# JINIA NANDY

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## EDUCATION

2022 (December)-till now: **Need based Assistant professor** in Geology department P.P.K. Bundu College, Ranchi University.

2018- 2022 (November): **Need based Assistant professor** in University Department of Geology, Ranchi University.

- 2015-2017: Post Doctorate, Principal investigator of Fast Track DST project.
- 2009-2014: **Ph.D** in Igneous Geochemistry (Applied Geology) from IIT, Indian School of Mines, Dhanbad, Jharkhand.
- 2007 2009: **M.Tech** in Petroleum exploration from IIT, Indian School of Mines, Dhanbad, Jharkhand, with 85.1% marks (Rank 2<sup>nd</sup>).
- 2005 2007: M.Sc. in Applied Geology from Department of Geological Sciences, Jadavpur University, West Bengal, India, with 70.18% marks.
- 2002 2005: **B.Sc.** in **Geology** from Department of Geological Sciences, **Jadavpur University**, West Bengal, India, with 68.88 % marks.
- 2002: Higher Secondary in Science, West Bengal Board, with 81.4%.
- 2000: Madhyamik, West Bengal Board, with 86.75%.

### **DST PROJECT TITLE**

Geochemistry and petrogenesis of different granitoid suites associated with the Tsundupalle greenstone belt, eastern Dharwar craton (EDC), south India: implications for crustal evolution during Archaean.

Young Scientist Fellow in Applied Geology Department of Indian School of Mines, Dhanbad.

### Ph.D. DISSERTATION TITLE

Study of Kadiri greenstone belt and adjacent granitoids, Eastern Dharwar craton, southern India: Petrogenesis and tectonic setting.

Supervisor:

Dr. Sukanta Dey (Associate Professor, Department of Applied Geology, Indian School of Mines, Dhanbad).

## M.Tech THESIS TITLE

### Estimation of water saturation using resistivity independent methods.

Supervisor:

Dr. Rima Chatterjee (Associate Professor, Department of Applied Geology, Indian School of Mines, Dhanbad).

### **RESEARCH INTEREST**

I specialize in the study of igneous rock and their geochemical properties. My interest includes in field study, petrography study and geochemistry including major and trace elemental, zircon U-Pb dating, Sm-Nd isotopic study, EPMA studies and lastly tectonic evolution of those suites of rocks. These analyses also help to evaluate petrogenesis of those rocks and their evolution through time.

# PUBLICATIONS

1. Dey, S., Nandy, J., Choudhary, A.K., Yongsheng, L. and Keqing, Z. (2013) Neoarchaean crustal growth by combined arc– plume action: Evidences from Kadiri greenstone belt, Eastern Dharwar craton, India. Geological Society Of London, Special Publication "Continent formation through time", v. 389(1), 135-163, (IF-3.46).

2. Dey, S., Nandy, J., Choudhary, A.K., Yongsheng, L and Keqing, Z (2014) Origin and evolution of granitoids associated with the Kadiri greenstone belt, eastern Dharwar craton: a history of orogenic to anorogenic magmatism. **Precambrian Research**, v. 246, p. 64-90, (IF-4.918).

**3.** Nandy J. and Dey S. (2013) Petrography and geochemistry of Kadiri greenstone belt and their implications. Indian Journal of Geological Congress, v. 5(2).

4. Dey, S., Halla, J., Kurhila, M., **Nandy, J.**, Heilimo, E. and Pal, S. (2016) Geochronology of Neoarchaean granitoids of the NW eastern Dharwar craton: implication for crust formation. **Geological Society of London Special Publication**, 449 (1),89-121, doi:10.1144/SP449.9.

5. Dey, S, Mitra, A., Nandy, J., Mondal, S., Topno, A., Liu, Y., and Zong, K. (2017) "Early crustal evolution as recorded in granitoids of the Singhbhum and western Dharwar cratons"

submitted in Martin van Kranendonk, Victoria Bennet, Elis Hoffman (ed.) **Elsevier Book, Earths Oldest Rocks** (Second Edition), 2019, 741-792.

