

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, DST-INSPIRE Faculty selection expert committee 2022-25
- Member, Nominations Committee (2021-23), 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
- Silver medal, M.Sc. (Applied Geology)-2002, IIT Kharagpur
- 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, cosmochemistry

Current research interests

- Petrogenesis of strategic and green energy critical metal deposits (rare earth elements, uranium, tungsten, lithium, 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
- Oxygenation history of the Archean atmosphere using stable Cr-isotopes

Teaching and research responsibilities

- In-charge of Radiogenic Isotope LA-MC-ICPMS laboratory, IIT Kharagpur
- Teaching: Geochemistry (Theory + Laboratory), Igneous Petrology (Theory + Laboratory), Field Geology

Sponsored projects and consultancy work

Project title	Investigators	Sponsor/Client	Duratio	Value (Rs.)
10. 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: B. Mishra CI: D. Upadhyay	Ministry of Earth Sciences	2022-2025	65,50,265
9. LAICPMS analytical facility various users	PI: D. Upadhyay	Various Govt. and Private Agencies	2013–2022	Ca. 50,00,000 till date
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 ₃ S ₄) formation by hydrothermal alteration and partial melting of base-metal sulfide deposits as a potential mechanism contributing to groundwater As-	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	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	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-8 (*independent guidance*-5: Dr. Sabyasachi Chattopadhyay, Dr. Tuhin Chakraborty, Dr. Suman Mondal; Dr. Sameer Ranjan; Dr. Urmi Ghosh; *joint guidance*-3: Dr. Ajay Kumar Singh, Dr. Prabhakar Naraga, Dr. Rekha S); *submitted*-2 (Rachit Parihar, Sarita Patel); *ongoing*-5 (Kumar Abhinay, Tapasya Singh, Rupashree Saha, Srinivasan Abinash, Shailendra Yadav)
- M-Tech thesis supervision: completed-7, ongoing-1
- MSc thesis supervision: completed-33, ongoing-5

Details of PhD theses supervised

S. No.	Thesis title	Name of student	Year	Remark
10	Genesis of uranium mineralization in the Singhbhum Shear Zone: constraints from the chemical and isotopic composition and geochronology of hydrothermal minerals	Sarita Patel	2023	Thesis under review
9	Melt-assisted sulfide ore remobilization at Sindesar Khurd, Rajasthan	Rachit Parihar	2022	Thesis under revision
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
7	Eoarchean to Neoproterozoic 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
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
4	The Simlipal Complex, Singhbhum Craton, eastern India: Remnant of a large Mesoarchean impact crater	Ajay K. Singh	2020	Degree awarded
3	The Geological Evolution of the Paleoproterozoic Tonalite-Trondhjemite-Granodiorite Crust and the Neoproterozoic Malayagiri Supracrustal Rocks, Singhbhum Craton, eastern India	Sabyasachi Chattopadhyay	2016	Degree awarded
2	Archean and Neoproterozoic structure, metamorphic phase equilibria and monazite geochronology in and across the Singhbhum Craton, eastern India	Prabhakar Naraga	2013	Degree awarded
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

Member of Professional bodies

- 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

List of publications

Published in peer-reviewed journals

1. Dora, M.L., Meshram, T., Baswani, S.R., Malviya, V.P., **Upadhyay, D.**, Shareef, M., Atif, M., Ranjan, S., Mahapatro, S.N., Nanda, J.K., Randive, K. (2023). Geological evolution of the Proterozoic Betul Belt of the Central Indian Tectonic Zone: its linkage to the assembly and dispersal of Columbia and Rodinia supercontinents, *Gondwana Research*, in press (<https://doi.org/10.1016/j.gr.2022.11.017>). **(IF = 6.151)**
2. 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 = 1.934)**
3. 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 = 4.942)**
4. 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 = 4.942)**.
5. 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 = 3.229)**
6. 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 = 4.659)**
7. 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 = 4.127)**
8. Ranjan, S., **Upadhyay, D.**, Srikanthappa, 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 = 4.261)**
9. Patel, A.K., Mishra, B., **Upadhyay, D.**, Pruseth, K.L. (2022). Mineralogical and geochemical evidence of dissolution-precipitation controlled hydrothermal rare earth element mineralization in the Amba Dongar carbonatite complex, western India, *Economic Geology*, 117, 683-702. **(IF = 4.013)**
10. 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.
11. 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 = 1.581)**
12. 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 = 3.62)**
13. 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 = 3.809)**
14. **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 = 4.659)**
15. 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 = 4.685)**

