Curriculum Vitae

Dr. THUNGYANI N. OVUNG

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EDUCATION

University of Calcutta, West Bengal, India

Ph.D. (Geology) specialized in igneous petrology and geochemistry. Awarded 29th May, 2019. Dissertation: Petrology of the igneous members of the Manipur Ophiolite Belt, Jessami-Moreh areas, Northeastern India.

Gauhati University, Assam, India **M.Sc** in Geology (CGPA 8.2/10), August 2011. **B.Sc** in Geology (Percentage 67.1), July 2009.

RESEARCH AND TEACHING INTERESTS

- Mantle metasomatisms
- Behavior of incompatible elements of the crustal rocks
- Melt modifications in subduction zones
- Origin of mantle and crustal rocks in back-arc basins
- Nickel-mineralization in serpentinites
- Neo-Tethyan ophiolites

RESEARCH EXPERIENCES

University Research Fellow at University of Calcutta, India. July 2015-July 2018.

- Deciphering the extent and source of mantle melting of the Indo-Myanmar Range ophiolites.
- Studying the behavior of LILEs and LREEs in the crustal rocks to understand the role of subduction components in melt modifications.
- Sr-Nd isotopic studies of the crustal rocks of Manipur ophiolite using TIMS to constrain the source of the magma.
- Mineralogical study of the peridotites and volcanics of Manipur ophiolite using EMPA.
- Extensive field studies of the ophiolitic rocks of eastern Himalayas and Indo-Myanmar Ranges.
- Paper publications.

Research Fellow, Department of Science and Technology -funded project. November 2012-March 2015.

- Sample preparation for whole-rock analyses of mantle and crustal rocks of Manipur ophiolite.
- Detailed petrographic and mineralogical studies of peridotites.
- Field work in the Indo-Myanmar Ranges.

TEACHING EXPERIENCES

Assistant Professor at Department of Geology, Banaras Hindu University, Varanasi, UP, India. From Jan 2020 till May 2020 Taught Mineralogy and Ore Geology

Assistant Professor at Department of Geology, Patkai Christian College (Autonomous), Nagaland, India. From July 2018-December 2018.

Taught Igneous petrology and Economic Geology.

PEER-REVIEWED PUBLICATIONS

Thungyani N. Ovung, Biswajit Ghosh, Jyotisankar Ray (2020) Petrogenesis of the Neo-tethyan ophiolites in the Indo-Myanmar Ranges: A review. International Geology Review doi.org/10.1080/00206814.2020.1775137

Thungyani N. Ovung, Jyotisankar Ray, Biswajit Ghosh, Christian Koeberl, Dan Topa, Madhuparna Paul (2018) Clinopyroxene composition of volcanics from the Manipur Ophiolite, Northeastern India: implications to geodynamic setting. International Journal of Earth Sciences vol 107(4), p. 1215-1229.

Thungyani N. Ovung, Jyotisankar Ray, Xueming Teng, Biswajit Ghosh, Madhuparna Paul, Proloy Ganguly, Saradee Sengupta, Supriyo Das (2017) Mineralogy of the Manipur Ophiolite Belt, Northeast India: implication for mid-oceanic ridge and supra-subduction zone origin. Current Science, vol.112 (10), p. 2122-2128.

Thungyani N. Ovung, Jyotisankar Ray, Biswajit Ghosh, Debabrata Mandal, Pallab Dasgupta, Madhuparna Paul. (2017) Occurrence of népouite in the serpentinite of the Manipur Ophiolite Belt, Northeastern India: implication for melt-rock interaction in a supra-subduction zone. Journal Geological Society of India, vol.90(2), p.154-158.

Biswajit Ghosh, Tomoaki Morishita, Jyotisankar Ray, Akihiro Tamura, Tomoyuki Mizukami, Yusuke Soda, **Thungyani N. Ovung** (2017) A new occurrence of titanian (hydro) andradite from the Nagaland Ophiolite, India: implications for element mobility in hydrothermal environments. Chemical Geology, vol. 457, p. 47-60.

Biswajit Ghosh, Sarmishtha Mukhopadhyay, Tomoaki Morishita, Akihiro Tamura, Shoji Arai, Debaditya Bandyopadhyay, Soumi Chattopadhaya, **Thungyani N. Ovung** (2018) Diversity and evolution of suboceanic mantle: Constraints from Neo-tethyan ophiolites at the eastern margin of the Indian plate. Journal of Asian Earth Sciences vol 160, p.67-77.

RESEARCH VISITS ABROAD

Research visit to University of Vienna, Austria, from 7th November, 2016 to 7th December, 2016, for geochemical analyses of rock samples using X-ray fluorescence spectrometry (XRF), Instrumental neutron activation analyses (INAA), Thermal ionization mass spectrometry (TIMS), and Electron micro probe analyzer (EMPA). Supervised by Prof. Christian Koeberl.

Attended Japan-Asia Youth Exchange program in Science (Sakura Exchange Program in Science) administered by Japan Science and Technology Agency from 2nd to 22nd October, 2017, at Kanazawa University, Japan. Supervised by Prof. Tomoaki Morishita.

CONFERENCE PRESENTATIONS

Poster presentation at Goldschmidt 2017 conference, held at Paris, France, from 13th to 17th August, 2017. Thungyani N. Ovung, Jyotisankar Ray, Biswajit Ghosh, Christian Koeberl, Dan Topa, Madhuparna Paul (2017) Clinopyroxene composition of volcanics from the Manipur Ophiolite, Northeastern India: implications to geodynamic setting.

Poster presentation at the Annual general Meeting of the Geological Society of India and international conference on 'Future challenges in earth sciences for energy and mineral resources,' held at Indian Institute of Technology-Indian School of Mines (IIT-ISM), Dhanbad. Thungyani N. Ovung, Jyotisankar Ray, Biswajit Ghosh, Proloy Ganguly, Madhuparna Paul, Sunita Saha and Barsha Shaw (2013) Some petrological aspects of Manipur ophiolite belt, Northeastern India. Abstract #110.

Poster presentation at Convergence 2014: A seminar on Geological sciences held at Indian Institute of Science Education and Research, Kolkata. Thungyani N. Ovung (2014) Petrological aspects of Manipur ophiolite belt, Northeastern India.

REFRESHER COURSES ATTENDED

- 1. Indian Academy of Science's refresher course on "Crustal strength rheology and seismicity" held at IIT-ISM, Dhanbad from 15th to 26th May, 2017.
- 2. Indian Academy of Science's refresher course on "Theoretical structural geology, crystallography, mineralogy, thermodynamics, experimental petrology, and theoretical geophysics held at Indian Academy of Science, Bangalore from 20th November to 4th December, 2017.