

Dr. SATYABRATA BEHERA (BIO-DATA)

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3. Institution: Ravenshaw University, Cuttack, Odisha
4. Date of Birth: 26/06/1993
5. Gender (M/F/T): Male
6. Category Gen/SC/ST/OBC: OBC
7. Whether differently abled (Yes/No): No
8. Academic Qualification (Undergraduate Onwards)

	Degree	Year	Subject	University/Institution	% of marks
1.	Ph.D.	2022	Geology	IIT Kharagpur, Department of Geology and Geophysics	NA
2.	M.Sc.	2015	Geology	Ravenshaw University, Cuttack, Odisha	85%
3.	B.Sc.	2013	Geology Honours	M.P.C. Autonomous College, North Orissa University, Odisha	Honours: 90.63% Aggregate: 83.78%

9. Ph.D. thesis title, Guide's Name, Institute/Organization/University, Year of Award.
Ph.D. thesis title: "Gold prospectivity mapping and exploration targeting in Sonakhan and Hutti-Maski greenstone belts, India"
Guide's Name: Prof. Mruganka Kumar Panigrahi
Institute: IIT Kharagpur, Department of Geology and Geophysics
Year of Award: 2022

10. Work experience (in chronological order).

S.No.	Positions held	Name of the Institute	From	To	Pay Scale
1	Teaching Assistant	IIT Kharagpur, Department of Geology and Geophysics	2021, January	2021, December	15,000 per month
2	Teaching Assistant	MHRD sponsored MOOC (massive open online courses) project for the NPTEL (SWAYAM) course “Fluid Inclusion in Mineral Principles, Methodology, Practice and Application”	2018, August	2018, September	25,000 per month
3	Teaching Assistant	MHRD sponsored MOOC (massive open online courses) project for the NPTEL (SWAYAM) course “Mineral Resources: Geology, Exploration, Economics and Environment”	2018, January	2018, April	25,000 per month

11. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

S.No.	Name of Award	Awarding Agency	Year
1	Best poster award	ESRI India User Conference, Kolkata	2019
2	Junior Research Fellowship and Senior Research Fellowship	IIT Kharagpur (through the MHRD, Government of India)	(2015, December - 2020, December)
3	Qualified Joint CSIR-UGC Test for JRF and NET in the subject Earth, Atmospheric, Ocean, and Planetary Sciences	Council of Scientific & Industrial Research	2016, June
4	Qualified GATE in the subject Geology and Geophysics	All India Council for Technical Education (AICTE), Ministry of Human Resource Development (MHRD)	2015
5	Best graduate in B.Sc. Geology	M.P.C. Autonomous College, North Orissa University, Odisha	2013

12. Publications (*List of papers published in SCI Journals, in year wise descending order*).

S.No.	Author(s)	Title	Name of Journal	Volume	Page	Year
1	Behera, S. and Panigrahi, M.K.	Gold prospectivity mapping and exploration targeting in Hutti-Maski schist belt, India: Synergistic application of Weights-of-Evidence (WOE), Fuzzy Logic (FL) and hybrid (WOE-FL) models.	Journal of Geochemical Exploration	235	1-29	2022
2	Behera, S. and Panigrahi, M.K.	Gold Prospectivity Mapping in the Sonakhan Greenstone Belt, Central India: A Knowledge-Driven Guide for Target Delineation in a Region of Low Exploration Maturity	Natural Resources Research	30(6)	3925 - 3953	2021
3	Behera, S. and Panigrahi, M.K.	Mineral prospectivity modelling using singularity mapping and multifractal analysis of stream sediment geochemical data from the auriferous Hutti-Maski schist belt, S. India	Ore Geology Reviews	131	1-21	2021
4	Behera, S., Panigrahi, M. K., and Pradhan, A.	Identification of geochemical anomaly and gold potential mapping in the Sonakhan Greenstone belt, Central India: An integrated concentration-area fractal and fuzzy AHP approach	Applied Geochemistry	107	45-57	2019

13. Books/Reports/Chapters/General articles etc.

S.No	Title	Author's Name	Publisher	Year of Publication
1	Mineral Exploration: Integrating Remote Sensing, GIS, AI and Seismic Methods. In <i>Remote Sensing for Geophysicists</i> . (ISBN: 9781032778921)	Behera, S., Pattnaik, J., & Mohanty, D.D.	CRC Press - Taylor & Francis	2024
2	Remote Mapping of Clay Alteration Zones in moderately vegetated Terrane using Landsat ETM + Data: A Case Study from Sonakhan Greenstone Belt, Central India	Behera, S.	GEOS Annual Edition, 17, pp.50-55 (Published by Earth Science Study Circle (ESSC), Department of Geology and Geophysics, IIT Kharagpur	2019

14. Any other Information

Dr. Satyabrata Behera holds the post of Assistant Professor in the Department of Geology, Ravenshaw University. During his doctoral program, Dr. Behera worked on a challenging area of mineral exploration, taking two important gold localities (Sonakhan and Hutti) in India as case studies. His research mainly focuses on developing effective approaches to improve the exploration effort for precious, essential, critical and strategic minerals in our country. His primary research interests are in Mineral Exploration with a holistic approach and incorporating techniques of Prospectivity Mapping, Mineral Systems Analysis, Fractal Analysis, Geologic Remote Sensing and GIS. Over the past couple of years, he has been working on machine learning approaches such as neural networks, support vector machines, random forests, etc. and applying them to exploration data for effective interpretation and extract meaningful information. Dr. Behera is a Life Member of Geological Society of India and Earth Science Study Circle (ESSC), Department of Geology and Geophysics, IIT Kharagpur. He used to be a Student Member in American Geophysical Union (2018-19) and European Geosciences Union (2020, ID 545289). He has presented his research findings at many international and national conferences. Dr. Behera has published the results of his research in reputed international journals in the field of mineral exploration, an area in which there is a rare contribution from academia.

Link to the Profile: https://ravenshawuniversity.ac.in/?page_id=42714

REFEREES

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