

PERSONAL INFORMATION



Dr. ANIRBAN MUKHOPADHYAY

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Sex Male | Date of birth 08/01/1981 | Nationality Indian

WORK EXPERIENCE

2021- Present

Post-Doctoral Research Associate

**Disaster Preparedness, Mitigation, and Management
Asian Institute of Technology, Bangkok (Thailand)**

- Risk Hazards and Vulnerability assessments of GBM, Mekong & Red River Delta.
- Geospatial modelling
- Hydrodynamic modelling

2019–2021

Post-Doctoral Fellow

Centre for Earth Observation Science, University of Manitoba, Winnipeg (Canada)
<https://umanitoba.ca/faculties/environment/departments/ceos/people/1539.html>

- Geospatial modeling of the coast of Arctic and sub-arctic regions.
- Dynamics of sea surface temperature, sea ice, and land-fast ice
- Hydrodynamic modeling (using Mike -21, DELFT3D/FM)

2018–2019

Research Associate

Space Application Centres (SAC), ISRO (at Jadavpur University, Kolkata, India)

Geospatial Assessment of Mangrove's Species Discrimination In Indian Sundarbans, Their Health And Its Effect On Environment And Climate Using Airborne Hyperspectral (AVIRIS Ng) And RISAT-1 Remote Sensing Data

2014–2018

Senior Researcher

**Deltas, vulnerability and climate change: migration and adaptation (DECCMA India)
(at Jadavpur University., Kolkata, India)**

<http://www.deccma.com/deccma/>

- Coastal Vulnerability Assessment (IPCC AR4/5). Using Multicriteria, AHP, & Bayesian framework
- Land use land cover mapping and modeling using CA-MARKOV Model.
- Coastal erosion modeling Using DSAS Model & Subsidence analysis using GRACE Tellus data
- Hydrographic survey (ADCP, DGPS, Echo-sounder, Current meter)

2016–2017

Consultant

The World Bank

70 Lodi Estate, New Delhi (India)

<http://www.worldbank.org/en/country/india>

- Analysis of climate-related risks of the Mangroves of Indian Sundarbans.
- Mangrove species zonation using satellite data and ground validation.
- Futuristic modeling of Mangrove species with respect to salinity change using geo-statics.

2013–2014 **Project Scientist**

“Assessing health, livelihoods, ecosystem services and poverty alleviation in populous deltas” (ESPA India) Jadavpur University, Kolkata (India)
<http://www.espadeltas.net/>

- Land Use Land Cover Mapping and Modelling.
- Sea level rise and future inundation projection (Bangladesh Sundarbans) Using SLAMM.
- Sundarbans Mangroves zonation and futuristic modeling (Bangladesh Sundarbans) using CA-Markov Model.
- Integrative modeling – building the Delta Dynamic Integrated Emulator Model (ΔDIEM) using Bayesian framework.

2012–2013 **Co-Investigator**

International Growth Centre (IGC), London School of Economics and Political Science (LSE)
<https://www.theigc.org/project/schematic-natural-hazard-zonation-of-bihar-using-geoinformatics/>

- Schematic Natural Hazard Zonation of Bihar using Geo-informatics
- Flood & Drought hazard & Urban Heat Island analysis using geospatial data
- Multi-hazard vulnerability analysis

2006–2008 **Junior Research Fellow**

Hydraulic Study Department, Kolkata Port Trust, Kolkata (India)
<http://kolkataporttrust.gov.in/>

- Hydrographic survey (DGPS, Echo-sounder, Current meter)
- Hydrological data analysis
- Satellite image processing

EDUCATION AND TRAINING

12/2008–02/2014 **PhD in Science**

EQF level 8

Jadavpur university

Topic: Multi-Hazard coastal vulnerability modeling using Geo-informatics along selected sectors of Orissa coast

Course Work: Geological Oceanography

2006–2008 **M.Tech (First Class)**

EQF level 7

Indian Institute of Remote Sensing (IIRS,ISRO) Affiliated by Andhra University, Dehradun (India)

-Remote Sensing & Geographic Information System

03/2005–12/2005 **Post Graduate Diploma (First Class)**

EQF level 7

Indian Institute of Remote Sensing (IIRS,ISRO), Dehradun (India)

Remote sensing and GIS application on natural resource management with a specialization in Marine Sciences.