6. Nandy, J., Dey, S. and Heilimo, E. (2019) Neoarchaean magmatism through arc and lithosphere melting: evidence from Eastern Dharwar Craton. Geological Journal (Special Volume), 54, 3148-3166

# **Conference Presentation:**

**1. Nandy, J.** and Dey, S. (2012) Field setting, geochemistry and geocronology of the Kadiri greenstone belt, eastern Dharwar craton, India: Evidences for Neoarchean crustal growth by joint arc-plume processes. Abstract volume In IGCP-SIDA 599 meeting and field trip to the Early Archean Dniester-Bug Complex southern in Ukraine.

2. Nandy, J. and Dey, S. (2017) Neoarchaean magmatism through arc and lithosphere melting: evidence from Eastern Dharwar craton. **Goldschmidt Conference, 2017 in Paris, France.** 

**3.** Nandy, J. and Dey, S. (2013) Evolution of Kadiri granitoid-greenstone belt, eastern Dharwar craton, India. Abstract selected in International conference on future challenge in Earth science for energy and mineral resources.

4. Nandy, J. and Dey, S. (2013) Petrogenesis and tectonic evolution of Kadiri-granitoidgreenstone belt, eastern Dharwar Craton. Modern Geological and geophysical methods and their applications (IGU).

### HONORS AND ACTIVITIES

- Got Young scientist fellowship of DST Fast Track project, March, 2015.
- International Seminar and paper presentation at IGCP-SIDA 599- Meeting & Field trip to the early Archean Dniesper-Bug Complex in Southern Ukrain, 2012.
- Got First class **2<sup>nd</sup> position in M.Tech**, 2009.
- All India Rank 70<sup>th</sup> in Graduate Aptitude Test for Engineering (GATE) examination, 2005.

# **PROFESSIONAL EXPERIENCES**

# **TEACHING:**

- Two months teaching experience in Ashutosh College, Geology Department as a full time contractual post (3/11/2014-31/12/2014).
- Assisted in practical classes of igneous, sedimentology, handspecimen, and structural for Msc.Tech and intregated Msc.Tech course (lab) in Indian School of Mines, Dhanbad.
- Assisted many Msc.Tech students towards the completion of their dissertation works.

### FIELD:

- Accomplished detailed field work as a part of Ph.D. program in south India. The field work included detail lithological and structural mapping, identification of different lithology and their association in outcrop scale.
- Participated in fieldworks that cover wide areas of geology which includes-
  - Geological mapping and study of igneous rocks in Maithon area, Burdwan District, West Bengal, 2002-03
  - → Study and Geological mapping of metamorphic marble terrain in Jabalpur, M.P, 2003-04
  - Study of modern depositional environment in Chandipur Tidal flat, Orissa, 2004-05
  - → Structural Mapping of metasedimentary sequences in and around Ghatshila, Jharkhand, 2005-06
  - → Visit to O.N.G.C Rajahmundry to study about the drilling operations and the work at the base station and to study the different stratigraphic formations, Andhra Pradesh, 2006-07
- → Industrial training in Oil India Limited and ONGC, Dehradun, 2008(M.Tech).

### **TECHNICAL SKILLS**

- → Textural analysis with Leica DMLP **polarized light microscope** fitted with an image analyzer (DC300FX camera and Leica QWIN software for image analyses).
- → Familiar with sample preparation for Inductively Couples Plasma Mass Spectrometer( ICPMS) analysis for open and closed digestion
- → Samples prepare for **Thermal ionization mass spectrometer** (**TIMS**) **analysis** for granite and basalt rocks
- $\rightarrow$  Experienced in sample preparation method for **XRF**.

### SOFTWARES

Geochemical Digitization and mapping Other software

- : GCD tool kit, Tri Draw
- : AutoCad, Corel, Surfer
- : Microsoft Office, Adobe Photoshop

### REFERENCES

**Dr. Sukanta Dey** Professor, IISER, Kolkata Contact no.: +91-9431503788 Email: geodeys@gmail.com

# **Prof. Talat Ahmed**

Vice Chancellor of Jamia Millia Islamia Office Address: Kashmir university Contact no: +91- 9796997990 Email: tahmad001@yahoo.co.in