CURRICULUM VITAE

DR. SAYANTAN DAS

Date of Birth: 22.03.1986

E-mail ID: sayantdas@gmail.com

DESIGNATION

Assistant Professor in Geography, Dum Dum Motijheel College, Kolkata-700074.

ACADEMIC BACKGROUND

- Ph.D. (Geography), University of Calcutta, West Bengal, 2018.
- M.Sc. (Geography: Specialization in Geomorphology), University of Pune, Maharashtra, 2009.
- B.Sc. (Geography), Presidency College (University of Calcutta), West Bengal, 2007.

POSITIONS HELD/ HOLDING

• 2017–Present: Assistant Professor in Geography, Dum Dum Motijheel College

• 2013–2017 : College Appointed Whole-time Teacher, Bhairab Ganguly College

2011–2013 : CSIR-Senior Research Fellow, Department of Geography, University of Calcutta
 2009–2011 : CSIR-Junior Research Fellow, Department of Geography, University of Calcutta

TEACHING INTEREST

• Geomorphology, Hydrology, Remote Sensing and GIS, Geostatistics, Population Geography.

Software Skills: ArcGIS, Erdas Imagine, Geomatica, QGIS, SPSS Statistics.

Working Knowledge of Instruments: Differential GPS, Transit Theodolite, Total Station, Echo Sounder.

RESEARCH PROFILE

Ph.D. Thesis:

Evolution of Drainage and Morphology of Bhagirathi-Ganga Interfluve Region in West Bengal with Special Reference to Palaeochannels.

Supervisor: Prof. Sunando Bandyopadhyay, Department of Geography, University of Calcutta.

M.Sc. Dissertation Thesis:

Spatio-temporal Variations in Land use and Impervious Surfaces in Mula-Mutha Watershed using Satellite Data. **Supervisor:** Prof. Amit G. Dhorde, Department of Geography, University of Pune.

PUBLICATIONS:

Journal Paper:

- 1. Roy, L., **Das, S.** (2021). GIS-based landform and LULC classifications in the Sub-Himalayan Kaljani Basin: Special reference to 2016 Flood. *The Egyptian Journal of Remote Sensing and Space Science (Elsevier)*, 24(3): 755-767. https://doi.org/10.1016/j.ejrs.2021.06.005
- Sarkar, A., Roy, L., Das., S., Sengupta, S. (2021). Fluvial response to active tectonics: analysis of DEM-derived longitudinal profiles in the Rangit River Basin, Eastern Himalayas, India. *Environmental Earth Sciences* (Springer-Verlag GmbH Germany), 80, 258: 1-22. https://doi.org/10.1007/s12665-021-09561-2
- 3. Bandyopadhyay, S., **Das, S.**, Kar, N.S. (2021). Avulsion of the Brahmaputra in Bangladesh during the 18th–19th Century: A Review Based on Cartographic and Literary Evidence. *Geomorphology (Elsevier)*, 384, 107696: 1-19. https://doi.org/10.1016/j.geomorph.2021.107696
- 4. Guha, A., **Das, S.**, Guptaroy, P. (2021). নদী—কিছু কথা, কিছু ভাবনা (Rivers—Some words, some thoughts). *Gjnan-o-Bijnan*, 74(8): 325-330.

- 5. **Das, S.**, Das, A., Kar, N.S., Bandyopadhyay, S. (2020). Cyclone Amphan and its impact on the Lower Deltaic West Bengal: a preliminary assessment using remote sensing sources. *Current Science*, 119(8): 1246-1249. https://doi.org/10.18520/cs/v119/i8/1246-1249
- Hossain, W., Das, S. and Dasgupta, S. (2019). Hydro-Geomorphic Analysis of a Meandering Bend of the Ichhamati River at Hugle-Mathpara Region in North 24 Parganas District, West Bengal, *Indian Journal of Geomorphology*, 7: 29-41. http://doi.org/10.5281/zenodo.4117540
- 7. **Das, S.**, Patel, P.P., Sengupta, S. (2016). Evaluation of different digital elevation models for analyzing drainage morphometric parameters in a mountainous terrain: A case study of the Supin–Upper Tons Basin, Indian Himalayas. *SpringerPlus*, 5(1544): 1-38. DOI: 10.1186/s40064-016-3207-0
- 8. Bandyopadhyay, S., **Das, S.**, Kar, N.S. (2015). Discussion: 'Changing river courses in the western part of the Ganga–Brahmaputra delta' by Kalyan Rudra (2014), Geomorphology, 227, 87–100. *Geomorphology* (*Elsevier*), 250: 442-453. <u>DOI: 10.1016/j.geomorph.2015.02.037</u>
- 9. **Das, S.**, Kar, N.S., Bandyopadhyay, S. (2015). Glacial lake outburst flood at Kedarnath, Indian Himalaya: a study using digital elevation models and satellite images. *Natural Hazards (Springer Science + Business Media Dordrecht)*, 77(3): 769-786. DOI: 10.1007/s11069-015-1629-6
- 10. **Das, S.**, Kar, N.S., Bandyopadhyay, S. (2015). Dimensions of Debris Flow of Kedarnath Disaster 2013: A Study Using Digital Elevation Models. *Geographical Review of India*, 77(4): 295-309. http://doi.org/10.5281/zenodo.3992877
- 11. Kar, N.S., **Das, S.**, Bandyopadhyay, S. (2015). কেদারনাথ বিপর্যয়—২০১৩: একটি পর্যালোচনা (Kedarnath Disaster–2013: A Review). *Himalaya Prasanga*, pp. 47-50.
- 12. Kar, N.S., **Das, S.** (2014). বন্যাপ্রবণ ঘাটাল ব্লক-একটি ভৌগোলিক সমীক্ষা (A Geographical Analysis of Flood Vulnerability in Ghatal Region, West Bengal, India). *Bhugol-o-Paribesh*, 2(3): 25-30.
- 13. **Das, S.**, Dhorde, A., Dhorde, A. (2013). Assessment of Impervious Surface Growth in the Mula-Mutha Watershed in Maharashtra. *Geographical Review of India*, 75(3): 281-296. http://doi.org/10.5281/zenodo.3993086
- Dhorde, A., Das, S., Dhorde, A. (2012). Evaluation of Land Use/Land Cover Change in Mula-Mutha Watershed, Pune Urban Agglomeration, Maharashtra, India: Based on Remote Sensing Data. *Earth Science India*, 5(3): 108-121. http://doi.org/10.5281/zenodo.3993102
- 15. Das, S. (2012). বিলুপ্তির পথে খাজিয়ার হ্রদ (Khajiar Lake: On the verge of extinction). Himalaya Prasanga, pp. 29-37.
- 16. Das, S. (2012). Land Use Classification Using Modern Techniques. *The Observer*, 50: 54-57.
- 17. Das, S. (2011). Google Earth: A Contemporary Way to Explore the World. The Observer, 49: 46-51.