2002–2004

M.Sc (First Class)

EQF level 7

University of Calcutta, Kolkata (India)

Marine Science

-Physical Oceanography, Geological Oceanography, Chemical Oceanography, Biological Oceanography, Optical Oceanography

PERSONAL SKILLS

Mother tongue(s) Bengali

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Hindi	C2	A2	C2	C1	A1
Spanish	A1	A1	A1	A1	A1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Other skills
Teaching Experience

Adjunct faculty at Disaster Preparedness, Mitigation, and Management (DPMM)

Asian Institute of Technology, Thailand 2021 to present.

Guest faculty member at School of Oceanographic Studies, **Jadavpur University** in “PG Diploma course of Remote Sensing and GIS” and M.Phil course in “Oceanography & Coastal Management” from 2008 to 2019.

Conducting Course

- Conducted EDUSAT based training course at the School of Oceanographic Studies titled “**Remote Sensing, Geographical Information System and Global Positioning System**” organized Jointly by the Indian Institute of Remote Sensing, (NRSC) Department of Space, Government of India, and School of Oceanographic Studies, Jadavpur University in the year 2008, 2009, 2010, 2011, 2012, 2013, 2015, 2016, 2018.
- Conducted EDUSAT based training course at the School of Oceanographic Studies titled “**Advanced Course on Geo-informatics**” in the year 2011& “**Hyper Spectral Remote Sensing**” in the year 2012 **Microwave Remote Sensing** in the year 2014.

ADDITIONAL INFORMATION
Research proposal writing/Funding

- Title:** Schematic Natural Hazards Zonation of Bihar using Geoinformatics' **Funding agency:** International Growth Centre (IGC), London School of Economics and Political Science (LSE) **Grant:** GBP 23.20K
- Title:** Hydrodynamic modeling of freshwater-ice-marine coupling in high-latitude estuaries and coastal waters **Funding agency:** CERC CEOS (U of M) **Grant:** CAD \$145k
- Title:** Monitoring and re-envisioning James Bay system: A sub-Arctic inland sea in transition **Funding agency:** PURE OCEAN **Proposed Funding:** EURO 69690. (**Submitted**)
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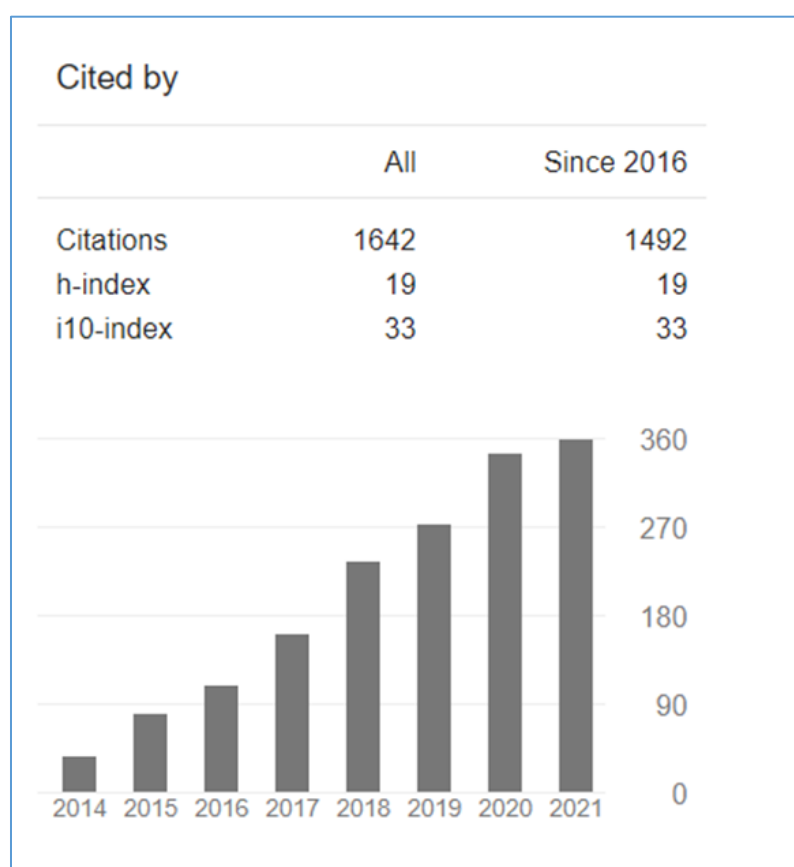
Honours and awards
COSELMAR grant for attending Summer School “Maritime Spatial Planning and Management” from 1st to 5th June 2015 at Department of Coast, Environment, Remote Sensing and Geomatics, Nantes University, France.

