshot of the Gondwana assembly, *Gondwana Research*, 149, 246-261. ***(IF = 8.6)***
3. Chandra, J., Ranjan, S., **Upadhyay, D**. (2025). Petrogenesis of Kamthai and Amba Dongar carbonatite complexes, India: constraints from in-situ $^{87}Sr/^{86}Sr$ composition and U-Pb ages of apatite, *Journal of Petrology*, 66, egaf049. ***(IF = 4.3)***
4. Dora, M.L., **Upadhyay, D.**, Baswani, S.R., Meshram, T., Mukherjee, M.K., Mahapatro, K.R. (2025). Age and genesis of hydrothermal Ni-PGE-Te mineralisation in the Gondpipri mafic-ultramafic complex, central India: constraints from zircon U-Pb geochronology and magnetite-pyrite geochemistry, *Mineralium Deposita*, 60, 429-452. ***(IF = 4.9)***
5. Chandra, J., **Upadhyay, D.**, Patel, A.K., Mishra, B, (2024). Involvement of syn-, para- and post-magmatic hydrothermal fluids in the alteration of the Kamthai carbonatite complex (India): insights from in-situ measured $^{87}S/^{86}Sr$ isotope and trace element composition of calcite, *Geochemistry*, 84, 126216. ***(IF = 3.2)***
6. Gogoi, R., Hazarika, P., **Upadhyay, D.**, Phukon, P., Sharma, U.P., Kumar, P, (2024). Albitization related U and Th mobilization under reducing conditions, *Geochemistry*, 84, 126160. ***(IF = 3.2)***
7. Das, E., Pal, D.C., **Upadhyay, D.**, Tripathi, A., Kashyap, V., Meena, K. (2024). Sulfide remobilization in the metamorphosed Kayad SedEx Zn-Pb deposit, western India: evidence from mode of occurrence, texture, hydrothermal alteration features, and trace element chemistry, *Economic Geology*, 119, 885-905. ***(IF = 5.1)***
8. Abhinay, K., **Upadhyay, D**. (2024). Zircon U-Pb-Hf constraints on the geological evolution of the Bihar Mica Belt, Central Indian Tectonic Zone, and its link to Columbia assembly, *Precambrian Research*, 405, 107363. ***(IF = 3.8)***
9. Manikyamba, C., **Upadhyay, D.**, Mohan, M.R. (2024). Archean crustal evolution and craton formation in peninsular India: New insights from the Singhbhum, Dharwar and Bastar cratons, *Proceedings of the Indian National Science Academy*, 90, 167-195. ***(IF = 0.9)***
10. Mishra, B., **Upadhyay, D.** (2024). Indian ore deposits: current genetic understandings, *Proceedings of the Indian National Science Academy*, 90, 506-521. ***(IF = 0.9)***
11. Mukherjee, P.K., Kumar, P., Singhal, S., Singh, P., **Upadhyay, D.**, Rahaman, W., Tomson, J.K., Das, S., Jain, A.K., Chopra, S. (2024). Geochronological and Metal Isotopic studies in India; an overview of new and existing Geoanalytical facilities in India, *Proceedings of the Indian National Science Academy*, 90, 494-505. ***(IF = 0.9)***
12. Baidya, A.S., Maiti, G., Mondal, S., **Upadhyay, D**. (2024). Biotite chemistry as an indicator of hydrothermal deposit types and fluid sources: Insights from big data compilation, multivariate statistical analysis, and machine learning, *Journal of Geochemical Exploration*, 259, 107442. ***(IF = 3.9)***
13. Saha, R., **Upadhyay, D.**, Mishra, B. (2024). Discriminating quartz host rock based on its trace element chemistry using machine learning-a new tool for sedimentary provenance studies, *Chemical Geology*, 651, 122016. ***(IF = 3.9)***
14. Saha, R., **Upadhyay, D.**, Mishra, B. (2024). Review of temporal trend in Archean granitoid chemistry-implications for Eoarchean (3.7-3.9 Ga) transition in geodynamic regime of crust formation, *Precambrian Research*, 400, 107264. ***(IF =***

