

**Jyotirmoy Paul**

Post-Doctoral Researcher  
Short Curriculum vitae

Bavarian Research Institute of Experimental  
Geochemistry and Geophysics (BGI)  
University of Bayreuth  
Email: [jyotirmoy.paul@uni-bayreuth.de](mailto:jyotirmoy.paul@uni-bayreuth.de)  
Web: <https://jyotirmoy.github.io>

---

**Appointments**

Post-Doctoral researcher	University of Bayreuth	2021 - Present
Research Associate	Indian Institute of Science, Bangalore	2021 (July- October)

---

**Education**

PhD in Geodynamics	Indian Institute of Science, Bangalore	2015-2021
M.Sc. in Applied Geology	Jadavpur University	2013 - 2015
B.Sc in Geological Sciences	Jadavpur University	2010-2013

---

**Other Research experiences/ Research stays**

ETH Zurich	Research collaboration	June, 2022
Schulmberger Mumbai	Summer intern	2014 June- July
Indian Institute of Technology, Bombay	Summer intern	2013 May- June 2012 June, July

---

**International Grants and awards**

Independent Researcher travel grant	University of Bayreuth	2022
Roland Schlich Grant	European Geoscience Union	2018,2020
AGU Travel Grant	American Geophysical Union	2018, 2019, 2021
Travel Grant	International Association of Mathematical Geosciences	2014
Conference Grant	Young Earth Scientist	2014
Best poster	3 <sup>rd</sup> YES Congress	2014

---

**National Grants, fellowship**

Tata Trust Grant	Tata Trust	2019
Senior Research Fellowship	Indian Institute of Science	2017- 2020
Junior Research Fellowship	Indian Institute of Science	2015-2017
Inspire Fellowship	Department of Science and Technology	2010-2015

### Synergistic activities

Reviewer for peer reviewed journals	Geophysical Journal International Lithosphere	
Reviewer for science community/funding agencies	National Science Foundation, USA	
Outstanding student poster/pico Coordinator	European Geoscience Union, Geodynamics division	2023-Present
Session chair	American Geophysical Union Fall Meeting	2019, 2022
Social media coordinator	European Geoscience Union, Geodynamics division	2019- 2021
Blog Editor	European Geoscience Union, Geodynamics division	2020- 2021
Professional Affiliation:	Student member: American Geophysical Union, European Geoscience Union	

### Complete List of Publications:

#### *In peer reviewed journals*

6. J. Paul\*, C.P. Conrad, T.W. Becker, A. Ghosh, 2023. Convective self-compression of cratons and the stabilization of old lithosphere. *Geophysical Research Letters*, 50, e2022GL101842. <https://doi.org/10.1029/2022GL101842>.
5. J. Paul\*, A. Ghosh, 2022. Could the Reunion plume have thinned the Indian craton?, *Geology*, 50 (3): 346–350, doi: <https://doi.org/10.1130/G49492.1>
4. J. Paul\*, A. Ghosh, 2020. Evolution of cratons through the ages: A time-dependent study, *Earth and Planetary Science Letters*, 531, 115962.
3. J. Paul\*, S. Mondal, R. Kayal, D. Sarkar, 2019. Burrow morphology of the ocypodid crab *Ocypode ceratophthalma* at Chandipur Coast, Eastern India and its implications. *Current Science*, 117(4), 699-705.
2. J. Paul\*, A. Ghosh, C.P. Conrad, 2019. Traction and strain-rate at the base of the lithosphere: An insight into cratonic survival. *Geophysical Journal International*, 217(2), 1024-1033.
1. A.S. Baidya, J. Paul, D.C. Pal, and D. Upadhyay, 2017. Mode of occurrence and geochemistry of amphibole in the Kolihan-Chandmari copper deposits, Rajasthan, India: Insight into the ore-forming process. *Ore Geology Reviews*, 80, 1092-1110.