- Adjudged to be the **best paper and Poster** in the national seminar on Remote sensing & Environment organized by School of Oceanographic Studies, Jadavpur University in collaboration with the council and Department of Science and Technology, Government of West Bengal from 20th to 22^{en} March 2014.
- **BC3 (Basque Centre for Climate Change) Grunt** for attending the training programme on “Artificial Intelligence for Ecosystem Services Modeling” By Basque Centre for Climate Change and University of Vermont at Bilbao, Spain, 2013
- **Best Young Scientist award** in Coral Reef Section in “National Seminar on Marine & Estuarine Biodiversity” In co-operation with *Department of Ocean Development (DOD), Government of India* Organized by Central Calcutta Science & Culture Organization for Youth 2006.
- Achieved **Second place in a Poster presentation**(Vulnerability of Hooghly estuary) Organized By *NATMO, Prof .S.P.Chatterjee Memorial Foundation* in 22^{end} February 2011

Courses

- Summer school on “**Future delta**” at Utrecht University from 28 August to 01 September 2017, **Netherlands**
- **Hyperspectral Remote Sensing** at National Remote Sensing Centre (**NRSC**) (**ISRO**, Dept. of Space, Govt. of India), Hyderabad, **India**, August 2016
- **Land Cover Classification System (LCCS)** at the Food and Agriculture Organization of the United Nations (**FAO**), Rome, **Italy**. **September 2015**
- **Maritime Spatial Planning and Management** at Department of Coast, Environment, Remote Sensing and Geomatics, Nantes University, **France**. **June 2015**
- **Artificial Intelligence for Ecosystem Services Modeling** By Basque Centre for Climate Change and the University of Vermont at Bilbao, **Spain**, **March 2013**

Publications



Seminar/Symposium/conference:

- Kaushik Gupta, Anirban Mukhopadhyay, Jens Ehn., 2019, Investigating the annual cycle and decadal variability of landfast sea ice in the Canadian sub-Arctic: A Hudson-Bay-wide study. In International Glaciological Society: Sea Ice at the Interface symposium (82A3412)
- Atreya Basu, Greg McCullough, Anirban Mukhopadhyay, Simon Bélanger, Jens Ehn, David G. Barber., 2019, Optical delineation and assessment of the Nelson River plume, Hudson Bay. In International Glaciological Society: Sea Ice at the Interface symposium (82A3412)
- Gupta, K., Mukhopadhyay, A. and Ehn, J., 2020, May. Landfast ice in the Canadian Sub-Arctic: A Hudson-Bay wide study. In EGU General Assembly Conference Abstracts (p. 12232).
- Basu, A., Mukhopadhyay, A. and Ehn, J., 2020, May. Quantile function based, optical characterisation of the Nelson River plume dispersion in Hudson Bay (Canada). In EGU General Assembly Conference Abstracts (p. 2494).