3.8)

15. Bhuyan, N. Hazarika, P., **Upadhyay, D.** (2023). Continental evaporites as brine sources for formation of SEDEX and MVT deposits: implications from boron isotope compositions of tourmaline, *Geochimica et Cosmochimica Acta*, 361, 82-100. *(**IF =** **5.0**)*
16. Patel, A., **Upadhyay, D.**, Mishra, B., Pruseth, K.L. (2023). Magmatic rare earth element mineralization and secondary fluid-assisted redistribution in the Kamthai carbonatite complex, NW India, *Lithos*, 456-457, 107294. *(**IF =** **3.5**)*
17. Ghosh, U. **Upadhyay, D.**, Mishra, B. Abhinay, K. (2023). In-situ trace element and Li-isotope study of zinnwaldite from the Degana tungsten deposit, India: implications for hydrothermal tungsten mineralization, *Chemical Geology*, 632, 121550. *(**IF =** **3.9**)*
18. Baidya, A.S., Saha, R., Pal, D.C., **Upadhyay, D.** (2023). Fingerprinting alteration and mineralization in the iron oxide Cu-Au (IOCG) system using biotite chemistry and monazite geochronology: constraints from the Khetri Copper Belt, western India, *Mineralium Deposita*, 58, 1445-1476. ***(IF = 4.9)***
19. Patel, A., **Upadhyay, D.**, Mishra, B., Pruseth, K.L. (2023). Reconstruction of hydrothermal fluid composition of the Kamthai carbonatite complex using lattice strain model: implications for LREE/HREE fractionation, *Lithos*, 444-445, 107097. *(**IF =** **3.5**)*
20. Patel, S., **Upadhyay, D.**, Ranjan, S., Mishra, B. (2023). Magnetite-fluorapatite geochemistry and monazite U-Pb geochronology of the Mohuldih uranium deposit, Singhbhum Shear Zone, eastern India, *Geological Journal*, 58, 2002-2027. ***(IF = 1.8)***
21. Dora, M.L., Meshram, T., Baswani, S.R., Malviya, V.P., **Upadhyay, D.**, Shareef, M., Raza, M.A., Ranjan, S., Meshram, R., Patnaik, M.K., Randive, K. (2023). Geological evolution of the Proterozoic Betul Belt (~2.16–0.95 Ga) of the Central Indian Tectonic Zone: its linkage to the assembly and dispersal of Columbia and Rodinia supercontinents, *Gondwana Research*, 116, 168-197. ***(IF = 6.1)***
22. Singh, T., **Upadhyay, D.**, Mishra, B. (2023). In-situ laser ablation of mineral fluid inclusions: evaluating the effects of solid and liquid matrices, laser repetition rate and fluence on data quality, *International Journal of Mass Spectrometry*, 485, 117010. ***(IF = 1.8)***