**\* Corresponding author of the paper**

### **Conference Presentations:**

19. **J. Paul**, G. Golabek, A. Rozel, P. Tackley, T. Katsura, H. Fei, 2022. Modeling Earth's mantle evolution using olivine and bridgmanite grain growth parameters *AGU Fall Meeting, Chicago*.
18. **J. Paul**, C. P. Conrad, T. Becker, A. Ghosh, 2022. Self-induced craton compression: Potential implications for craton stability. *AGU Fall Meeting, Chicago*.
17. **J. Paul**, G. Golabek, A. Rozel, P. Tackley, T. Katsura, H. Fei, 2022. Effect of heterogeneous grain-growth in Earth's mantle. *Ada Lovelace Workshop, Hévíz, Hungary*.
16. **J. Paul**, A. Ghosh, 2021. Thinning of the Indian craton due to the Reunion plume eruption. *AGU Fall Meeting, New Orleans, T15C-0177*.
15. **J. Paul**, A. Ghosh, 2021. Effect of the reunion plume eruption on the Indian craton thickness. *6th Rock deformation and structures, virtual mode*.
14. **J. Paul**, A. Ghosh, 2021. Interaction of the Indian craton with the Reunion plume. *EGU General Assembly, Vienna*.
13. **J. Paul**, A. Ghosh, 2020. Understanding deformation of cratons in presence of mid-lithospheric discontinuity. *EGU General Assembly, Vienna*.
12. **J. Paul**, A. Ghosh, 2020. On survival of cratonic lithosphere. *36th International Geological Congress, Delhi*.
11. **J. Paul**, A. Ghosh, 2019. Evolution of cratons in time-dependent mantle convection models. *AGU Fall Meeting, San Francisco*.
10. A. Ghosh, **J. Paul**, 2019. Effect of Weak Mid-lithospheric Discontinuities on the Survival of Cratons. *AGU Fall Meeting, San Francisco*.
9. J. Paul, A. Ghosh, 2019. Time dependent 3-D numerical modeling of the cratonic evolution. *Ada Lovelace Workshop, Siena, Italy*.
8. J. Paul, **A. Ghosh**, 2019, Evolution and survival potential of cratons: A numerical study. *IUGG General Assembly, Montreal*.
7. **J. Paul**, A. Ghosh, 2018, Stability of cratons since early Phanerozoic. *AGU Fall Meeting, Washington DC*.
6. A. Ghosh, **J. Paul**, C.P. Conrad, 2018, The Relation Between Traction and Strain Rate at the Base of the Lithosphere: Key to Understanding Cratonic Stability *AGU Fall Meeting, Washington DC*.
5. **Paul J**, Ghosh A., 2018, Variation of traction and strain rate with lithospheric thickness: An insight into understanding cratonic stability, *EGU General Assembly, Vienna*.
4. **Paul J.**, Baidya A. S., and Pal D. C., 2015, Origin of alternate amphibole and quartz rich bands in amphibole bearing quartzite from North Khetri Copper Belt, Rajasthan, India, *AGU Fall Meeting, San Francisco*.

3. Baidya A. S., **Paul J.** and Pal D. C., 2014, Multiple stages of Amphibole formation in the Chandmari Cu-deposit, Khetri copper belt, Rajasthan: implications for changing fluid composition vis-à-vis sulfide mineralization, *National Conference on Making of the Indian Continent, Presidency University, Kolkata.*

2. **Paul J.**, 2014, Diversity of Indian climate and its effect on Indian music, *3<sup>rd</sup> YES Congress Abstract Volume*

1. **Paul J.**, and Mondal S., 2013, Ecological significance of Ocypode crab burrows: A case study from Chandipur, Eastern Coast of India, *National Conference on Earth Science in India: Challenges and Emerging Trends, Indian Institute of Technology, Roorkee..*

### **Book Contributions**

1. **Paul J.**, 2015, Tightly folded quartz vein in dolomitic host rock, Central Indian Suture Zone. Jabalpur, Madhya Pradesh, India. In: *Mukherjee, S. (Ed) Atlas of Structural Geology, Elsevier*

2. **Paul J.**, 2015, Doubly plunging round hinge isoclinal fold in calc-silicate. Central Indian Suture Zone. Jabalpur, Madhya Pradesh, India. In: *Mukherjee, S. (Ed) Atlas of Structural Geology, Elsevier*

3. **Paul J.**, 2015, Folded quartz vein in dolomitic rock showing different geometries of hinge region. Central Indian Suture Zone. Jabalpur, Madhya Pradesh, India. In: *Mukherjee, S. (Ed) Atlas of Structural Geology, Elsevier*

