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| <i>Name</i>                     | Argha Banerjee   |
| <i>Present position</i>         | Associate Professor, and Deputy Chair<br>Earth and Climate Science<br>Indian Institute of Science Education and Research Pune<br>Dr. Homi Bhabha Road, Pashan, Pune 411 008<br>India   |
| <i>Email</i>                    | argha@iiserpune.ac.in, argha.k@gmail.com   |
| <i>Date of birth</i>            | 2nd February, 1981   |
| <i>Research Interests</i>       | Himalayan glaciers, Glacier-fed rivers, Glacial landscapes   |
| <i>Education</i>                | Ph. D. (2004 - 2010)<br>Department of Theoretical Physics<br>Tata Institute of Fundamental Research, Mumbai, India<br><br>M.Sc. in Physics (2002 - 2004)<br>Indian Institute of Technology Kanpur, India<br><br>B.Sc. in Physics (1999 - 2002)<br>Jadavpur University, Kolkata, India  |
| <i>Past positions</i>           | Post Doctoral Fellow (2010 - 2012)<br>The Institute of Mathematical Sciences, Chennai, India<br><br>INSPIRE Faculty Fellow (2013 – 2015)<br>Department of Earth Sciences<br>Indian Institute of Science Education and Research Kolkata, India<br><br>Assistant Professor (2015-2021)<br>Earth and Climate Science<br>Indian Institute of Science Education and Research Pune |
| <i>Awards and Fellowships</i>   | National Talent Search Scholarship, NCERT (1997)<br>Joint CSIR-UGC Junior Research Fellowship (2003)<br>INSPIRE Faculty Fellowship Award, DST (2012)   |
| <i>Mentoring</i>                | 1 PostDoc, 2 Phd, and 4 Masters' students  |
| <i>Teaching</i>                 | Undergraduate and graduate-level courses on Glaciology, Hydrology, Landscape Evolution, Geodynamics, and Mechanics.  |
| <i>Administration</i>           | Deputy-Chair, ECS<br>Coordinator, Phd program, ECS<br>Member of various Institute-level committees (Academic Ethics, Students Activity, Students' Election, etc.   |
| <i>National-level Workshops</i> | Organised Training school on glacier modelling; Training school on   |

geospatial data analysis; Training school on non-equilibrium thermodynamics; Glaciology workshop for undergraduate students; workshop for young scientists from Indian Cryosphere community

#### Others

Scientific Editor, Journal of Glaciology

Topic Editor, Frontiers in Earth Science, Research topic – *Debris-Covered Glaciers Formation, Governing Processes, Present Status and Future Directions*

Member, Project Appraisal and Monitoring Committee - Hydrology & Cryosphere, Ministry of Earth Sciences, Govt of India

#### Grants

1. *Understanding and modelling the interactions between Debris and glacier Ice in a changing Climate (D-ICE)*, An Indo-Swiss project funded by Ministry of Earth Sciences, (2023-2027), ₹22 Lakhs.
2. *Improved description of the water-cycle in the Upper Ganga catchment using isotope, geochemical data, and model simulation*, funded by Ministry of Earth Sciences, (2018-2022), ₹22 Lakhs.
3. *Observation and modelling of the water cycle in Chandra and Upper Alaknanda Basins*, funded by HiCOM, NCAOR (2018-2022), ₹24 Lakhs.
4. *A scoping proposal to build a two-dimensional ice-flow model for basin-scale glacier simulation in the Himalaya*, funded by Ministry of Earth Sciences, Govt of India (2016–2018), ₹10 Lakhs.
5. *Numerical modeling and field studies of debris covered glaciers in Indian Himalaya*, funded by Dept of Science and Technology, Govt of India under INSPIRE Faculty Award Scheme (2013-2018), ₹35 Lakhs.
6. *Glaciers in Upper Alaknanda-Saraswati valley and Climate change*, a multi-institutional project funded by The Institute of Mathematical Sciences, Chennai (2012-2017).
7. *Measurement and modeling of supraglacial debris layer properties of Hamtah glacier*, funded by Dept of Science and Technology, Govt of India (2014-2017), ₹20 Lakhs.

#### Recent publications

1. S Laha, U Majeed, A Banerjee, I Rashid, J Steiner, S Vijay, Assessing potential risk of glacier avalanches to hydropower infrastructure in the Himalayan region. *Natural Hazards*, 120(5), 4749-4774 (2024)..
2. IA Bhat, I Rashid, RAAJ Ramsankaran, A Banerjee, S Vijay: Inventorying rock glaciers in the Western Himalaya, India, and assessing their hydrological significance. *Geomorphology*, 109514 (2024).
3. A Banerjee, C Sarangi, I Rashid, S Vijay, NA Najar, AS Chandel: A scaling relation for cryoconite holes. *Geophysical Research Letters*, 50, e2023GL104942 (2023).
4. S Laha, A Banerjee, A Singh, P Sharma, M Thamban: Climate sensitivity of the summer runoff of two glacierised Himalayan catchments with contrasting climate. *Hydrology and Earth System Sciences*, 27 (2), 627-645 (2022).

5. A Banerjee, U Singh, C Sheth: Disaggregating geodetic glacier mass balance to annual scale using remote-sensing proxies. *Journal of Glaciology* 1-10 (2022).
6. S Laha, A Winter-Billington, A Banerjee, R Shankar, HC Nainwal, M Koppes: Estimation of ice ablation on a debris-covered glacier from vertical debris-temperature profiles. *Journal of Glaciology* 1-12 (2022).
7. A Banerjee: A weak precipitation sensitivity of glacier runoff. *Geophysical Research Letters* 49 (5), e2021GL096989 (2022).
8. A Winter-Billington, R Dadic, RD Moore, G Flerchinger, P Wagnon, and A Banerjee: Modelling debris-covered glacier ablation using the Simultaneous Heat and Water (SHAW) transport model. Part 1: model development and application to North Changri Nup. *Frontiers in Earth Science* 891 (2022).
9. JK Pattanaik, and others: Luminescence chronology of Late Quaternary palaeo-lake deposits from the Upper Alaknanda Basin, Uttarakhand, India: Implication to palaeoclimate and depositional settings. *Journal of Asian Earth Sciences* 227, 105079, 2 (2022).
10. A Banerjee: Volume-area scaling for debris-covered glaciers, *Journal of Glaciology* 66 (259), 880-886 (2020).
11. A Banerjee, D Patil, and A Jadhav: Possible biases in scaling-based estimates of glacier change: a case study in the Himalaya, *The Cryosphere* 14, 9, 3235-3247 (2020).