23. Ravindran, A., Mezger, K., Balakrishnan, S., Berndt, J., Ranjan, S., **Upadhyay, D**. (2023). Formation of Paleo- to Meso-Archean continental crust in the western Dharwar Craton, India: Constraints from U-Pb zircon ages and Hf-Pb-Sr isotopes of granitoids and sedimentary rocks, *Chemical Geology*, 615, 121196. ***(IF = 3.9)***
24. Singh, T., **Upadhyay, D.**, Patel, A.K., Mishra, B. (2022). High MREE-HREE solubility in a carbonatite-derived hydrothermal fluid: evidence from fluorite-hosted fluid inclusions in the Amba Dongar carbonatite complex, India, *Chemical Geology*, 613, 121162. ***(IF = 3.9)***.
25. Negi, P., Saikia, A., Ahmad, M., **Upadhyay, D.**, Akhtar, S. (2022). Nature and origin of anorthosite enclaves within Proterozoic granites of Chotanagpur Granite Gneiss Complex of Eastern India, *Front. Earth Sci.*, 10: 952554. ***(IF = 2.9)***
26. Ghosh, U., **Upadhyay, D**. (2022). The retrograde evolution of F-rich skarn: clues from major and trace element chemistry of garnet, scheelite, and vesuvianite from the Belka Pahar wollastonite deposit, India, *Lithos*, 422-423, 106750. *(**IF =** **3.5**)*
27. Chakraborty, T., **Upadhyay, D.**, Abhinay, K. (2022). Tourmaline growth in pelitic schist and quartzite: a textural, chemical and B-isotopic study from the Gangpur Schist Belt, eastern India, *Geochemistry*, 82, 125887. ***(IF = 3.7)***
28. Ranjan, S., **Upadhyay, D.**, Srikantappa, C. (2022). Eoarchean to Neoarchean crustal evolution of the Western Dharwar Craton, southern India: clues from U-Pb-Hf isotope composition of detrital zircon, *Precambrian Research*, 371, 106559. ***(IF = 3.8)***
29. Patel, A.K., Mishra, B., **Upadhyay, D.**, Pruseth, K.L. (2022). Mineralogical and geochemical evidence of dissolution-reprecipitation controlled hydrothermal rare earth element mineralization in the Amba Dongar carbonatite complex, western India, *Economic Geology*, 117, 683-702. *(**IF =** **5.1**)*
30. Maltese, S., Caro, G., Pandey, O.P., **Upadhyay, D.**, Mezger, K. (2022). Direct evidence for crust-mantle differentiation in the late Hadean, *Communications Earth & Environment (Nature)*, 3, 1-6. ***(IF = 7.9)***
31. Mahapatro, S.N., Renjith, M.L., Martha, R.K., Patel, R.K., **Upadhyay, D.**, Sarma, D.S. (2022). Petrogenesis and U-Pb zircon dating of Chaitma Alkaline Complex at the southern margin of the Central Indian Tectonic Zone: geodynamic implications, *Geological Society London Special Publication*, 513, 351-379. ***(IF = 2.64)***
32. Saha, R., **Upadhyay, D.**, Mishra, B. (2021). Discriminating tectonic setting of igneous rocks using biotite major element