Book Chapter:

- 18. Kar, N.S., **Das, S.**, Bandyopadhyay, S. (2020). Anthropogeomorphology of the Lower Deltaic West Bengal with Special Reference to the Hugli River System. In: Das, B.C., Ghosh, S, Islam, I., Roy, S. (eds.) *Anthropogeomorphology of Bhagirathi-Hooghly River System in India*, CRC Press, pp. 83-122. https://doi.org/10.1201/9781003032373_3
- 19. Kar, N.S., **Das, S.** (2020). Flood-Prone Ghatal Region, India: A Study on Post-'Phailin' Inundations of 2013. In: Bandyopadhyay, S., Magsi, H., Sen, S., Ponce Dentinho, T. (Eds) *Water Management in South Asia. Contemporary South Asian Studies* (Springer, Cham), pp. 69-89. https://doi.org/10.1007/978-3-030-35237-0_5
- 20. Patel, P.P., **Das, S.** (2017). Towering Rocky Slabs of Jamsola. In: Kale, V. (Ed.) *Atlas of Geomorphosites in India*. Indian Institute of Geomorphologists (IGI), pp. 45-47. http://doi.org/10.5281/zenodo.3993106
- 21. Bandyopadhyay, S., Kar, N.S., **Das, S.**, Sen, J. (2014). River systems and water resources of West Bengal: A Review. In: Vaidyanadhan, R. (Ed.) *Rejuvenation of Surface Water Resources of India: Potential, Problems and Prospects*. Geological Society of India, Special Publication 3, pp. 63-84. DOI: 10.17491/cgsi/0/v0i0/62893

22. **Das, S.**, Bandyopadhyay, S. (2012). Degeneration of Jalangi River: An Investigation Based on Maps and Satellite Images. In: Desai, M. and Halder, S. (Ed.) *Coping with Disasters: Mitigation Strategy, Preventive Action and Recover*. Abhijit Publications, pp. 66-85. http://doi.org/10.5281/zenodo.3993124

Conference Proceeding:

23. **Das., S.,** Roy, L., Sarkar, A., Sengupta, S. (2020). Mathematical modelling of long profiles in a tectonically active area: Observations from the DEM-based geomorphometry of the Rangit River, India. In: Alvioli, M., Marchesini I., Melelli, L., Guth, P. (eds) *Proceedings of the Geomorphometry 2020 Conference*, pp. 124-127. DOI:10.30437/GEOMORPHOMETRY2020_35

Reviewer of Journals:

- Arabian Journal of Geosciences, Springer Nature Switzerland AG [ISSN: 1866-7511].
- Journal of Geoscience and Environment Protection, Scientific Research Publishing [ISSN: 2327-4344].
- Indian Journal of Geomorphology, Indian Institute of Geomorphologists [ISSN: 2320-0731].
- Safety in Extreme Environments, Springer Nature Switzerland AG [ISSN: 2524-8189].
- Regional Studies in Marine Science, Elsevier [ISSN: 2352-4855].
- International Journal of Digital Earth, Taylor & Francis [ISSN: 1753-8955].
- Advances in Remote Sensing, Scientific Research Publishing [ISSN: 2169-2688].

