Curriculum Vitae

Dr. KALYANBRATA HATUI

Assistant professor, Department of Civil Engineering, NITK Surathkal, Mangalore-575025

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Education

Ph.D., Geological Sciences **2021**

University of Delhi, North Campus, Delhi, India

Topic: Structural, metamorphic and geochronological study of Delhi Supergroup rocks from Kumbhalgarh-Sayra-Ranakpur area, Rajasthan: Implications for the tectonic evolution of South Delhi Fold Belt

Supervisor: Prof. Anupam Chattopadhyay

Master of Science, Applied Geology **2014**

Presidency University, Kolkata, India
Sessional Grade Point Average (SGPA): 7.80

Dissertation: Petrography and Geochemistry of Mafic Rocks in and around Sati and Saraspada, North of Bisoi, Mayurbhanj District, Orissa, India

Supervisor: Prof. Arijit Ray

Bachelor of Science, Geology (Honors) **2012**

Presidency College (affiliated to University of Calcutta), Kolkata, India
First division and Qualified with Honors

Summer Project: A Study of Geomorphic Parameters of The Upland Catchment Basin of Tista River using GIS-RS Techniques

Advisor: Prof. Parthasarathi Ghosh, Indian Statistical Institute, Kolkata, India

Software and Machinery Skills

- **Software Exposure:** ArcGIS/QGIS, AutoCAD, SNAP 8.0, CorelDRAW Graphics Suite, Python, Interdex 8.0, GEOrient, GeoRose, Grapher 7.0 and other common software
- **Sophisticated Instruments Operated:** Nikon, Leica and Olympus Optical Systems
- **Experimental Structural Geology Apparatus:** Sand Box Model, Shear Apparatus etc.
- **Industrial Training:** Petroleum Exploration at Oil and Natural Gas Corporation Limited (ONGC), Kolkata, 2014

Experience in Industry and Academics

Assistant Professor **December 2024 to present**

Department of Civil Engineering
National Institute of Technology Karnataka (NITK Surathkal)

Post-Doctoral fellow **March 2024 to Dec'24**

Department of Earth Sciences
Indian Institute of Technology, Kanpur (IIT Kanpur)

Assistant Manager – Geologist **March 2023 to March 2024**

Rashmi Group, Ideal Center, 9, Acharya Jagadish Chandra Bose Rd, Kolkata-17

- Geological mapping of the mafic and ultramafic rocks of CGC rocks
- Advising managerial, technical, and engineering staffs during drilling activities

Gold Exploration Geologist **June 2022 to March 2023**

Kundan Group, 2nd Floor, Scindia House, 3, Janpath, Connaught Place, Delhi

- Surveying and mapping geologically promising gold mineralization sites
- Collecting and recording samples and data
- 3D modelling and preparing reports

Assistant Professor **March 2021 to May 2022**

Department of Earth Sciences and Environment, Manav Rachana International Institute of Research and Studies, Faridabad, India

Course: Structural Geology, Metamorphic Petrology, Mineralogy and Crystallography

Teaching Assistant **July 2017 – June 2020**

Department of Geology, University of Delhi, Delhi, India
Course: Structural Geology and Tectonics (Undergraduate and Postgraduate)

Project Fellow **June 2014 to January 2015**

Presidency University, Kolkata, India

Project: Monogenetic mantle xenolith bearing alkali basalic lava field from Kutch basin, Gujarat, western India: Estimation of magma ascent rate and time from study of mantle xenoliths and xenocrysts

Advisor: Prof. Arijit Ray

Area of Interest

- Structural Geology and Analogue Modelling
- Geological Mapping and Field Geology
- Metamorphic Petrology
- Remote Sensing and GIS

Academic Achievements and Activities

- **Member of organizing team,** 5th conference on Rock Deformation and Structures (RDS-V) under the aegis of *Structural Geology and Tectonics Studies Group of India (SGTSGI)*, held at Department of Geology, University of Delhi in the year 2018
- Qualified **Joint CSIR-UGC NET** (National Eligibility Test for Assistant Professor) with **AIR 97** in 2022
- **INSPIRE Fellowship 2015**, Department of Science and Technology, Government of India
- **West Bengal State Scholarship 2012,** Government of West Bengal, India
- **INSPIRE Scholarship 2011**, Department of Science and Technology, Government of India
- **West Bengal State Scholarship 2009,** Government of West Bengal, India

Scientific Research Publications (In Peer-reviewed Journals)