16. Samal, A.K., Srivastava, 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 the role of hydrothermal fluid-induced metasomatism, *Minerals*, 2021, 11, 756. **(IF = 2.737)**
17. Dora, M.L., **Upadhyay, D.**, Malviya, V., Meshram, T., Baswani, S.R., Randive, K.R., Meshram, R., Ranjan, S. (2021) Neoproterozoic 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 = 4.261)**
18. 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 Mesoproterozoic anorthositic rocks from the Holenarsipur greenstone belt, Western Dharwar Craton: implications for accretionary tectonics in southern India, *Lithos*, 398-399, 106268. **(IF = 4.659)**
19. 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 = 4.659)**
20. Maltese, A., Mezger, K., **Upadhyay, D.**, Berndt, J., Scherer, E.E. (2021). On the petrogenesis of Paleoproterozoic continental crust: U-Pb-Hf isotope and major-trace element constraints from the Bastar Craton, India, *Chemical Geology*, 579, 120337. **(IF = 4.685)**
21. 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 = 5.095)**
22. 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 = 4.659)**
23. 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 = 4.261)**
24. 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 = 4.659)**
25. 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 = 7.190)**
26. Singh, A.K., **Upadhyay, D.**, Pruseth, K.L., Mezger, K., Nanda, J.K., Maiti, S., Saha, D. (2021). Shock metamorphic features in the Archean Simlipal Complex, Singhbhum Craton, eastern India: possible remnant of a large impact structure, *Journal of the Geological Society of India*, 97, 35-47. **(IF = 0.964)**
27. Baidya, A.S., Sen, A., Pal, D.C., **Upadhyay, D.** (2021). Ore-forming processes in the Khetri Copper Belt, western India: constraints from trace element chemistry of pyrite and C-O isotope composition of carbonates, *Mineralium Deposita*, 56, 957-974. **(IF = 4.004)**
28. Adak, S., Pal, D.C., **Upadhyay, D.**, Mondal, R. (2021). Textural re-equilibration, hydrothermal alteration and element redistribution in Fe-Ti oxide pods, Singhbhum Shear Zone, eastern India, *Geochemistry*, 81, 125679. **(IF = 4.127)**
29. Pandey, O.P., Mezger, K., Söderlund, U., **Upadhyay, D.**, Srivastava, R., Gautam, G.C., Ernst, R. (2020). Geochronology, whole-rock geochemistry and Sr-Nd isotopes of the Bhanupratappur mafic dyke swarm: evidence for a common Paleoproterozoic LIP event at 2.37-2.36 Ga in the Bastar and Dharwar cratons, *Precambrian Research*, 347, 105853. **(IF = 4.261)**
30. Singha Deb, A.K., Sahu, P., Boda, A., Ali, Sk.M., Shenoy, K.T., **Upadhyay, D.** (2020). DFT and MD Simulations supplemented experiments for isotopic fractionation of zinc compounds using macrocyclic crown ether appended polymeric resin, *Physical Chemistry Chemical Physics*, 22, 14682-14693. **(IF = 3.734)**
31. Chakraborty, T., **Upadhyay, D.** (2020). The geochemical differentiation of S-type pegmatites: constraints from major-trace element and Li-B isotopic composition of muscovite and tourmaline, *Contributions to Mineralogy and Petrology*, 175, 60. **(IF = 3.841)**
32. Ranjan, S., **Upadhyay, D.**, Pruseth, K.K., Nanda, J.K. (2020). Detrital zircon evidence for change in geodynamic regime of continental crust formation 3.7–3.6 billion years ago, *Earth and Planetary Science Letters*, 538C, 116206. **(IF =**

5.483)