NUMBER OF SEMINAR PRESENTATIONS:

- International: 20; National: 28; State level: 1
- Invited Lectures: 10

Sessions Chaired/ Co-chaired:

- 'Natural and Man-made Disaster Management' in the 12th World Congress of the Regional Science Association International (RSAI) in 2018.
- 'Water Resource Management III' in the 14th International Geographical Union (IGU)-India International Conference on 'Agriculture, Food, Water, Biodiversity and Health in Changing Climate' in 2020.
- 'Applicability of RS and GIS in Risk Assessment' in the *IGU Commission on Hazard and Risk, International Geographical Union (IGU) International Webinar* on 'Innovations in Disaster Risk Reduction: Aiming Towards a Resilient Society' in 2020.
- 'Role of Remote Sensing and GIS in Geomorphological Studies' and 'Young Geomorphologists Competition' in the 33rd Conference of the Indian Institute of Geomorphologists (IGI): Online International Conference on 'Geomorphology and Environmental Sustainability' in 2021.

NUMBER OF WORKSHOP/ CAPACITY BUILDING COURSE PARTICIPATIONS:

• International: 3; National: 12

WORKSHOP/CONFERENCE ORGANIZER:

- **Organising Secretary** in *National Seminar* on 'Contemporary Research in Geography' in 2016, Organizer: Department of Geography, Bhairab Ganguly College.
- **Co-convener** in the 1st Intensive Training Programme for 'The Young Geomorphologists of India' in 2020, Organizer: IGI-Young Geomorphologists Forum, Host: Department of Geography, University of Calcutta.
- Organising Secretary in the 32nd National Conference of the Indian Institute of Geomorphologists (IGI) on 'Geomorphology for Human Adaptation to Changed Environment' in 2021, Organizer: Indian Institute of Geomorphologists (IGI), Host: Department of Geography, West Bengal State University.
- **Convener** in the 2nd *Intensive Training Programme (Online Event)* for 'The Young Geomorphologists' in 2021, Organizer: IGI-Young Geomorphologists Forum.

MEMBERSHIPS OF LEARNED SOCIETIES

- Indian Society of Geomatics (ISG), Ahmedabad.
- Geographical Society of India, Kolkata.
- *Himalaya Samiksha Parishad*, Kolkata.
- Institute of Indian Geographers (IIG), Pune.

- Indian Science Congress Association (ISCA), Kolkata.
- *Indian Institute of Geomorphologists (IGI)*, Allahabad.
- International Society for Photogrammetry and Remote Sensing (ISPRS), Germany.
- International Association of Hydrological Sciences (IAHS), England.

AWARDS

- Awarded 'Junior Research Fellowship (JRF)' and declared eligible for Lectureship (NET) in the subject of *Earth Atmosphere, Planetary and Ocean Sciences* in the Joint CSIR-UGC Test for *Junior Research Fellowship* and *Eligibility for Lectureship (NET)* held in December 2008.
- Selected as a chapter nominee by the Indian Society of Remote Sensing (ISRS) for participating in the ISRS
 Pre-Symposium Tutorial on 'Crop Area Assessment, Mapping and Modeling' and Annual Convention of ISRS
 and National Symposium on 'Empowering Rural India through Space Technology' held in Bhopal, India, 2011.
- Won Best Poster Award in National Seminar on *'Himalaya: Environment and Development'* for the presentation on "Exploring the Tranquil Beauty of the Himalayas: The Har-Ki-Dun Valley Trek", 2012.
- Best Poster of the 2nd session of Earth System Sciences in the *100th Indian Science Congress* for the presentation on "An Account of the Decayed Upper Course of Jalangi River, West Bengal", 2013.
- Awarded as one of the winners of *Google India Mapathon 2013* by Google Inc.
- Won Best Presentation Award in the Indian Society of Remote Sensing (ISRS), Kolkata Chapter-organized *National Remote Sensing Day* on *'Geospatial Technology and Climate Change'* for the presentation on "Kedarnath Disaster 2013: Evidences from Satellite Data", 2013.
- Awarded foreign travel grants by the Council of Scientific and Industrial Research (CSIR), UGC-DPO, University of Calcutta and ETO, University of Calcutta to attend the 8th IAG International Conference on Geomorphology on 'Geomorphology and sustainability' held in Paris, France, 2013.
- Selected among the top 20 Young Geomorphologists and received grant from the International Association of Geomorphologists (IAG) for the 9th IAG International Conference of Geomorphology on 'Geomorphology and Society' held in New Delhi and Dehradun, India, 2017.
- Received scholarship from Universitas Gadjah Mada, Indonesia for participating in the *Summer Course* on '*Ecosystem-based Disaster Risk Reduction in the Tropics*' held in Yogyakarta, Indonesia, 2018.
- Selected among the top 15 Young Geomorphologists and received grant from the International Association of Geomorphologists (IAG) for the IAG Regional Conference of Geomorphology on 'Geomorphology of Climatically and Tectonically sensitive areas' held in Athens, Greece, 2019.
- Awarded foreign travel grants by the Council of Scientific and Industrial Research (CSIR) and University
 Grants Commission (UGC) to attend the IAG Regional Conference of Geomorphology on 'Geomorphology of
 Climatically and Tectonically sensitive areas' held in Athens, Greece, 2019.