Curriculum Vitae

Name : MALLIKA K JONNALAGADDA

Academic Qualifications : M.Sc. Ph.D. (Geology)

Date of Birth : 25th December 1983

Marital Status : Married

Qualifications:

Ph. D.	Awarded	2014	Savitribai Phule Pune University
M.Sc.	First class (68 %)	2006	Savitribai Phule Pune University
B.Sc.	Second class (68 %)	2004	Savitribai Phule Pune University

Ph.D. Title:

Petrography and Geochemistry of the Ultra High Pressure (UHP) eclogitic rocks from the Tso Morari Dome, Ladakh, (NW Himalayas), India.

Areas of Interest:

Igneous petrology, with special emphasis on the mantle petrology and geochemistry, Ultra High-Pressure Metamorphism.

Postdoctoral experience:

2018 - Research Fellow at the Géosciences Environnement Toulouse (GET) – CNRS Observatoire Midi- Pyrénées, Toulouse, France.

Postdoc Supervisor – Dr. Mathieu BENOIT/Dr. Michel GREGOIRE

Duration – 3 months

Sanctioned Projects:

DST – Women Scientist (PI) 2017-2019

Project Title: Petrographic and geochemical fingerprinting of mafic ultramafic rocks of the Spontang ophiolite, Ladakh Himalayas, India. Sanctioned Amount – Rs. 29 Lakhs

SERB – Young Scientist Scheme (YSS- FAST TRACK (PI) 2014-2017

Project Title: Emplacement History and tectonic Significance of the mafic- ultramafic rocks of the Spontang ophiolite sequence, Ladakh, NW Himalayas, India. Sanctioned Amount – Rs. 35.23 Lakhs

International Collaborations:

Collaboration project between CNRS- Geoscience Environnment Toulouse (GET) and Savitribai Phule Pune University

Project title: Tectono-magmatic evolution of the Indus Ophiolite Belt, Ladakh, NW, Himalayas, India.

Duration – 2018-2021.

Principal Investigator– Mallika K. Jonnalagadda

Scientist Mentor (SPPU) – Nitin R Karmalkar

Scientist Mentor (CNRS-GET) – Mathieu Benoit

Awards

- DST – Women Scientist Award – 2017-2021.
- Young Scientist Award (Fast Track position) – SERB, New Delhi –2014-2017
- Senior Research Fellow (SRF) – CSIR - GOI –2011-2014
- European Geoscience Union – Early Career Scientist Representative – 2017-2018
- SERB - International Travel Grant 2017

Analytical Experience

- **Analytical Experience at GET, Toulouse**

  Clean Lab – Underwent intensive clean lab training involving sample preparation protocols for mafic, ultramafic rocks and mineral separates for trace element, REE geochemistry (ICPMS) and radiogenic isotopic (Sr-Nd and Pb) geochemistry.

  ICPMS – Received training on the SB-ICPMS for trace and REE elements.

  TIMS – Trained on the Neptune Thermo TIMS machine for Sr-Nd isotopic analysis.

  EPMA- Trained on the Cameca SX50 microprobe.

  Electron Probe Micro Analyser (EPMA)

  Handled the Electron Probe Micro Analyzer (EPMA) CAMECA SXFive instrument at DST-SERB National Facility, Department of Geology (Center of Advanced Study), Institute of Science, Banaras Hindu University and the DST – IITB EMPA laboratory at IIT, Bombay, Powai.

- **Spectro Xepos ED-XRF**

  Lab In-charge: ED-XRF (Spectro Xepos) laboratory since 2013 -2019.

  Responsibilities:

  a) Manage daily activities of the lab.
  b) Analysis of samples from external and in-house users.
  c) Managing finances generated from analysis for consumables etc.