33. Ranjan, S., **Upadhyay, D.**, Abhinay, K., Srikantappa, C. (2020). Paleoproterozoic and Neoproterozoic Tonalite–Trondhjemite–Granodiorite (TTG) and granite magmatism in the Western Dharwar Craton, southern India: implications for Archean continental growth and geodynamics, *Precambrian Research*, 340, 105630. **(IF = 4.261)**
34. Ray, D., Misra, S., **Upadhyay, D.**, Newsom, H., Peterson, E., Dube, A., Satyanaryanan, M. (2020). Iron-nickel metallic components bearing silicate-melts and coesite from Ramgarh impact structure, west central India: Possible identification of the impactor, *Journal of Earth System Science*, 129, 118. **(IF = 1.851)**
35. Ao, A., Bhowmik, S.K., **Upadhyay, D.** (2020). P-T-melt/fluid Evolution of abyssal mantle peridotites from the Nagaland Ophiolite Complex, NE India: Geodynamic significance, *Lithos*, 354-355, 105344. **(IF = 4.659)**
36. Dora, M., **Upadhyay, D.**, Randive, K., Shareef, M., Baswani, S., Ranjan, S. (2020). Trace element geochemistry of magnetite and pyrite and sulfur isotope geochemistry of pyrite and barite from the Thanewasna Cu-(Au) deposit, western Bastar Craton, Central India: implication for ore genesis, *Ore Geology Reviews*, 117, 103262. **(IF = 4.582)**
37. Hazarika, P., Bhuyan, N., **Upadhyay, D.**, Kumar, A., Singh, N. (2019). The nature and sources of ore-forming fluids in the Bhukia gold deposit, Western India: constraints from chemical and boron isotopic composition of tourmaline, *Lithos*, 350–351, 105227. **(IF = 4.659)**
38. Baidya, A.S., Pal, D.C., **Upadhyay, D.** (2019). Chemical weathering of garnet in Banded-Iron Formation: Implication for the mechanism and sequence of secondary mineral formation and mobility of elements, *Geochimica et Cosmochimica Acta*, 265, 198–220. **(IF = 5.095)**
39. Ackerman, L., Polák, L., Magna, T., Rapprich, V., Ďurišová, J., **Upadhyay, D.** (2019). Highly siderophile element geochemistry and Re-Os isotopic systematics of carbonatites: insights from Tamil Nadu, India, *Earth and Planetary Science Letters*, 520, 175–187. **(IF = 5.483)**
40. **Upadhyay, D.**, Chattopadhyay, S., Mezger, K. (2019). Formation of Paleoproterozoic-Mesoproterozoic Na-rich (TTG) and K-rich granitoid crust of the Singhbhum craton, eastern India: constraints from major and trace element geochemistry and Sr-Nd-Hf isotope composition, *Precambrian Research*, 327, 255–272. **(IF = 4.261)**
41. Pandey, O.P., Mezger, K., Ranjan, S., **Upadhyay, D.**, Villa, I.M. Villa, Nägler, T.F., Vollstaedt, H. (2019). Genesis of the Singhbhum Craton, eastern India; implications for Archean crust-mantle evolution of the Earth, *Chemical Geology*, 512, 85–106. **(IF = 4.685)**
42. Chakraborti, T.M., Ray, A., Deb, G.K., **Upadhyay, D.**, Chakraborti, R. (2019). Evidence of crustal reworking in the Mesoproterozoic: Insights from geochemical, U-Pb zircon and Nd isotopic study of a 3.08–3.12 Ga ferro-potassic granite-gneiss from north-eastern margin of Singhbhum Craton, India, *Lithos*, 330-331, 16–34. **(IF = 4.659)**
43. Chakraborty, T., **Upadhyay, D.**, Ranjan, S., Pruseth, K.L., Nanda, J.K. (2019). The Geological evolution of the Gangpur Schist Belt, eastern India: constraints on the formation of the Greater Indian Landmass in the Proterozoic, *Journal of Metamorphic Geology*, 37, 113–151. **(IF = 4.667)**
44. Pant, N.C., Jimenez-Espejo, F.J., Cook, C.P., Biswas, P., McKay, R., Marchesi, C., Ito, M., **Upadhyay, D.**, Kuroda, J., Shimizu, K., Senda, R., Fliedert, T.V.D, Takano, Y., Suzuki, K., Escutia, C., Shrivastava, P.K. (2018). Suspected meteorite fragments in marine sediments from East Antarctica, *Antarctic Science*, 30, 307–321. **(IF = 1.787)**
45. Ranjan, S., **Upadhyay, D.**, Abhinay, K., Pruseth, K.L., Nanda, J.K. (2018). Zircon geochronology of deformed alkaline rocks along the Eastern Ghats Belt margin: India-Antarctica connection and the Enderbia continent, *Precambrian Research*, 310, 407–424. **(IF = 4.261)**
46. Mondal, S., **Upadhyay, D.**, Banerjee, A. (2017). Origin of Rapakivi feldspar by a fluid-induced coupled dissolution-precipitation process, *Journal of Petrology*, 58, 1393–1418. **(IF = 4.238)**
47. Ackerman L., Magna, T., Rapprich, V., **Upadhyay, D.**, Kratky, O., Cejkova, B., Erban, V., Kochergina, Y., Hrstka T. (2017). Contrasting petrogenesis of temporally-related carbonatites from Samalpatti and Sevattur, Tamil Nadu, India, *Lithos*, 284–285, 257–275. **(IF = 4.659)**
48. Ray, D., **Upadhyay, D.**, Misra, S., Newsom, H.E. (2017). New insights on petrography and geochemistry of impactites from the Lonar crater, India, *Meteoritics and Planetary Science*, 52, 1577–1599. **(IF = 2.333)**
49. Sahoo, D., Pruseth, K.L., **Upadhyay, D.**, Ranjan, S., Pal, D.C., Banerjee, R., Gupta, S. (2017). New constraints from zircon, monazite and uraninite dating on the commencement of sedimentation in the Cuddapah basin, India, *Geological Magazine*, 155, 1230–1246. **(IF = 2.971)**
50. Hazarika, P., **Upadhyay, D.**, Pruseth, K.L. (2017). Episodic tourmaline growth and re-equilibration in mica-pegmatite from the Bihar Mica Belt, India: major and trace element variations under pegmatitic and hydrothermal conditions,

