

## Kumaun University, Nainital

### Curriculum Vitae

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Name : Deepa Arya  
Designation : Assistant Professor  
Department : Geology Department  
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#### Educational Qualification

Degree	University	Subjects	Year
B.Sc.	Kumaun University Nainital	Zoology, Geology, IT	2005
M.Sc.	Kumaun University Nainital	Geology	2007
Ph.D.	Kumaun University Nainital	Geology	2018

#### Work Experience

Position	Department	University/Organization	Year
MHRD-Fellow	Geology	IIT-Roorkee	2009
CSIR-JRF	Geology	IIT-Bombay	2010

#### Administrative Responsibilities

Position	Nature of responsibility	University/Organization	Year
Member	Admission Committee	Kumaun University Nainital	2011-2023
Member	Examination control	Kumaun University Nainital	2020
Member	Grievance Cell	Geology Department	2011-2023

#### Research Interests

Igneous petrology, magma chamber dynamics, mantle geochemistry, phase equilibria studies, ore and mineralization, fluid inclusion studies and microthermometry, isotope studies.

## Publications

### a) Research Papers

S. No.	Author's Name	Name of the Journal (Volume no. and Page no.)	Thomson Reuters Impact Factor of the Journal	Sl. no. of the Journal in the list of UGC/UGC- CARE	Title of the Paper
1.	Deepa Arya, Saurabh Gupta, Santosh Kumar, Igor Broska, Tomas Vaculovic	Journal Geological Society of India Vol.93, March 2019, pp.257-262	1.459	116	Morphology and Chemistry of Zircons from the Paleoproterozoic Cu ( $\pm$ Mo $\pm$ Au) Hosting Granitoids of Malanjkhanda Mine Area, Central India
2.	Deepa Arya, Gajendra Kumar, Saurabh Gupta, Santosh Kumar, Kapil S. Panwar, Deepti, G.L. Sindhupe, R.M. Khan	Journal of Geosciences Research, Vol. 3, No.2, July, 2018, pp. 121-132	1.2	238 ISSN, 2455-1953	Geochemistry and Petrogenesis of Mafic Dykes in Paleoproterozoic Cu( $\pm$ Mo $\pm$ Au) Hosting Granitoids at Malanjkhanda Mine Area, Central India
3.	Deepa Arya	Journal of Geosciences Research	1.2	238 ISSN, 2455-1953	Petrographical Evolution of Jhiroli Magnesite Deposit, Inner Lesser Himalaya, Bageshwar, Uttarakhand India: Implication on low Grade Metamorphic Ores
4.	Deepa Arya, Deewakar Bawari	Journal of Geosciences Research	1.2	238 ISSN, 2455-1953	Field and Petrographical Appraisal of Dyke Exposure at Kilbury Range in Krol Nappe, Kumaun Lesser Himalaya, Nainital, India
5.	Deepa Arya, Saurabh Gupta, Santosh Kumar, Xisheng Xu	Lithos Volumes 402- 403, 15 nov.2021, 106153 (IF4.004), 2021-04-09, DOI: 10.1016/j.lithos.2021.1 06153	4.37	0024-4937	Geochemistry and U-Pb-Lu-Hf zircon isotopes of Cu ( $\pm$ Au $\pm$ Mo) hosted granitoids of Malanjkhanda pluton, Central India: Implications on petrogenesis, source and crustal evolution.
6.	Deepa Arya	Journal of Geosciences Research	1.2	238 ISSN, 2455-1953	Magnetic susceptibility studies of unmineralized granitoids of Malanjkhanda- Central India

### b) Book chapters

S. No.	Title of the Book	ISBN No.	Author's Name	Publisher Name	If Chapter (page no.)
1.	Geology and natural resources of Himalaya	978-93-83247- 95-0	Deepa Arya	ASR Publications, Lucknow	304-309
2.	National workshop Volume 'Landslides' Paper	978-93-82171- 31-7	Deepa Arya	Pratyush Publications, New Delhi	130-136
3.	National workshop Volume 'Landslides' Paper	978-93-82171- 31-7	Deepa Arya	Pratyush Publications, New Delhi	37-44
4.	Traditional farming and climate	978-93-95218- 92-4	Deepa Arya	ASR Publication	In press