chemistry-a machine learning approach, *Geochemistry Geophysics Geosystems*, 22, e2021GC010053. (***IF =* 3.5***)*

33. Baidya, A.S., Pal, D.C. **Upadhyay, D.** (2021). Biotite chemistry and mineral association as an indicator of redox conditions in the iron oxide Cu-Au (IOCG) system: Constraints from the Khetri Copper Belt, western India, *Ore Geology Reviews*, 139, 104544. (***IF =* 3.3***)*
34. **Upadhyay, D.**, Mondal, S., Patel, A.K., Mishra, B., Pruseth, K.L., Bhushan, S.K. (2021). Rare Earth Element precipitation induced by non-redox transformation of magnetite to hematite: microtextural and geochemical evidence from the Kamthai carbonatite complex, western India, *Lithos*, 400-401, 106381. *(**IF =* 3.5***)***
35. Ghosh, U., **Upadhyay, D.**, Abhinay, K., Mishra, B. (2021). Nature of the mineralizing fluids in the Balda and Motiya W-prospects, western India: constraints from chemical and B-isotope composition of tourmaline, *Chemical Geology*, 582, 120439. ***(IF = 3.9)***
36. Samal, A.K., Srivistava, R.K., **Upadhyay, D**. (2021). Major, trace and rare-earth element geochemistry of Nb-V rich andradite-schorlomite-morimotoite garnet from Ambadungar-Saidivasan alkaline carbonatite complex, India: implication for thr role of hydrothermal fluid-induced metasomatism, *Minerals*, 2021, 11, 756. ***(IF = 2.7)***
37. Dora, M.L., **Upadhyay, D.**, Malviya, V., Meshram, T., Baswani, S.R., Randive, K.R., Meshram, R., Ranjan, S. (2021) Neoarchean and Proterozoic crustal growth and reworking in the Western Bastar Craton, Central India: constraints from zircon, monazite geochronology and whole rock geochemistry, *Precambrian Research*, 362, 106284. ***(IF = 3.8)***
38. Panicker, A.G., Mohan, R.M., **Upadhyay, D.**, Raju, B.V., Chauhan, H., Chalapathi Rao, N.V. (2021). U-Pb zircon age, geochemistry and petrogenesis of Mesoarchean anorthositic rocks from the Holenarsipur greenstone belt, Western Dharwar Craton: implications for accretionary tectonics in southern India, *Lithos*, 398-399, 106268. *(**IF =* 3.5***)***
39. Mondal, S., **Upadhyay, D.**, Banerjee, A. (2021). REE mineralization in the peralkaline Siwana granite, western India-role of fractional crystallization, hydrothermal remobilization, and feldspar-fluid interaction, *Lithos*, 396-397, 106240. *(**IF =* 3.5***)***
40. Maltese, A., Mezger, K., **Upadhyay, D.**, Berndt, J., Scherer, E.E. (2021). On the petrogenesis of Paleoarchean continental crust: U-Pb-Hf isotope and major-trace element constraints from the Bastar Craton, India, *Chemical Geology*, 579, 120337. ***(IF = 3.9)***
41. Hazarika, P., **Upadhyay, D.**, Mishra, B., Borah, P., Abhinay, K. (2021). Modelling B-release and isotopic fractionation during metamorphic dehydration of basalt and pelite: implications for the source of mineralizing fluid in greenstone-hosted orogenic gold deposits, *Geochimica et Cosmochimica Acta*, 304, 83-100. *(**IF =* 5.0***)***
42. Patel, S., **Upadhyay, D.**, Mishra, B., Abhinay, K., Sarangi, A.K. (2021). Multiple episodes of hydrothermal alteration and uranium mineralization/remobilization in the Singhbhum Shear Zone, eastern India: constraints from chemical and boron isotopic composition of tourmaline, *Lithos*, 388-389, 106084. ***(IF =* 3.5*)***
43. Singh, A.K., **Upadhyay, D.**, Mezger, K., Pruseth, K.L., Nanda, J.K. (2021). Age, provenance and tectonic setting of metasedimentary rocks of the Simlipal Complex, Singhbhum Craton, eastern India, *Precambrian Research*, 355, 106113. ***(IF = 3.8)***
44. Pandey, O.P., Mezger, K., **Upadhyay, D.**, Paul, D., Singh, A.K., Söderlund, U., Gumsley, A. (2021). Major-trace element and Sr-Nd isotope compositions of mafic dykes of the Singhbhum Craton: insights into evolution of the lithospheric mantle, *Lithos*, 382-383, 105959. ***(IF =* 3.5*)***
45. Meshram, T., Dora, M.L., Baswani, S.R., **Upadhyay, D.**, Meshram, R., Ranjan, S., Nanda, J.K. (2021). Petrogenesis and U-Pb geochronology of charnockites flanking the Pranhita Godavari rift in peninsular India-link between the Bastar and Eastern Dharwar Cratons, *Gondwana Research*, 92, 113-132. ***(IF = 6.1)***
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89. **Upadhyay, D**., Mezger, K. Nucleosynthetic and neutron capture-induced Sm isotope anomalies in chondrites, *Lunar and Planetary Science Conference XXXIX*, 2008.
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91. **Upadhyay, D.**, Scherer, E.E., Mezger, K. Nd isotope mixing during thermal ionization mass spectrometry and implications for ^{142}Nd anomalies, *Goldschmidt Conference*, 2007.
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93. **Upadhyay, D.**, Braun, I., Jahn-Awe, S., Pin, C., Paquette, J.-L. Neoproterozoic alkaline magmatism at Sivamalai, Southern India, *Deutsche Mineralogisch Gesellschaft (DMG) Meeting 2005*.