Geological Magazine, 154, 68–86. **(IF = 2.971)**

51. Baidya, A.S., Paul, J., Pal, D.C., **Upadhyay, D.** (2016). Mode of occurrences and geochemistry of amphibole in the Kolihan-Chandmari copper deposits, Rajasthan, India-implications for fluid sources and evolution vis-à-vis sulfide mineralization, *Ore Geology Reviews*, 80, 1092–1110. **(IF = 4.582)**
52. Bermingham, K.R., Mezger, K., Scherer, E.E., Horan, M., Carlson, R., **Upadhyay, D.**, Magna, T., Pack, A. (2016). Barium Isotope Abundances in Meteorites and Their Implications for Early Solar System Evolution, *Geochimica et Cosmochimica Acta*, 175, 282–298. **(IF = 5.095)**
53. Chattopadhyay, S., **Upadhyay, D.**, Nanda, J.K., Mezger, K., Pruseth, K.L., Berndt, J. (2015). Proto-India was a part of Rodinia: evidence from Grenville-age suturing of the Eastern Ghats Province with the Paleoproterozoic Singhbhum craton, *Precambrian Research*, 266, 506–529. **(IF = 4.261)**
54. **Upadhyay, D.**, Kooijman, E., Singh, A.K., Mezger, K., Berndt, J. (2015). The basement of the Deccan traps and its Madagascar connection: constraints from xenoliths, *Journal of Geology*, 123, 295–310. **(IF = 2.329)**
55. **Upadhyay, D.**, Chattopadhyay, S., Kooijman, E., Mezger, K., Berndt, J. (2015). Corrigendum to “Magmatic and metamorphic history of Paleoproterozoic tonalite-trondhjemite-granodiorite (TTG) suite from the Singhbhum craton, eastern India” [Precambrian Res. 252 (2014) 180–190], *Precambrian Research*, 260, 161–162 **(IF = 4.261)**
56. Raith, M.M., Mahapatro, S.N., **Upadhyay, D.**, Berndt, J., Mezger, K., Nanda, J.K. (2014). Age and P-T evolution of the Neoproterozoic Turkel Anorthosite Complex, Eastern Ghats Province, India, *Precambrian Research*, 254, 87–113. **(IF = 4.261)**
57. **Upadhyay, D.**, Chattopadhyay, S., Kooijman, E., Mezger, K., Berndt, J. (2014). Magmatic and Metamorphic History of Paleoproterozoic Tonalite-Trondhjemite-Granodiorite (TTG) Suite from the Singhbhum Craton, Eastern India, *Precambrian Research*, 252, 180–190. **(IF = 4.261)**
58. Hazarika, P., **Upadhyay, D.**, Mishra, B. (2013). Contrasting geochronological evolution of the Rajpura Dariba and Rampura Agucha metamorphosed Zn-Pb deposit, Aravalli-Delhi Belt, India, *Journal of Asian Earth Sciences*, 73, 429–439. **(IF = 3.786)**
59. **Upadhyay, D.** (2012). Alteration of plagioclase to nepheline in the Khariar alkaline complex, SE India: constraints on metasomatic replacement reaction mechanisms, *Lithos*, 155, 19–29. **(IF = 4.808)**
60. Schulz, T., **Upadhyay, D.**, Münker, C., Mezger, K. (2012). Formation and exposure-history of non-magmatic iron meteorites and winonaites: Clues from Sm and W isotopes, *Geochimica et Cosmochimica Acta*, 85, 200–212. **(IF = 5.095)**
61. **Upadhyay, D.**, Pruseth, K.L. (2012). Fluid-induced dissolution breakdown of monazite from Tso Moriri complex, NW Himalayas: evidence for immobility of trace elements, *Contributions to Mineralogy and Petrology*, 164, 303–316. **(IF = 3.841)**
62. Kooijman, E., **Upadhyay, D.**, Mezger, K., Raith, M.M., Berndt, J. (2011). Response of the U-Pb chronometer and trace elements in zircon to ultrahigh-temperature metamorphism: the Kadavur anorthosite complex, southern India, *Chemical Geology*, 290, 177–188. **(IF = 4.685)**
63. S. Rekha, **Upadhyay, D.**, Bhattacharya, A., Kooijman, E., Goon, S., Mahato, S., Pant, N.C. (2011). Lithostructural and chronological constraints and implications for tectonic restoration of Proterozoic accretion in the eastern Indian Precambrian shield, *Precambrian Research*, 187, 313–333. **(IF = 4.261)**
64. Saha, L., Pant, N.C., Pati, J.K., **Upadhyay, D.**, Berndt, J., Bhattacharya, A., Satyanaryanan, M. (2011). Neoproterozoic high-pressure margarite-phengitic muscovite-chlorite corona mantled corundum in quartz-free high-Mg, Al phlogopite-chlorite schists from the Bundelkhand craton, north central India, *Contributions to Mineralogy and Petrology*, 161, 511–530. **(IF = 3.841)**
65. Raith, M.M., Sengupta, P., Kooijman, E., **Upadhyay, D.**, Srikantappa, C. (2010). Corundum-leucosome-bearing aluminous gneiss from Ayyarmalai, Southern Granulite Terrain, India: A textbook example of vapour phase-absent muscovite-melting in silica-undersaturated aluminous rocks, *American Mineralogist*, 95, 897–907. **(IF = 2.919)**
66. Sprung, P., Scherer, E.E., **Upadhyay, D.**, Leya, I., Mezger, K. (2010). Non-nucleosynthetic heterogeneity in non-radiogenic stable Hf isotopes: implications for early solar system chronology, *Earth and Planetary Science Letters*, 295, 1–11. **(IF = 5.483)**
67. **Upadhyay, D.**, Gerdes, A., Raith, M. M. (2009). Unraveling sedimentary provenance and tectonothermal history of high temperature metapelites using zircon and monazite chemistry: a case study from the Eastern Ghats Belt, India, *Journal of Geology*, 117, 665–683. **(IF = 2.329)**
68. **Upadhyay, D.**, Scherer, E. E., Mezger, K. (2009). Neodymium-142 evidence for an enriched Hadean reservoir in

- cratonic roots, *Nature*, 459, 1118–1121. **(IF = 42.778)**
69. **Upadhyay, D.**, Scherer, E. E., Mezger, K. (2008). Fractionation and mixing of Nd isotopes during thermal ionization mass spectrometry: implications for high precision $^{142}\text{Nd}/^{144}\text{Nd}$ analyses, *Journal of Analytical Atomic Spectrometry*, 23, 561–568. **(IF = 3.565)**
 70. **Upadhyay, D.** (2008). Alkaline magmatism along the southeastern margin of the Indian shield: Implications for regional geodynamics and constraints on craton-Eastern Ghats Belt suturing, *Precambrian Research*, 162, 59–69. **(IF = 4.261)**
 71. **Upadhyay, D.**, Raith, M. M., Mezger, K., Bhattacharya, A., Kinny, P. D. (2006). Mesoproterozoic rifting and Pan-African continental collision in SE India: evidence from the Khariar alkaline complex, *Contributions to Mineralogy and Petrology*, 151, 434–456. **(IF = 3.841)**
 72. **Upadhyay, D.**, Raith, M. M., Mezger, K., Hammerschmidt, K. (2006). Mesoproterozoic rift-related alkaline magmatism at Elchuru, Prakasam Alkaline Province, SE India, *Lithos*, 89, 447–477. **(IF = 4.808)**
 73. **Upadhyay, D.**, Raith, M. M. (2006). Petrogenesis of the Kunavaram alkaline complex and the tectonothermal evolution of the neighboring Eastern Ghats Belt granulites, SE India, *Precambrian Research*, 150, 73–94. **(IF = 4.261)**
 74. **Upadhyay, D.**, Jahn-Awe, S., Pin, C., Paquette, J.-L., Braun, I. (2006). Neoproterozoic alkaline magmatism at Sivamalai, Southern India, *Gondwana Research*, 10, 156–166. **(IF = 7.190)**
 75. **Upadhyay, D.**, Raith, M. M. (2006). Intrusion age, geochemistry and metamorphic conditions of a quartz-monzonite intrusion at the craton-Eastern Ghats Belt contact near Jojuru, India, *Gondwana Research*, 10, 267–276. **(IF = 7.190)**
 76. Mishra, B., **Upadhyay, D.**, Bernhardt, H. J. (2006). Metamorphism of the host and associated rocks at the Rajpura-Dariba massive sulfide deposit, Northwestern India, *Journal of Asian Earth Sciences*, 26, 21–37. **(IF = 3.786)**

