

# CURRICULUM VITAE

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**Socials:** [GitHub](#), [LinkedIn](#)

**Education:** PhD 5<sup>th</sup> year\* (2019- present), Subject of interest: Geodynamics  
Indian Institute of Science, Bangalore, Karnataka.

M.Sc. in Applied Geology (2016-2018)  
Jadavpur University, Kolkata, West Bengal.

B.Sc. in Geology (2013-2016)  
Jadavpur University, Kolkata, West Bengal.

**Awards and Achievements:** Received Shyama Prasad Mukherjee Fellowship, 2021  
Junior Research Fellowship, Indian Institute of Science, 2019.  
All India Rank (AIR) 12 in National Eligibility Test (NET), 2019,  
Summer Cycle.  
AIR 56 in Graduate Aptitude Test in Engineering (GATE), 2019.  
Silver Medal in National Mathematical Olympiad (2008-2009).

**Teaching Experience:** Course name: Earth Science Laboratory (ES207),  
Indian Institute of Science, Bangalore.

**Professional skills:** Programming Language extensively used: Python, MATLAB  
and C (not extensively).  
Shell scripting and experienced in working with Ubuntu and bash.  
Software: GPlates, Paraview, Adobe Photoshop, Corel Draw,  
ArcGIS, LaTeX.  
Geodynamics Package used: CitcomS, I2ELVIS, HC (Hager &

O'Connell flow computation), PyGplates.  
Computational Fluid Dynamics package: ANSYS.

**Student membership:** American Geophysical Union

**Publications:** **D. Pal\***, A. Ghosh, Present day mantle structure from global mantle convection models since the Cretaceous, submitted in Geophysical Journal International (*under review*).

**D. Pal\***, A. Ghosh, How the Indian Ocean Geoid Low was Formed, Geophysical Research Letters, 50, e2022GL102694, <https://doi.org/10.1029/2022GL102694>, 2023.  
(*This paper was featured in various media like Scientific American, New Scientist, The Guardian, CNN, and The Washington Post*).

**A. Ghosh\***, D. Pal, Do lower mantle slabs contribute in generating the Indian Ocean Geoid Low?, Tectonophysics, 822, <https://doi.org/10.1016/j.tecto.2021.229176>, 2022.

**\* Corresponding author of the paper**

**Conference Abstracts:** **D. Pal**, A. Ghosh, How the Indian Ocean Geoid low was formed, 7th National Conference on Rock Deformation and Structures, Banaras Hindu University, Varanasi, Uttar Pradesh, 2022.

**D. Pal**, A. Ghosh, Predicting the origin of the Indian Ocean Geoid Low from global mantle convection models since the Cretaceous, AGU Fall meeting, Virtual, 2022.

**D. Pal**, A. Ghosh, Reproducing the present-day mantle structure using forward mantle convection models since the Cretaceous. AGU Fall meeting, San Francisco, California, 2023.

**D. Pal**, A. Ghosh, What caused the speed-up of the Indian Plate during the late Cretaceous to early Cenozoic? AGU Fall meeting, San Francisco, California, 2023.

**A. Ghosh**, D. Pal, Formation of the enigmatic Indian Ocean geoid Low, AGU Fall meeting, San Francisco, California, 2023.