4. **Paul, J.**, 2015, Z-type of buckle fold of amphibole rich layer in metamorphosed granitic host rock. Chhotonagpur Gneissic Complex, Maithon, West Bengal, India. In: *Mukherjee, S. (Ed) Atlas of Structural Geology, Elsevier*

### **Science Communications**

7. Cratons, Why Are You Still Here?, 2021 *American Geophysical Union, Eos* [\[Link\]](#)

6. 2021: 100th year of the craton concept and beyond, 2021, *European Geoscience Union, Geodynamics division* [\[Link\]](#)

5. How did the Oldest Part of the Earth Still Survive Today, *AWSAR Scheme, Department of Science and Technology, India*

4. EGU 2018: Experience of a first time attendee, *European Geoscience Union, Geodynamics division* [\[Link\]](#)

3. Deformation Pattern as indicator of structural evolution: Ghatsila-Galudih-Tentuldanga fold belt, Tentuldanga, Jharkhand, Eastern India, Eastern India, *Earth Science India, 2014, PI VII(IV) P. 1-8*

2. Talc, a hydrous mineral of phyllosilicate group containing Mg, formed in the marble rock of Jabalpur, *Geo-Gallery, Earth Science India, 2013*

1. Tremolite, a Ca-Mg hydrous mineral of amphibole group, is one of the major metamorphic, *Geo-Gallery, Earth Science India, 2013*

### **Science-Society communications**

4. Geoscience in the third world, 2020, *European Geoscience Union, Geodynamics division* [\[Link\]](#)

3. Status of academic freedom, 2019, *Confluence, Indian Academy of Science* [\[Link\]](#)

2. The Forgotten Tomb: Inspiration of the Taj Mahal, 2018, *Coldnoon* [\[Link\]](#)

1. Celebrating scripts from around the world, 2018, *IISc Connect* [\[Link\]](#)

#### Science communication in mother tongue:

7. ভারত মহাসাগরের গর্ত: পর্ব ৩ (Super plume), 2021, *Geoscience Education* [\[Link\]](#)

6. ভারত মহাসাগরের গর্ত: পর্ব ২ (Geoid Anomaly), 2021, *Geoscience Education* [\[Link\]](#)

5. ভারত মহাসাগরের গর্ত: পর্ব ১, 2021, *Geoscience Education* [\[Link\]](#)

4. লাভার উৎস সন্ধান, 2021 *বিজ্ঞান* [\[Link\]](#)

3. পৃথিবীর প্রাচীন পাথর গুলির জীবনযাত্রা, 2021, September *বিজ্ঞান কথা*, *Vigyan Parisar*, Govt. of India p. 14-15 [\[Link\]](#)

2. ব-দ্বীপের বহিঃপ্রকাশ, 2021 *এ লেভেলে বিজ্ঞান* [\[Link\]](#)

1. পৃথিবীর গভীর কথা, 2020 *বিজ্ঞান* [\[Link\]](#)

#### Science Editorials at European Geoscience Union Geodynamics blog:

11. [Lithospheric failure at subduction zones](#) by Nicolai Nijholt

10. [The Deccan Chronicle: Plume or no-Plume? Perspective from a Deccan dyke swarm](#) by Ayanangshu Das

9. [Curious case of convex upwards topography in accretionary wedges](#) by Sreetama Roy

8. [Stellar storms in other worlds: implication to the stability of exoplanetary atmospheres](#) by Gopal Hazra

7. [The geophysicist's toolbox](#) by Adam Beall

6. [Magnetic field generation and its reversal in dynamo models](#) by Debarshi Majumder

5. [Whole solid-Earth numerical simulation: Towards an understanding of mantle-core interactive dynamics](#) by Masaki Yoshida

4. [Modelling the deformation in the Indian plate and the India-Eurasia collision zone](#) by Srishti Singh

3. [Rayleigh-Taylor instability in geodynamics](#) by Dip Ghosh

2. [Advanced geodynamic models of giant earthquakes](#) by Thyagarajulu Gollapalli

1. [Understanding intraplate earthquakes](#) by Attreyee Ghosh