Under review/revision/preparation

1. Baidya, A.S., Saha, R., Pal, D.C., **Upadhyay, D.** 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*, under review.
2. Ghosh, U. **Upadhyay, D.**, Mishra, B. Abhinay, K. Fluid source and its evolution during granite-associated W-Li-Rb mineralization: trace element and Li-isotopic evidence from zinnwaldite of Degana deposit, India, *Chemical Geology*, under review.
3. Baidya, A.S., Maiti, G., Mondal, S., **Upadhyay, D.** Biotite chemistry as an indicator of hydrothermal deposit types and fluid sources: insights from big data compilation, multivariate statistical analysis, and machine learning, *Economic Geology*, under review.
4. Patel, S., **Upadhyay, D.**, Ranjan, S., Mishra, B. Magnetite-fluorapatite geochemistry and monazite U-Pb geochronology of the Mohuldih uranium deposit, Singhbhum Shear Zone, eastern India, *Geological Journal*, under review.
5. Patel, A., **Upadhyay, D.**, Mishra, B., Pruseth, K.L. Reconstruction of hydrothermal fluid composition of the Kamthai carbonatite complex using lattice strain model: implications for LREE/HREE fractionation, *Lithos*, under revision.
6. Das, E., Pal, D.C., **Upadhyay, D.**, Tripathi, A., and authors from HZL. Melt- and fluid-induced remobilization of sulfides in the formation of Zn-Pb deposit: evidence from hydrothermal alterations, and trace element chemistry of sulfides from Kayad deposit, Western India, *Economic Geology*, under review.
7. Saha, R., **Upadhyay, D.**, Mishra, B. Eoarchean (3.7-3.9 Ga) transition in geodynamic regime of granitoid crust formation: insights from Archean granitoid chemistry, *Geochimica et Cosmochimica Acta*, under review.
8. Abhinay, K., **Upadhyay, D.**, Paul, D. The Paleo- and Mesoproterozoic crustal evolution of the Bihar Mica Belt (Central Indian Tectonic Zone) and its link to the Columbia supercontinent-constraints from U-Pb-Hf isotopes in zircon, under preparation.

Conference proceedings and abstracts

1. Ghosh, U., Agarwal, R., **Upadhyay, D.**, Tiwari, R. Using mica and tourmaline chemistry as indicators of tin-tungsten mineralization: a machine learning approach, *6th National Geo-Research Scholar Meet (Wadia Institute of Himalayan Geology and the University of Ladakh)*, 2022.
2. **Upadhyay, D.**, Ranjan, S. Is the N-S metamorphic gradient in the Western Dharwar Craton superficial and the effect of multiple metamorphic overprints? *Goldschmidt Conference*, 2022.