Invited talks/seminars/conference session convener

Type	***Theme / Venue***	***Year***
Invited seminar	Metasomatic replacement of Plagioclase by Nepheline textural characteristics and geochemical changes, Fest-Kolloquium, University of Muenster, Germany	2007
Invited seminar	P-process nebular heterogeneity in Sm and Nd isotope: evidence from chondritic meteorites, Paneth Kolloquium, Nordlingen, Germany	2008
Invited seminar	Nucleosynthetic and neutron capture-induced Sm isotope anomalies in chondrites, Lunar and Planetary Science Conference, Houston, USA	2008
Invited seminar	Heterogeneous distribution and decoupling of p-process Sm and Nd isotopes in the solar nebula, Deutsche Mineralogische Gesellschaft Meeting, Berlin	2008
Invited seminar	The Geological Evolution of the Paleoarchean and Neoarchean crust of the Singhbhum Craton, Eastern India, Geological Society of India, Monthly Scientific Lecture, Bengaluru	2016
Invited	Recent Trends in Isotope Geochemistry, Physical Research Laboratory, Ahmedabad	2016

seminar		
Invited seminar	UGC-HRDC-JU Inter-disciplinary Refresher Course on Modern Methods in Earth System Science, Jadavpur University	2018
Invited seminar	Detrital zircon evidence for Hadean mafic crust and Eoarchean arc-like tectonic setting in the Singhbhum Craton, India, Freie University Berlin, Germany	2019
Invited seminar	Advanced training program on Analytical Geochemistry, National Geophysics Research Institute, Hyderabad	2021
Invited seminar	Advanced training program on Analytical Geochemistry, National Geophysics Research Institute, Hyderabad	2022
Session convener	*Metamorphism to the Extremes: Decoding Orogenic Processes-Goldschmidt Conference, 2022 Hawaii*	*2022*
Invited Keynote	In-situ laser ablation of mineral fluid inclusions-applications to ore genetic systems, *34th ISMAS Symposium on Mass Spectrometry, National Geophysical Research Institute (Hyderabad)*	2023
Invited seminar	Advanced training program on Analytical Geochemistry, National Geophysics Research Institute, Hyderabad	2023
Invited lecture	Advanced training program on Analytical Geochemistry, National Geophysics Research Institute, Hyderabad (two lectures on 06th and 7th March, 2024)	2024
Invited lecture	UGC-MMTTC (HRDC), University of Jammu Two-week Refresher Course on Earth Sciences for Assistant Professors Feb 26th to March 9th, 2024	2024
Invited lecture	Controls on Rare earth element mineralization in carbonatite and peralkaline granite-case studies from Amba Dongar/ Kamthai and Siwana, 21st June, 2024, *GMDC Science & Research Centre (GSRC), Ahmedabad*	2024
Invited Keynote	National Symposium on Magmatic Processes in the Indian Shield, Indian Institute of Technology, Kanpur, 19.07.24 to 20.07.24	2024
Invited Plenary	Geology and Mineral Resources of Jharkhand: some recent advances in scientific understanding, National Workshop on Mission based Geological Advancements in Jharkhand	2024
Invited lecture	Advanced training program on Analytical Geochemistry, National Geophysics Research Institute, Hyderabad (two lectures on 05th March, 2025)	2025
Invited lecture	The Hf isotope composition of granitoids from the Singhbhum Craton, National Seminar on Dynamic Processes of the Earth: From Deep Interior to Surface (DPE 2025), *Presidency University, Kolkata*, March 21–22, 2025	2025
Invited talk	International seminar on critical and strategic minerals, 59th Foundation day of Hindustan Copper Limited, *Kolkata*, November 09, 2025	2025

Citations
Google scholar: 3212
Scopus: 2761
H-index: 31
i10-index: 70

I declare that the information provided above is correct to the best of my knowledge.

Kharagpur, 12.02.2026



(Dewashish Upadhyay)