Published Book:

1. **Mukhopadhyay, A.**, Mitra, D. and Hazra, S. eds., 2021. Sundarbans Mangrove Systems: A Geo-Informatics Approach. CRC Press.
2. Ghosh, T. and **Mukhopadhyay, A.** *Natural Hazard Zonation of Bihar (India) Using Geoinformatics: A Schematic Approach*. ISBN 978-3-319-04437-8. (2014), **Springer Briefs in Earth Sciences**
3. Hazra, S., **Mukhopadhyay, A.**, Ghosh, A.R., Mitra, D., Dadhwal, V.K. (ED) -Environment and Earth Observation: Case Studies in India. ISBN 978-3-319-46008-6 (2016) **Springer Remote Sensing/Photogrammetry**

Published Book Chapters: (Blue indicates Corresponding Author)

1. **Mukhopadhyay, A.** and Ghosh, T., 2019. Dynamics of the Sundarbans Forested Islands in the Context of Erosion-Accretion and Sea Level Rise. In *The Sundarbans: A Disaster-Prone Eco-Region* (pp. 491-506). Springer, Cham.
2. Basu, A., Mukhopadhyay, S., Gupta, K., Mitra, D., Chatteraj, S.L. and **Mukhopadhyay, A.**, 2021. Geostatistical Analysis of Suspended Particulate Matter Along the North-Western Coastal Waters of Bay of Bengal. In *Estuarine Biogeochemical Dynamics of the East Coast of India* (pp. 129-149). Springer, Cham.
3. Gupta, K., Pramanick, N. and Mukhopadhyay, A., Remote Sensing as a Tool for Mangrove Ecosystem Mapping and Monitoring: On Sundarbans' Perspective. In *Sundarbans Mangrove Systems* (pp. 67-92). CRC Press.
4. Acharyya, R., Pramanick, N., Gupta, K., Basu, A., Ghosh, T. and **Mukhopadhyay, A.**, Monitoring the Effects of the Tropical Cyclone 'Amphan' on the Indian Sundarbans Using Microwave Remote Sensing. In *Sundarbans Mangrove Systems* (pp. 251-268). CRC Press.
5. **Mukhopadhyay, A.**, Hornby D.D., Hutton C.W., Lazar, A., Amoako Johnson, F., Ghosh, T. 2018, "Land cover and land use: The spatial basis for integrated assessment" *Ecosystem Services for Well-Being in Deltas Integrated Assessment for Policy Analysis*, Nicholls, R.J., Hutton, C.W., Adger, W.N., Hanson, S.E., Rahman, M.M., Salehin, M. (Eds.) ISBN 978-3-319-71093-8. **Palgrave Macmillan**.
6. AN. Lázár, A. Payo, R. J. Nicholls, H. Adams, D. Clarke, C.W. Hutton, Susan Kay, Jose Fernandez, Mostafa, Anisul Haque, Ali Ahmed, **Anirban M.**, Paul Whitehead, M. Salehin, Razzaque, prof Saleh, Sylvia Szabo, Fiifi Amorako Johnson, Jon Ceasar, 2018 -Integrative modelling – building the Delta Dynamic Integrated Emulator Model (ΔDIEM) *Ecosystem Services for Well-Being in Deltas Integrated Assessment for Policy Analysis*, Nicholls, R.J., Hutton, C.W., Adger, W.N., Hanson, S.E., Rahman, M.M., Salehin, M. (Eds.) ISBN 978-3-319-71093-8. **Palgrave Macmillan**.