3. Chandra, J., Ranjan, S., **Upadhyay, D.** In-situ Sr isotope analysis of apatite from Kamthai and Amba Dongar carbonatite complexes, western India: link with Deccan Large Igneous Province, *Goldschmidt Conference, 2022.*
4. Abhinay, K., **Upadhyay, D.** Paleoproterozoic (1.65 Ga) juvenile magmatism in the Chhotanagpur Granitic Gneiss Complex (CGGC), eastern India: link to the assembly of the Columbia supercontinent, *Goldschmidt Conference, 2022.*
5. Pradhan, B., Lukose, L., Bhowmik, S.K., Sorcar, N., Ranjan, S., **Upadhyay, D.** Early Jurassic Ultra-hot Subduction Zone Metamorphism within the Neo-Tethys: Evidence from High-Temperature Metamorphic Sole rocks in the Nagaland-Manipur Ophiolite Belt, NE India, *Goldschmidt Conference, 2022.*
6. Ranjan, S., **Upadhyay, D.** Zircon U-Pb-Hf isotopic evidence for transition in granitoid source at the Paleoproterozoic-Mesoarchean boundary in the Western Dharwar Craton, southern India, *Goldschmidt Conference, 2022.*
7. Saha, R., **Upadhyay, D.**, Mishra, B. Applying machine learning to discriminate host rock of quartz using its trace element chemistry—potential application to sedimentary provenance, *Goldschmidt Conference, 2022.*
8. Maltese, A., Caro, G. Pandey, O.P., **Upadhyay, D.**, Mezger, K. Isotopic evidence for episodic mantle melting in the Hadean, *Goldschmidt Conference, 2021.*
9. Ravindran, A., Mezger, K., Ranjan, S., **Upadhyay, D.**, Berndt, J. Formation of Archaean felsic continental crust in the western Dharwar Craton, India: Isotopic and trace element constraints from detrital zircons, *Goldschmidt Conference, 2021.*
10. Saha, R., **Upadhyay, D.**, Mishra, B. Eoarchean (3.8-3.7 Ga) transition in geodynamic regime of continental crust formation revealed from secular change in TTG composition, *Goldschmidt Conference, 2021.*
11. Ghosh, U., **Upadhyay, D.**, Mishra, B., Pruseth, K.L. Chemistry of Li-bearing micas (zinnwaldite): clues to magmatic-hydrothermal evolution of granite-hosted W-mineralization at Degana, India, *Goldschmidt Conference, 2021.*
12. Chatterjee, S., Pandey, O.P., Ravindran, A., Mezger, K., **Upadhyay, D.** Mafic Dykes from Archean Singhbhum Craton: A Window into the Evolution of Sub-Continental Lithospheric Mantle, *Swiss Geoscience Meeting, Zurich, 2020.*
13. Maltese, A., Caro, G., Pandey, O.P., **Upadhyay, D.**, Mezger, K. First constraints on the role of Hadean components during the formation of Paleoproterozoic TTGs from India, *Swiss Geoscience Meeting, Zurich, 2020.*
14. Singh, T., **Upadhyay, D.** Singh, A.K., Mishra, B., Patel, A.K. The composition of the REE mineralizing fluid in the Amba Dongar carbonatite complex: constrain from chemistry of fluorite and its fluid inclusions, *AGU Fall, 2020.*
15. Mondal, S., **Upadhyay, D.**, Banerjee, A. Rare earth element mineralization during prolonged hydrothermal alteration of the Siwana peralkaline granite, western India, *AGU Fall, 2020.*
16. Ghosh, U., **Upadhyay, D.** Fluid-rock interaction in calc-silicate rocks and the role of halogens in W mobilization and precipitation: clues from wollastonite skarn at Belka Pahar, Rajasthan, western India, *AGU Fall, 2020.*
17. Singh, T., **Upadhyay, D.**, Patel, A.K., Mishra, B. On the origin of fluorite mineralization in the Amba Dongar carbonatite complex, India: constraints from thermobarometry and chemistry of fluid inclusions in fluorite, *International Geological Congress, 2020.*
18. Banerjee, A., **Upadhyay, D.**, Ranjan, S. The evolution of Archean greenstone successions of the Bundelkhand Craton, India: constraints from U-Pb dating and Hf isotope analyses of zircon, *International Geological Congress, 2020.*
19. Mondal, S., **Upadhyay, D.**, Banerjee, A. Rare earth element mineralization during prolonged hydrothermal alteration of the Siwana peralkaline granite, *International Geological Congress, 2020.*
20. Saha, R., Baidya, A.S., Pal, D.C., **Upadhyay, D.** Using biotite textural relations and chemistry to trace hydrothermal alteration and IOCG mineralization: an example from the Khetri Copper Belt, Rajasthan, *International Geological Congress, 2020.*
21. Abhinay, K., **Upadhyay, D.** Paleo- and Mesoproterozoic crustal accretion and growth in the eastern Indian shield: constraints from zircon U-Pb geochronology of the Chhotanagpur Granitic Gneiss Complex, *International Geological Congress, 2020.*
22. Patel, S., Mishra, B., **Upadhyay, D.**, Ozha, M.K. Textural and chemical study of brannerite from the Mohuldih uranium deposit, Singhbhum Shear Zone (SSZ), India: evidence of U, Ti, Fe mobilization during late stage of hydrothermal mineralization, *International Geological Congress, 2020.*
23. Patel, A.K., Mishra, B., **Upadhyay, D.**, Pruseth, K.L. Fluid-assisted alteration of apatite and mobilization of rare earth elements in carbonatites from Amba Dongar, western India, *International Geological Congress, 2020.*
24. Ghosh, U., **Upadhyay, D.** Oscillatory-zoned hydrothermal garnets record fluid-rock interaction at Belka Pahar scheelite-bearing wollastonite deposit in Rajasthan, *International Geological Congress, 2020.*
25. Chakraborty, T., **Upadhyay, D.** Growth of tourmaline in metapelites and S-type granites/pegmatites: a geochemical