Research Publications

1. **2019 –** Compositional variations of chromian spinels from the peridotites of the Spontang Ophiolite Complex, Ladakh, NW Himalayas, India: Petrogenetic Implications – *Mallika K. Jonnalagadda*, Nitin R. Karmalkar, Mathieu Benoit, Michel Gregoire, Raymond A. Duraiswami, Shivani Harshe, and Sagar Kamble, Geoscience Journal– https://doi.org/10.1007/s12303-019-0001-3 .IF-1.193
2. **2019** – Geochemistry of eclogites of the Tso Morari complex, Ladakh, NW Himalayas: Insights into trace element behavior during subduction and exhumation - Mallika K Jonnalagadda, Nitin R Karmalkar, Raymond A Duraiswami, Geosciences Frontiers, v. 10, pp. 811-826. – IF – 4.256
3. **2017** – Formation of Atoll Garnets in the UHP Eclogites of the Tso Morari Complex, Ladakh, Himalaya. –*Mallika. K. Jonnalagadda*, N.R. Karmalkar, R.A. Duraiswami, Shivani Harshe, Sarah Gain, W.L. Griffin. Journal of Earth System Science, 126:107– IF - 0.955
4. **2017-** Morphology and chemistry of Cr Spinel from the peridotites of the Spontang Ophiolite Complex, Ladakh: insights into the petrogenesis of mantle peridotites - *Mallika Jonnalagadda*, Nitin Karmalkar, and Shivani Harshe - Geophysical Research Abstracts, Vol. 19, EGU2017-6643.
5. **2016 -** Magma Types and source characterization of the Early Deccan Magmatism, Kutch region NW India: Insights from the geochemistry of igneous intrusions. - N.R. Karmalkar, R.A. Duraiswami, *M. K. Jonnalagadda*, W.L. Griffin, Michel Gregoire, Mathieu Benoit and Guillaume Delpech – Special Vol. of Journal of Geological Society of India, v. 6, pp. 193-208.
6. **2014 -** Pumpellyite-Yugawaralite aggregates in serpentinised harzburgite near Hanle, Nidar Ophiolite Belt, Ladakh Trans-Himalaya, India and their significance – R.A. Duraiswami, N. R. Karmalkar, M. G. Kale, P. K. Sarkar, T. N. Shaikh and *M. K. Jonnalagadda*– Himalayan Geology, v. 35, pp. 22 – 30.
7. **2014** - Mid-Cretaceous Lamproite from the Kutch region, Gujarat, India: Genesis and Tectonic implications – N. R. Karmalkar, R. A. Duraiswami, *M. K. Jonnalagadda* and W. L. Griffin – Gondwana Research (2014) v. 26, pp. 942-956. IF- 6.959
8. **2008 -** Magma underplating and storage in the crust building process beneath the Kutch region, NW India - N.R Karmalkar, M.G. Kale, R.A. Duraiswami, *M. Jonnalagadda* – Current Science Vol. 94. pp. 1582-1588. IF- 0.843

9. **2007 -** Peeping into the Interior of the Western Continental Margin of India: A Xenolith-based Perspective - N.R. Karmalkar, R.A. Duraiswami, P.K. Sarma, S.P. Chauhan and *M.K. Jonnalagadda*– IAGR Memoir Vol. 10, pp. 143-155. IF- 6.959

Papers Presented at International/National Conferences/Workshop

International Conferences

- **2018 -** FOSTERITE: Scientific Training in the Internal Land Training theme: The differentiation of the earth and the silicate bodies of the solar system- Summer school, GET-OMP, Toulouse, France.
- **2017**- Morphology and chemistry of Cr Spinel from the peridotites of the Spontang Ophiolite Complex, Ladakh: insights into the petrogenesis of mantle peridotites - *Mallika Jonnalagadda*, Nitin Karmalkar, and Shivani Harshe in European Geoscience Union General Assembly 2017.
- **2016** - Quartz-Coesite phase transformations in garnet from Tso Morari Eclogites, Ladakh, NW Himalayas, India: Evidence from Raman Spectroscopy - *M. Jonnalagadda*, N. R. Karmalkar and R. A. Duraiswami in International seminar on Mineral Processing Technology MPT 2016 – Innovations in Mineral Processing.

National Conferences/Workshops

- **2018-** Secured A Grade in the Global Initiative of Academic Networks (GIAN) Workshop titled “Use of Radiogenic Isotopes in Petrology and Geochemistry” – Instructor – Dr. Mathieu Benoit, CNRS -GET, Toulouse, France.
- **2018 -** Secured B Grade in the Global Initiative of Academic Networks (GIAN) Workshop titled “Mantle Petrology: Probing the Earth’s Interior– Dr. Michel Gregoire, CNRS -GET, Toulouse, France.
- **2013** - Petrography and Geochemistry of the UHP eclogite enclaves from the Tso Morari Crystalline Complex, NW Himalaya, India: Insights into subducting and exhumation process - *M. Jonnalagadda*, N. R. Karmalkar and R. A. Duraiswami in National Seminar on Synergy of Geochemistry, Geology and Geophysics towards natural and energy resources, environment and health.
- **2011** - Significance of the atoll garnets from the eclogites of Tso Morari Complex, Ladakh, India in understanding the Himalayan Subduction process - *M. Jonnalagadda*, N. R. Karmalkar and R. A. Duraiswami in National Seminar on Geodynamics and Metallogenesis of the Indian Lithosphere and AGM of Geological Soc of India.

- **2006** - Magmatic Underplating as a crust building process: Evidence from the sills in Kutch, Gujarat, NW India - *M. Jonnalagadda*, N. R. Karmalkar and R. A. Duraiswami in National Seminar on Origin and Evolution of the Deep Continental Crust – Dept of Geology, University of Pune, Pune.

****