7. [Mukhopadhyay, A.](#), Andres Payo, Abhra Chanda, Tuhin Ghosh, S. M. Chowdhury, Sugata Hazra, 2018, -Mangroves of Bangladesh Sundarbans it's ecosystem services under climate change: Policy implications II Ecosystem Services for Well-Being in Deltas Integrated Assessment for Policy Analysis, Nicholls, R.J., Hutton, C.W., Adger, W.N., Hanson, S.E., Rahman, M.M., Salehin, M. (Eds.) ISBN 978-3-319-71093-8. **Palgrave Macmillan**.
8. Mitra, D., Bhandery, C., [Mukhopadhyay, A.](#), Chanda, A. and Hazra, S., 2018. Landslide Risk Assessment in Darjeeling Hills Using Multi-criteria Decision Support System: A Bayesian Network Approach. In Disaster Risk Governance in India and Cross Cutting Issues (pp. 361-386). **Springer, Singapore**.
9. Bhadra, T., [Mukhopadhyay, A.](#) and Hazra, S., 2017. Identification of River Discontinuity Using Geo- Informatics to Improve Freshwater Flow and Ecosystem Services in Indian Sundarban Delta. In Environment and Earth Observation (pp. 137-152). **Springer International Publishing**.
10. Ghosh, T., Hajra, R. and [Mukhopadhyay, A.](#) "Island erosion and afflicted population: Crisis and policies to handle climate change." *International Perspectives on Climate Change*, pp. 217-225., ISBN 978-3-319-04488-0, (2014). **Springer International Publishing**
11. Mukherjee, T., S. Mukherjee, [A. Mukhopadhyay](#), A. K. Roy, and S. Dutta. "Drought Monitoring of Chhattisgarh Using Different Indices Based on Remote Sensing Data." In *Climate Change and Biodiversity*, Chapter 7, pp. 85-101. (2014). **Springer Japan**.
12. Pal, I., Ghosh, [T., Mukhopadhyay, A.](#), Ghosh, S. -Cloudburst and flash flood at Uttarkashi (India): An assessment using Geo-informatics II *Multiple Geographical Perspectives on Hazards and Disasters* pp.61 to 72, (ISBN 978-88-979870-9-3) (2015), **Valmar Publication**.

Research Articles (Peer-reviewed): (Blue indicates Corresponding Author)

1. [Mukhopadhyay, A.](#), Ghosh, P., Chanda, A., Ghosh, A., Ghosh, S., Das, S., Ghosh, T. and Hazra, S., 2018. Threats to coastal communities of Mahanadi delta due to imminent consequences of erosion—Present and near future. **Science of The Total Environment**, 637, pp.717-729. **Elsevier. Impact Factor: 4.9**
2. [Mukhopadhyay, A.](#), Mondal, P., Barik, J., Chowdhury, S.M., Ghosh, T. and Hazra, S., 2015. Changes in mangrove species assemblages and future prediction of the Bangladesh Sundarbans using Markov chain model and cellular automata. **Environmental Science: Processes & Impacts**, 17(6), pp.1111-1117 **Royal Society of Chemistry. Impact Factor: 2.592**
3. [Mukhopadhyay, A.](#), Hazra, S., Mitra, D., Hutton, C., Chanda, A. and Mukherjee, S., 2016. Characterizing the multi-risk with respect to plausible natural hazards in the Balasore coast, Odisha, India: a multi-criteria analysis (MCA) appraisal. **Natural Hazards**, 80(3), pp.1495-1513. **Springer. Impact Factor: 1.833**
4. [Mukhopadhyay, A.](#), Mukherjee, S., Mukherjee, S., Ghosh, S., Hazra, S. and Mitra, D., 2012. Automatic shoreline detection and future prediction: A case study on Puri Coast, Bay of Bengal, India. **European Journal of Remote Sensing**, 45(1), pp.201-213. **Taylor and Francis. Impact Factor: 1.533**
5. [Mukhopadhyay, A.](#), Mondal, A., Mukherjee, S., Khatua, D., Ghosh, S., Mitra, D. and Ghosh, T., 2014. Forest cover change prediction using hybrid methodology of geoinformatics and Markov chain model: A case study on sub-Himalayan town Gangtok, India. **Journal of earth system science**, 123(6), pp.1349-1360. **Springer. Impact Factor: 0.955**
6. Hati, J.P., Samanta, S., Chaube, N.R., Misra, A., Giri, S., Pramanick, N., Gupta, K., Majumdar, S.D., Chanda, A., [Mukhopadhyay, A.](#) and Hazra, S., 2021. Mangrove classification using airborne hyperspectral AVIRIS-NG and comparing with other spaceborne hyperspectral and multispectral data. *The Egyptian Journal of Remote Sensing and Space Science*, 24(2), pp.273-281. **Elsevier. Impact Factor: 5.188**