- study from the Gangpur Schist Belt, eastern India, *International Geological Congress*, 2020.
26. Ranjan, S., **Upadhyay, D.**, Abhinay, K., Srikantappa, C. The evolution of the TTG crust in the Western Dharwar Craton, India: constraints from zircon U-Pb ages and Hf isotopes, *International Geological Congress*, 2020.
 27. Sorcar, N., Joshi, K.B., Arora, D., Pant, N.C., **Upadhyay, D.**, Ranjan, S. Reappraisal of late Neoproterozoic orogenesis in the Chilka Granulite Complex, Eastern Ghats Belt and Princess Elizabeth Land, East Antarctica, *International Geological Congress*, 2020.
 28. Mondal, S., **Upadhyay, D.**, Banerjee, A. Li-isotopic evidence for fluid exsolution & remobilization of REE-HFSE in peralkaline Siwana granite, *Goldschmidt Conference*, 2019.
 29. Maltese, A., Mezger, K., **Upadhyay, D.**, Scherer, E.E. A contribution to the Archean Hf record by bulk Lu-Hf single grain analysis of zircon, *Goldschmidt Conference*, 2019.
 30. Ravindran, A., Mezger, K., Balakrishnan, S., Kooijman, E., Schmitt, M., **Upadhyay, D.**, Berndt, J. Initial Sr- and Hf-isotopes from apatite and zircon from the Western Dharwar Craton constrain early Archean crust-mantle evolution, *Goldschmidt Conference*, 2019.
 31. Ranjan, S. **Upadhyay, D.**, Nanda, J.K. Detrital zircon evidence for volcanic arc-like tectonic setting by 3.7 Ga, *Goldschmidt Conference*, 2019.
 32. Chakraborty, T., **Upadhyay, D.**, Abhinay, K. Origin of S-type granitic pegmatites: a Li and B isotopic study of muscovites and tourmalines from Gangpur Group granitoids, India, *Goldschmidt Conference*, 2019.
 33. Abhinay, K., **Upadhyay, D.** A chemical and boron isotopic study of tourmaline from pegmatites in the Bihar Mica Belt, India, *Goldschmidt Conference*, 2019.
 34. Ghosh, U., **Upadhyay, D.**, Abhinay, K., Mishra, B., Pruseth, K.L. Source of fluid for Balda & Motiya tungsten mineralization, western India: a boron isotope study of tourmaline, *Goldschmidt Conference*, 2019.
 35. Patel, S. **Upadhyay, D.**, Mishra, B., Abhinay, K. Chemical and B-isotope composition of tourmaline from Bagjata uranium deposit, Singhbhum Shear Zone, India: implications for source of mineralizing fluids, *Goldschmidt Conference*, 2019.
 36. Singh, T., **Upadhyay, D.**, Mishra, B. Trace element chemistry of fluid inclusions in quartz from pegmatites of the Bihar Mica Belt, eastern India, *Goldschmidt Conference*, 2019.
 37. Maltese, A., Mezger, K., **Upadhyay, D.** A new perspective on Earth's differentiation history from single zircon Hf isotope analysis, *16th Swiss Geoscience Meeting, Bern*, 2018.
 38. **Upadhyay, D.**, Ranjan, S., Abhinay, K., Pruseth, K.L., Nanda, J.K. India-Antarctica connection: constraints from Deformed Alkaline Rocks and Carbonatites, *Goldschmidt Conference*, 2017.
 39. Mondal, S., **Upadhyay, D.** Formation of rapakivi feldspar by fluid-induced alteration of granites, *Goldschmidt Conference*, 2017.
 40. Chakraborty, T., **Upadhyay, D.**, Pruseth, K.L. Crustal accretion across the Central Indian Tectonic Zone: constraints from the Gangpur Schist Belt, India, *Goldschmidt Conference*, 2017.
 41. Parihar, R., Pruseth, K.L., **Upadhyay, D.** Textural sector zoning in garnet: a result of pseudomorphic replacement of carbonates, *Goldschmidt Conference*, 2017.
 42. Maltese, A., Mezger, K., **Upadhyay, D.** Relics of pristine Paleoproterozoic continental crust: Granitoids from the Bastar Craton, India, *Goldschmidt Conference*, 2017.
 43. Pandey, O.P., Mezger, K., **Upadhyay, D.**, Villa, I.M., Archean crust-mantle evolution: constraints from the Singhbhum Craton, eastern India, *Goldschmidt Conference*, 2017.
 44. Magna, T., Wittke, A., Gussone, N., Rappich, V., **Upadhyay, D.** Calcium isotope composition of carbonatites—a case study of Sevattur and Samalpatti, S India, *Goldschmidt Conference*, 2017.
 45. Sláma, J., Haluzová, E., Ackerman, L., Magna, T., Rappich, V., Kochergina, Y.U., **Upadhyay, D.** Hafnium isotope systematics of carbonatites and alkaline silicate rocks from Tamil Nadu, S India, *Goldschmidt Conference*, 2017.
 46. Abhinay, K., **Upadhyay, D.** Lithium isotope measurement in solution and using laser ablation technique: ion-exchange column chromatographic separation and measurement protocols, *Geological Society of India AGM, Kharagpur 2016*.
 47. Ranjan, S., **Upadhyay, D.** In-situ U-Pb dating of zircon using LA-ICPMS: data acquisition and processing protocols and results of dating zircon reference materials, *Geological Society of India AGM, Kharagpur 2016*.
 48. Chakraborty, T., **Upadhyay, D.** The metamorphic evolution of the Gangpur Schist Belt, *Geological Society of India AGM, Kharagpur 2016*.
 49. Mondal, S., **Upadhyay, D.** REE mineralization within the Malani Igneous Suite, *Geological Society of India AGM,*

Kharagpur 2016.