### c) Conference Publications/Proceedings

S. No.	Name of the title of event (Conference/workshop/seminar/training program)	Place organized at	Date & Duration of the event	Title of the paper if presented
1.	Workshop on Gemstones: Their Gemmology and Geology	Department of Geology, University of	21-22, February, 2011	Gemstones: Their Gemmology and

		Jammu, Jammu		Geology
2.	Government of India sponsored advanced field training programme	Regions of Leh-Ladakh Himalaya	1-15, August, 2011	Major Tectonics and Lithounits in Indus and Shyok Suture Zones of Ladakh Himalaya
3.	National Seminar on Geology and Georesources of Himalaya and Cratonic regions of India	Department of Geology, Centre of Advanced Study Kumaun University, Nainital	10-12 March, 2012	Constraining the origin of Malanjkhanda copper deposit, Central India: A new model in favour of porphyry type.
4.	National Seminar on Geology, Biodiversity and Natural Resources of Himalaya and their Intellectual Property Law (2012)	L.S.M. Government P.G. College, Pithoragarh, Uttarakhand	14-15 October, 2012	Possible role of microgranular enclave in the origin of Malanjkhanda copper deposit, Central India.
5.	International Seminar on Magmatism, Tectonism and Mineralization (MTM-2014)	Department of Geology, Centre of Advanced Study Kumaun University, Nainital	27-29 March, 2014	Variation in granitoids at Malanjkhanda copper deposit, Central India: Implication to infer granitoid type responsible for copper mineralization.
6.	Tier II Training Programme, Government of India, Ministry of water resources, River development and Ganga rejuvenation	Department of Geology, Centre of Advanced Study Kumaun University, Nainital	12-16 October, 2015	Training course on Water quality issues/ Water stressed areas
7.	Seminar cum workshop on Recent Advances in the Indian Earth Sciences	Department of Geology, Centre of Advanced Study Kumaun University, Nainital	25-26 March, 2019	Recent Advances in the Indian Earth Sciences
8.	One day awareness programme	UGC-HRDC, Kumaun University, Nainital	12 <sup>th</sup> July, 2019	Importance of Intellectual Property Rights
9.	International AvH Kolleg Limit-2019	Uttarakhand Academy of Administration, Nainital	25 <sup>th</sup> -27 <sup>th</sup> September, 2019	Climate, Water and Environment (Limit-2019)
10.	9 <sup>th</sup> Hutton Symposium Granites and Related rocks	School of Earth Sciences and Engineering, Nanjing University, Nanjing, China	13 to 18 <sup>th</sup> October, 2019	Geochemistry, zircon U-Pb chronology and Lu-Hf isotopes of granitoids from Malanjkhanda pluton, Central India: Implication on petrogenesis, mineralization and crustal growth (Accepted)

### Projects

Title of the project	Funding agency	Amount (Rs)	Year
1. Geochemistry of Hydrous Ferromagnesian minerals from mineralized and Barren Granitoids of Malanjkhanda region, Central India: Implication on	UGC	1.67 Lacs	2012-2014

Appraisal and Nature of copper deposits. UGC Minor project 2012-2014 (Completed).			
2. Petrochronology of Askot polymetallic deposit and its host granite gneiss Kumaun Lesser Himalaya: Implication on mineralization, magmatism and crustal evolution. File Number: SUR/2022/002664 has been approved by SERB SURE in the current year.	SERB-SURE	26,94,780 INR	2022-2025
3. Mineralogy and petrology of mafic dyke rocks, Nainital district, Kumaun Lesser Himalaya. Kumaun University, Nainital (Ongoing).	Kumaun University, Nainital	2.00 Lacs	2023

### Teaching details

Name of the course/paper	Department	University	Year
Physical Geology/ B.Sc. I Semester/ Paper-I	Geology	Kumaun University	2016-2017
Stratigraphy/ B.Sc. IV Semester	Geology	Kumaun University	2018-2021
Stratigraphy/ B.Sc. II Year/ Paper-II	Geology	Kumaun University	2014-2020
Economic geology/ B.Sc. III Year/ Paper-I, B.Sc.V Semester	Geology	Kumaun University	2011-2024, 2018-2024
Economic geology and mineral exploration/ B.Sc.V Semester	Geology	Kumaun University	2022
Environmental Geology/ B.Sc. III Year, B.Sc.V Semester	Geology	Kumaun University	2012-2024, 2018-2024
Elements of mineral exploration/ B.Sc. VI Semester	Geology	Kumaun University	2019-2020
Environmental Geology/ B. Sc.VI Semester	Geology	Kumaun University	2019-2024
Stratigraphy/ B.Sc. IV Semester	Geology	Kumaun University	2019-2020
Metamorphic Petrology/ B.Sc. III Semester	Geology	Kumaun University	2020-2021
Igneous and Metamorphic Petrology/ B.Sc. III Semester	Geology	Kumaun University	2021-2022
Metamorphic geology/M.Sc. I Semester	Geology	Kumaun University	2018-2020
Economic Geology/M.Sc. II Semester	Geology	Kumaun University	2011-2024
Stratigraphy/M.Sc. II Semester	Geology	Kumaun University	2012-2024