7. Payo, A., **Mukhopadhyay, A.**, Hazra, S., Ghosh, T., Ghosh, S., Brown, S., Nicholls, R.J., Bricheno, L., Wolf, J., Kay, S. and Lázár, A.N., 2016. Projected changes in area of the Sundarban mangrove forest in Bangladesh due to SLR by 2100. *Climatic Change*, 139(2), pp.279-291. **Springer. Impact Factor:3.496**
8. Pramanick, N., Acharyya, R., Mukherjee, S., Mukherjee, S., Pal, I., Mitra, D. and **Mukhopadhyay, A.**, 2021. SAR based flood risk analysis: A case study Kerala flood 2018. *Advances in Space Research. Elsevier. Impact Factor: 2.152*
9. Chanda, A., **Mukhopadhyay, A.**, Ghosh, T., Akhand, A., Mondal, P., Ghosh, S., Mukherjee, S., Wolf, J., Lázár, A.N., Rahman, M.M. and Salehin, M., 2016. Blue carbon stock of the Bangladesh Sundarban mangroves: what could be the scenario after a century?. *Wetlands*, 36(6), pp.1033-1045. **Springer. Impact Factor:1.573**
10. Barik J, **Mukhopadhyay A**, Ghosh T, Mukhopadhyay SK, Chowdhury SM, Hazra S. 2018. Mangrove species distribution and water salinity: an indicator species approach to Sundarban. *Journal of Coastal Conservation*. 1; 22(2) pp.361-368. **Springer. Impact Factor:0.959**
11. Hazra, S., **Mukhopadhyay, A.**, Mukherjee, S., Akhand, A., Chanda, A., Mitra, D. and Ghosh, T., 2016. Disappearance of the New Moore Island from the Southernmost Coastal Fringe of the Sundarban Delta-A Case Study. *Journal of the Indian Society of Remote Sensing*, 44(3), pp.479-484. **Springer. Impact Factor:0.725**
12. Giri, S., **Mukhopadhyay, A.**, Hazra, S., Mukherjee, S., Roy, D., Ghosh, S., Ghosh, T. and Mitra, D., 2014. A study on abundance and distribution of mangrove species in Indian Sundarban using remote sensing technique. *Journal of coastal conservation*, 18(4), pp.359-367. **Springer. Impact Factor:0.959**
13. Ganguly, D., **Mukhopadhyay, A.**, Pandey, R.K. and Mitra, D., 2006. Geomorphological study of Sundarban deltaic estuary. *Journal of the Indian Society of Remote Sensing*, 34(4), pp.431-435. **Springer. Impact Factor:0.725**
14. Acharyya, R., Pramanick, N., Mukherjee, S., Ghosh, S., Chanda, A., Pal, I., Mitra, D. and **Mukhopadhyay, A.**, 2021. Evaluation of catchment hydrology and soil loss in non-perennial river system: a case study of Subarnarekha Basin, India. *Modeling Earth Systems and Environment*, pp.1-29.
15. Ghosh, P., **Mukhopadhyay, A.**, Chanda, A., Mondal, P., Akhand, A., Mukherjee, S., Nayak, S.K., Ghosh, S., Mitra, D., Ghosh, T. and Hazra, S., 2017. Application of Cellular automata and Markov-chain model in geospatial environmental modeling-A review. *Remote Sensing Applications: Society and Environment*, 5, pp.64-77. **Elsevier.**
16. Mondal, A., **Mukhopadhyay, A.**, Guha, S., Kundu, S., Mukherjee, S. and Dasgupta, R., 2012. Decadal-Scale Vegetation Dynamics of Kolkata and Its Surrounding Areas, India Using Fuzzy Classification Technique. *Environment and Natural Resources Research*, 2(4), p.18.
17. **Mukhopadhyay, A.**, Mukherjee, S., Hazra, S. and Mitra, D., 2011. Sea level rise and shoreline changes: a geoinformatic appraisal of Chandipur coast, Orissa. *Int J Geol Earth Environ Sci*, a. 1(1), pp.9-17.
18. **Mukhopadhyay, A.**, Dasgupta, R., Hazra, S. and Mitra, D., 2012. Coastal hazards and vulnerability: a review. *International journal of geology, earth and environmental sciences*, 2(1), pp.57-69.
19. **Mukhopadhyay, A.**, Mukherjee, S., Garg, R.D. and Ghosh, T., 2013. Spatio-temporal analysis of land use-land cover changes in Delhi using remote sensing and GIS techniques. *International Journal of Geomatics and Geosciences*, 4(1), p.213.