50. Baidya, A.S., Sen, A., Pal D.C., **Upadhyay, D.** Mode of occurrences, textures and major (EPMA) and trace element (LA-ICPMS) geochemistry of pyrite from the Madan-Kudan copper deposit, Khetri Copper Belt, Rajasthan, India: clues to the ore-forming process, *Geological Society of India AGM, Kharagpur 2016*.
51. Maltese, A., Mezger, K., Pandey, O.P., **Upadhyay, D.** Zircon U-Pb ages from the Bastar Craton, central India: A Paleoproterozoic patchwork terrane, *14th Swiss Geoscience Meeting, Geneva 2016*.
52. Pandey, O.P., Mezger, K., **Upadhyay, D.** Mafic dyke swarms in global geodynamics: Examples from Singhbhum and Bastar cratons, India, *14th Swiss Geoscience Meeting, Geneva 2016*.
53. Kopačková, V., Rappich, V., Magna T., Mišurec J., Roggas C., Krátký O., **Upadhyay, D.** Application of Remote sensing applied in surveying for REE-rich carbonatites in Tamil Nadu (Southern India), *International Geologic Congress-35, Cape Town*.
54. Polák L., Ackerman L., Rappich, V., Magna, T., **Upadhyay, D.** Highly siderophile element (HSE) geochemistry of carbonatites and associated alkaline rocks from Tamil Nadu, India, *Goldschmidt Conference, 2016*.
55. Singh, A.K., **Upadhyay, D.**, Pruseth, K.L. Fe-concretions from Jaisalmer, India: possible analogue of Martian blueberries, *Goldschmidt Conference, 2016*.
56. Sahoo, D., Pruseth, K.L., **Upadhyay, D.**, Pal, D.C., Banerjee, R., Gupta, S. Na-metasomatism and U mobilization in the Palnad basin, Andhra Pradesh, India: implication for U-transport in Na-zirconosilicate complexes, *Goldschmidt Conference, 2016*.
57. Haloda, J., Magna, T., Rappich, V., **Upadhyay, D.** Element flows during fenitization of amphibole-rich pyroxenite by carbonatite intrusion, *Goldschmidt Conference, 2015*.
58. **Upadhyay, D.**, Chattopadhyay, S., Nanda, J.K., Mahapatro, S.N., Pruseth, KL. Grenville-age suturing of the Eastern Ghats Province with the Paleoproterozoic Singhbhum Craton, *XII International Symposium on Antarctic Earth Sciences, Goa, India, 2015*
59. Chattopadhyay, S., **Upadhyay, D.**, Scherer, E.E., Mezger, K. Geochronology and geochemistry of Paleoproterozoic TTGs from the Singhbhum Craton, India, *Goldschmidt Conference, 2015*.
60. Ray, D., Misra, S., Newsom, H., **Upadhyay, D.** LA-ICP-MS trace element geochemistry of sub-millimeter sized impact spherule from Lonar crater, India, *Lunar and Planetary Science Conference, 2015*.
61. Birmingham, K.R., Mezger, K., Scherer, E.E., Carlson, R., Horan, M., **Upadhyay, D.**, Magna, T., Pack, A. Barium Isotope Abundances in Meteorites: Implications for early solar system evolution, *Lunar and Planetary Science Conference, 2013*.
62. Raith, M.M., Srikantappa, C., Sengupta, P., Kooijman, E., **Upadhyay, D.** Vapour phase-absent muscovite-melting in silica-undersaturated aluminous rocks: a textbook example from the Southern Granulite Terrain, India, *Granulites and granulites conference, 2009*.
63. **Upadhyay, D.**, Scherer, E.E., Mezger, K. ¹⁴²Nd evidence for an enriched Hadean reservoir in the root of the Bastar craton (India), *Goldschmidt Conference, 2009*.
64. Kooijman, E., **Upadhyay, D.**, Mezger, K., Raith, M.M., Berndt, J. The effects of ultrahigh temperature metamorphism on the U-Pb systematics in zircon, *Goldschmidt Conference, 2009*.
65. Sprung, P., Scherer, E.E., **Upadhyay, D.**, Mezger, K., Bischoff, A. Is the Solar System non-radiogenic Hf isotope composition uniform? *Goldschmidt Conference, 2009*.
66. Schulz, T., **Upadhyay, D.**, Mezger, K., Münker, C., Palme, H. Neutron capture-induced Sm isotope anomalies in IAB and IIE silicate inclusions and Winonaites, *Paneth Kolloquium, 2008*.
67. **Upadhyay, D.**, Scherer, E.E., Mezger, K., Bischoff, A. P-process nebular heterogeneity in Sm and Nd isotopes: evidence from chondritic meteorites, *Paneth Kolloquium, 2008*.
68. Kooijman, E., **Upadhyay, D.**, Berndt, J., Mezger, K., Srikantappa, C. The behavior of the U Pb system and trace elements in zircon during contact metamorphism: a case study from the Kadavur anorthosite complex, SE India, *Deutsche Mineralogisch Gesellschaft Meeting, 2008*.
69. **Upadhyay, D.**, Mezger, K. P-process Sm and Nd isotope variations in chondritic meteorites, *Deutsche Mineralogisch Gesellschaft Meeting, 2008*.
70. **Upadhyay, D.**, Mezger, K. Nucleosynthetic and neutron capture-induced Sm isotope anomalies in chondrites, *Lunar and Planetary Science Conference XXXIX, 2008*.
71. Schulz, T., **Upadhyay, D.**, Mezger, K., Münker, C., Palme, H. Neutron capture-induced ¹⁵⁰Sm anomalies in IAB iron meteorites and winonaites, *Goldschmidt Conference, 2007*.

72. **Upadhyay, D.**, Scherer, E.E., Mezger, K. Nd isotope mixing during thermal ionization mass spectrometry and implications for ¹⁴²Nd anomalies, *Goldschmidt Conference*, 2007.
73. **Upadhyay, D.**, Raith, M.M. Mesoproterozoic rifting in SE India: evidence from alkaline magmatism along the Eastern Ghats front, *Deutsche Mineralogisch Gesellschaft Meeting*, 2005.
74. **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	Topic / 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 Paleoproterozoic and Neoproterozoic crust of the Singhbhum Craton, Eastern India, Geological Society of India, Monthly Scientific Lecture, Bengaluru	2016
Invited seminar	Recent Trends in Isotope Geochemistry, Physical Research Laboratory, Ahmedabad	2016
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	<i>Metamorphism to the Extremes: Decoding Orogenic Processes-Goldschmidt Conference, 2022 Hawaii</i>	2022

Citations

Google scholar: 2030

Scopus: 1748

h-index: 27

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

Kharagpur, 11th January, 2023

(Dewashish Upadhyay)