Mineral Exploration/ M.Sc. III Semester	Geology	Kumaun University	2012-2024
Mineral Exploration and Economics/ M.Sc. IV Semester	Geology	Kumaun University	2017-2019
Research methodology/ Paper-I	Ph.D.	Kumaun University	2024

### Honours and Awards

Award	Awarding Organization	Year
INSA Visiting scientist fellowship	Indian National Science Academy	2014-2015
CSIR-NET (JRF)	CSIR	2009 December
NET-Lectureship	CSIR	2009 June
MHRD-Fellowship	IIT-Roorkee	2009

### Conference Presentations

S. No.	Name of the title of event (Conference/workshop/seminar/training program)	Place organized at	Date & Duration of the event	Title of the paper if presented
1.	National Seminar on Geology and Georesources of Himalaya and Cratonic regions of India	Department of Geology, Centre of Advanced Study Kumaun University, Nainital	10-12 March, 2012	Constraining the origin of Malanjkhanda copper deposit, Central India: A new model in favour of porphyry type.
2.	National Seminar on Geology, Biodiversity and Natural Resources of Himalaya and their Intellectual Property Law (2012)	L.S.M. Government P.G. College, Pithoragarh, Uttarakhand	14-15 October, 2012	Possible role of microgranular enclaves in the origin of Malanjkhanda copper deposit, Central India.
3.	International Seminar on Magmatism, Tectonism and Mineralization (MTM-2014)	Department of Geology, Centre of Advanced Study Kumaun University, Nainital	27-29 March, 2014	Variation in granitoids at Malanjkhanda copper deposit, Central India: Implication to infer granitoid type responsible for copper mineralization.
4.	Seminar cum workshop on Recent Advances in the Indian Earth Sciences	Department of Geology, Centre of Advanced Study Kumaun University, Nainital	25-26 March, 2019	Recent Advances in the Indian Earth Sciences
5.	International AvH Kolleg Limit-2019	Uttarakhand Academy of Administration, Nainital	25 <sup>th</sup> -27 <sup>th</sup> September, 2019	Climate, Water and Environment (Limit-2019)
6.	9 <sup>th</sup> Hutton Symposium Granites and Related rocks	School of Earth Sciences and Engineering, Nanjing University, Nanjing, China	13 to 18 <sup>th</sup> October, 2019	Geochemistry, zircon U-Pb chronology and Lu-Hf isotopes of granitoids from Malanjkhanda pluton, Central India: Implication on petrogenesis, mineralization and crustal growth
7.	10 <sup>th</sup> Hutton Symposium Granites and Related rocks	Baveno, Italy	10 <sup>th</sup> to 15 <sup>th</sup> September 2023	Ore forming fluids of the Malanjkhanda copper deposit, Central India: Evidence from fluid inclusions and Raman Spectroscopy.
8.	Goldschmidt 2023	Lyon (France)	10 <sup>th</sup> to 14 <sup>th</sup> July 2023	Quantification of physio-chemical

				environment, nature of magmatism and mineralization of Paleoproterozoic Malanjkhanda Cu-deposit, Central India: Constraints from phase petrology of barren and mineralized granitoids.
9.	Global paradigm shift, Initiatives of India in Science, Education, Technology, Business and Climate	Veer Wajekar Arts, Science and Commerce College	10 <sup>th</sup> January 2024	Geochemistry of Lansdowne granite and gneiss, Garhwal lesser Himalaya, Uttarakhand, India
10.	Advances in geology & geo-resources of northwestern Indian block	University of Rajasthan	23-24 September 2022	Field appraisal of Jaiharikhal-Lansdowne granite Garhwal lesser Himalaya, Uttarakhand, India



**Signature of the faculty member**