20. Chanda, A., Das, S., Bhattacharyya, S., Das, I., Giri, S., Mukhopadhyay, A., Samanta, S., Dutta, D., Akhand, A., Choudhury, S.B. and Hazra, S., 2019. CO₂ fluxes from aquaculture ponds of a tropical wetland: Potential of multiple lime treatment in reduction of CO₂ emission. *Science of the Total Environment*, 655, pp.1321-1333. *Elsevier. Impact Factor:7.963*
21. Mondal, A., Khare, D., Kundu, S., Mukherjee, S., **Mukhopadhyay, A.** and Mondal, S., 2017. Uncertainty of soil erosion modelling using open source high resolution and aggregated DEMs. *Geoscience Frontiers*, 8(3), pp.425-436. *Elsevier. Impact Factor:4.256*
22. Islam, G.T., Islam, A.S., Shopan, A.A., Rahman, M.M., Lázár, A.N. and **Mukhopadhyay, A.**, 2015. Implications of agricultural land use change to ecosystem services in the Ganges delta. *Journal of environmental management*, 161, pp.443-452. *Elsevier. Impact Factor:4.010*
23. Mukherjee, S., Joshi, P.K., Mukherjee, S., Ghosh, A., Garg, R.D. and **Mukhopadhyay, A.**, 2013. Evaluation of vertical accuracy of open source Digital Elevation Model (DEM). *International Journal of Applied Earth Observation and Geoinformation*, 21, pp.205-217. *Elsevier. Impact Factor:3.930*
24. Johnson, F.A., Hutton, C.W., Hornby, D., Lázár, A.N. and **Mukhopadhyay, A.**, 2016. Is shrimp farming a successful adaptation to salinity intrusion? A geospatial associative analysis of poverty in the populous Ganges–Brahmaputra–Meghna Delta of Bangladesh. *Sustainability Science*, 11(3), pp.423-439. *Springer. Impact Factor:3.429*
25. Giri, S., Hazra, S., Ghosh, P., Ghosh, A., Das, S., Chanda, A., Das, I., Chakraborty, K., **Mukhopadhyay, A.** and Maity, S., 2019. Role of lunar phases, rainfall, and wind in predicting Hilsa shad (*Tenualosa ilisha*) catch in the northern Bay of Bengal. *Fisheries Oceanography*, 28(5), pp.567-575. *Impact Factor:2.786*
26. Bhattacharyya, S., Hazra, S., Das, S., Samanta, S., Mukhopadhyay, A., Dutta, D., Choudhury, S.B. and Chanda, A., 2020. Characterizing nutrient dynamics with relation to changes in partial pressure of CO₂ in a tropical sewage-fed aquaculture pond situated in a Ramsar wetland. *Water and Environment Journal*, 34(2), pp.259-273. *Wiley. Impact Factor:2.07*
27. C.E. Stancioff, J. Vermeer, **A. Mukhopadhyay**, S. de Ruiter, G. Brown, C.L. Hofman, 2018. Predicting coastal erosion in St. Kitts: Collaborating for nature and culture. *Ocean & Coastal Management*, 156, pp. 156-169. *Elsevier. Impact Factor:1.861*
28. Chanda, A., Akhand, A., Manna, S., Das, S., **Mukhopadhyay, A.**, Das, I., Hazra, S., Choudhury S.B., Rao, K.H. and Dadhwal, V.K., 2016. Mangrove associates versus true mangroves: a comparative analysis of leaf litter decomposition in Sundarban. *Wetlands ecology and management*, 24(3), pp.293-315. *Springer. Impact Factor:1.508*
29. Mukherjee, S., Mukherjee, S., Bhardwaj, A., **Mukhopadhyay, A.**, Garg, R.D. and Hazra, S., 2015. Accuracy of Cartosat-1 DEM and its derived attribute at multiple scale representation. *Journal of Earth System Science*, 124(3), pp.487-495. *Springer. Impact Factor:0.955*
30. Mandal, J., Ghosh, N. and **Mukhopadhyay, A.**, Urban Growth Dynamics and Changing Land-Use Land-Cover of Megacity Kolkata and Its Environs. *Journal of the Indian Society of Remote Sensing*, pp.1-19. *Impact Factor:0.869*
31. Das, S., Chanda, A., Dey, S., Banerjee, S., **Mukhopadhyay, A.**, Akhand, A., Ghosh, A., Ghosh, S., Hazra, S., Mitra, D. and Lotliker, A.A., 2016. Comparing the spatio-temporal variability of remotely sensed oceanographic parameters between the Arabian Sea and Bay of Bengal throughout a decade. *Current Science*, 110(4), pp.627-639. *Impact Factor:0.843*