Hatui, K., Chattopadhyay, A., Soto, H., Das, K., & Bhowmik, S. K. (2024). Pulsating orogenesis and Neoproterozoic crustal architecture in the western part of Aravalli-Delhi Mobile belt, India: new evidence from structural, metamorphic, and U-Pb zircon geochronological data. ***International Geology Review*****,** 1-29. https://doi.org/10.1080/00206814.2024.2393637

Hatui, K., & Chattopadhyay, A. (2020). Modification of pre-existing folds in a shear zone: a case study from Kumbhalgarh-Ranakpur area, South Delhi Fold Belt, Rajasthan, India. ***Journal of Earth System Science***, 129 (1). https://doi.org/10.1007/s12040-020-01395-z

Ghosh, N., **Hatui, K.**, & Chattopadhyay, A. (2020). Evolution of fault patterns within a zone of pre-existing pervasive anisotropy during two successive phases of non-coaxial extension: an experimental study. ***Geo- Marine Letters***. https://doi.org/10.1007/s00367-019-00627-6

Ghosh, N., **Hatui, K.**, & Chattopadhyay, A. (2019). Propagation and coalescence of en-echelon cracks under a far-field tensile stress regime: An experimental study. ***Journal of Earth System Science***, 128(2), 23. https://doi.org/10.1007/s12040-018-1056-7

Ray, A., **Hatui, K.**, Paul, D. K., Sen, G., Biswas, S. K., & Das, B. (2016). Mantle xenolith-xenocryst-bearing monogenetic alkali basaltic lava field from Kutch Basin, Gujarat, Western India: estimation of magma ascent rate. ***Journal of Volcanology and Geothermal Research***, 312, 40-52. https://doi.org/10.1016/j.jvolgeores.2016.01.015

Selected Conference Abstracts:

Hatui, K., Chattopadhyay, A., Das, K., & Bhowmik, S. K. (2021). Transpressional deformation and granite magmatism in the South Delhi Fold Belt during Neoproterozoic: new evidences from the Kumbhalgarh-Sayra-Ranakpur area, Rajasthan, India. **6th conference on Rock Deformation and Structures (RDS-VI), under the aegis of Structural Geology and Tectonics Studies Group India (SGTSGI)** at Department of Geology, Central University of Kerala, India. Abstract Volume, 29.

Hatui, K., & Chattopadhyay, A. (2020). Modification of pre-existing folds and foliations in a shear zone: example from the Ranakpur Shear Zone, South Delhi Fold Belt, Rajasthan, India. ***36th International Geological Congress 2020 (IGC 2020),*** Delhi, India (Accepted).

Hatui, K., Chattopadhyay, A., & Das, K. (2020). Structural Evolution of South Delhi Fold belt through geological mapping, geochronology and metamorphic study in and around Kumbhalgarh and Ranakpur area, Rajasthan, western India. **IUGS-TecTask Workshop** entitled "Structural Geology in the 21st century", IIT Kharagpur, India. Abstract volume, 55.

Das, K., **Hatui, K.,** & Chattopadhyay, A. (2019). Geochemistry and U-Pb zircon geochronology of pre- to post-tectonic granite emplacement across the South Delhi Fold belt, India: Implication towards the age of transpressive orogeny. ***Annual Meeting of Japan Association of Mineralogical Sciences***.

Hatui, K., & Chattopadhyay, A. (2018). Structural analysis of Ranakpur Shear Zone and South Delhi rocks in and around Kumbhalgarh and Ranakpur area, Rajasthan, western India. ***5th conference on Rock Deformation and Structures (RDS-V), under the aegis of Structural Geology and Tectonics Studies Group India (SGTSGI)*** at Department of Geology, University of Delhi, India.

Roy, S., **Hatui, K.,** Ghosh, N., & Chattopadhyay, A. (2018). Fault patterns produced during two successive phases of rifting within a mechanically anisotropic zone: an experimental study. ***5th conference on Rock Deformation and Structures (RDS-V), under the aegis of SGTSGI)*** at the Department of Geology, University of Delhi, Delhi, India. Abstract Volume, 72-73.

Hatui, K (2016). Meso-and micro- structures and Metamorphism from South Delhi Fold Belt, Rajasthan, India: An analysis. ***Annual General Meeting of The Geological Society of India,*** IIT Kharagpur, India. Abstract Volume, 227.

Hatui, K (2016). Polyphase folding and ductile shearing in South Delhi Fold Belt (SDFB): preliminary structural analysis from Ranakpur- Kumbhalgarh area, Southwestern Rajasthan, India. **National Geo-Research Scholars Meet**, Wadia Institute of Himalayan Geology, Dehradun, India. Abstract Volume, 52.