32. Akhand, A., **Mukhopadhyay, A.**, Chanda, A., Mukherjee, S., Das, A., Das, S., Hazra, S., Mitra, D., Choudhury, S.B. and Rao, K.H., 2017. Potential CO₂ emission due to loss of above ground biomass from the Indian Sundarban mangroves during the last four decades. *Journal of the Indian Society of Remote Sensing*, 45(1), pp.147-154. **Springer. Impact Factor:0.725**
33. Giri, S., Manna, S., Chanda, A., Chowdhury, A., **Mukhopadhyay, A.**, Chakraborty, S. and Hazra, S., 2016. Implementing a Spatial Model to Derive Potential Fishing Zones in the Northern Bay of Bengal Lying Adjacent to West Bengal Coast, India. *Journal of the Indian Society of Remote Sensing*, 44(1), pp.59-66. **Springer. Impact Factor:0.725**
34. Akhand, A., Chanda, A., Dutta, S., Manna, S., Giri, S., Das, S., **Mukhopadhyay, A.**, Lotliker, A.A., Chakraborty, K., Sarkar, N.S. and Sanyal, P., 2017. Microphytoplankton species assemblages, species-specific carbon stock and nutrient stoichiometry in the shallow continental shelf of the northern Bay of Bengal during winter. *Indian Journal of Geo Marine Sciences*. 46 (09) pp.1827-1835. **NISCAIR. Impact Factor:0.172**
35. Manna, S., Mondal, P.P., **Mukhopadhyay, A.**, Akhand, A., Hazra, S. and Mitra, D., 2013. Vegetation cover change analysis from multi-temporal satellite data in Jharkhali Island, Sundarbans, India. *Indian Journal of Geo-Marine Sciences* 42 (3), pp. 331-342. **NISCAIR. Impact Factor:0.172**
36. Sarkar, D., Mukhopadhyay, A. and Hazra, S., 2013. Characteristics of Tsunami and paleo Tsunami deposits in South Andaman Island, India. *Indian Journal of Geo-Marine Sciences* 42 (7), pp. 839–848. **NISCAIR. Impact Factor:0.172**
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Memberships

- European Geosciences Union
- Indian Society of Remote sensing (Life member)