

## Curriculum Vitae



### **Personal Information:**

**Name:** DR. KAUSTUV MUKHERJEE

**Official Designation:** Assistant Professor in Geography

**Official Address:** Department of Geography,  
Chandidas Mahavidyalaya,  
Khujutipara, Birbhum,  
West Bengal, India-731215.

**Date of Birth:** 29.03.1991

### Contact Details:

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### Academic Information:

Program/ Course	Subject/ Specialization	Institution	Year of completion	% of Marks	Division /Grade
Ph.D. Geography	Hydromorphological Appraisal of Wetlands: Diara Region of Malda District, West Bengal	Department of Geography, Vidya- Bhavana, <b>Visva-Bharati</b> , Santiniketan, India.	2019	-	-
B.Ed.	Core Papers, Special Paper: Guidance and Counselling, Methods: Geography and History	Holy Child B.Ed. College, <b>University of Gour Banga</b>	2014	71.786	1 <sup>st</sup>
M.A.	Geography ( <b>Specialization:</b> Environmental Geography)	Department of Geography, Vidya- Bhavana, <b>Visva-Bharati</b> , Santiniketan, India.	2013	78.5	A+
B.A. (Hons.)	Geography (Hons.)	Department of Geography, Vidya- Bhavana, <b>Visva-Bharati</b> , Santiniketan, India.	2011	71.625	1 <sup>st</sup>
Pre- Degree (Higher Secondary)	Ben, Eng, Geo, Sans, Hist, Math, Leather Work.	Uttar Siksha Sadana, Visva-Bharati, Santiniketan, India.	2008	78.275	1 <sup>st</sup>
Madhyamik Pariksha (Secondary)	Ben, Eng, Math, P.Sc, L.Sc., Hist., Geo., W.Ed	Chowhatta High School, Chowhatta, Birbhum, West Bengal, India. (West Bengal Board of Secondary Education)	2006	89.375	1 <sup>st</sup>

**Scholastic Achievements:**

- **Awarded with Junior Research Fellowship (JRF) with NET** from University Grants Commission (UGC), Govt. of India in 2013. [Roll No. – 11800254]
- **Ranked 1<sup>st</sup>** in M.A. in Geography in the University in 2013.
- **Ranked 1<sup>st</sup>** in Ph.D. Course Work Examination, 2014 in Geography.
- **Ranked 2<sup>nd</sup>** in B.A. (Honours) in Geography in the University in 2011.

**Employment Information:**

Post	Institution/Organization	Period
Assistant Professor	Department of Geography, <b>Chandidas Mahavidyalaya</b> Khujutipara, Birbhum.	09.06.2017 – Till Date
Junior Geographical Assistant	National Atlas & Thematic Mapping Organisation ( <b>NATMO</b> ), Department of Science and Technology, Govt. of India, Kolkata.	08.07.2015 - 08.06.2017

**Refresher / Orientation Course Attended:**

Sl. No.	Name of the Course	Theme of the Course	Date	Organised by
1	UGC Sponsored Refresher Course	2 Weeks Online Refresher Course on Remote Sensing & GIS	06.12.2021 – 18.12.2021	<b>UGC-HRDC, Himachal Pradesh University, Shimla</b>
2	UGC Sponsored Faculty Induction Programme	Faculty Induction Programme (Online)	06.07.2021 – 26.07.2021	<b>HRDC, Mizoram University, University Grants Commission</b>
3	4-Week Induction/Orientation Programme	Faculty in Universities/Colleges/Institutes of Higher Education	19.06.2021- 18.07.2021	<b>PMMMNMTT TLC - Ramanujan College (University of Delhi)</b>
4	Refresher Course	Data Analysis With Statistical Methods (Sharpening Skills in Statistical Analysis through MS-Excel, SPSS, MATLAB and R)	21.12.2020 – 03.01.2021	<b>PMMMNMTT TLC - Ramanujan College (University of Delhi)</b>

**Short-term Courses/Training Programme:**

Sl. No.	Name of the Course	Theme of the Course	Date	Organised by
1	10 Days Online Training Programme	Rainfall Data Analysis using Different Packages of R-Software	12.07.2021 – 22.07.2021	<b>KSCSTE-CWRDM, Kozhikode, Kerala</b>
2	Online Course	Earth Observation for Carbon Cycle Studies	21.06.2021 – 25.06.2021	<b>IIRS, ISRO, Dept. of Space, Govt. of India</b>
3	Faculty Development Programme	Machine Learning and Data Analytics Using Python	27.04.2020 – 05.05.2020	Electronics and ICT Academy, <b>IIT Roorkee</b>

4	TEQIP-KIT Sponsored Short Term Course	Fluvial Hydrodynamics and Thermo Fluids	04.02.2020 – 08.02.2020	Department of Civil Engineering, <b>IIT Kharagpur</b>
5	GIAN Short Term Course	Geoinformatics and Geocomputational Modeling for Water Resources Engineering and Environmental Science	17.09.2018 – 22.09.2018	Department of Civil Engineering, <b>IIT(ISM), Dhanbad</b>
6	GIAN Training Workshop	Applied Groundwater Flow and Transport Modeling with MODFLOW	26.07.2018 – 03.08.2018	Department of Hydrology, <b>IIT Roorkee</b>
7	GIAN Course	Extreme Weather Events over India: Observations, Assimilation and Modeling with special focus on Tropical Cyclones	18.06.2018 – 25.06.2018	School of Earth, Ocean and Climate Sciences, <b>IIT Bhubaneswar</b>
8	TRAINING PROGRAMME	Digital Image Processing, Photogrammetry & 3D GIS	27.02.2017 – 03.03.2017	Regional Remote Sensing Centre – East, Kolkata,(NRSC), <b>ISRO</b>
9	SHORT COURSE	Global Positioning System (GPS)	08.02.2016 – 12.02.2016	National Atlas & Thematic Mapping Organisation ( <b>NATMO</b> ), Govt. Of India
10	SHORT COURSE	Digital Mapping & Geographical Information System (DMGIS)	31.08.2015 – 24.09.2015	<b>NATMO</b> , Govt. Of India, Kolkata
11	SHORT COURSE	Digital Mapping & Geographical Information System (DMGIS)	03.06.2013 – 28.06.2013	<b>NATMO</b> , Govt. Of India, Kolkata

## **Paper Publications**

### ***Journal Articles:***

1. Saha, S., Kundu, B., Saha, A., Mukherjee, K., Pradhan, B. (Dec. 10, 2022). Manifesting deep learning algorithms for developing drought vulnerability index in monsoon climate dominant region of West Bengal, India. *Theoretical and Applied Climatology (Springer)*, <https://doi.org/10.1007/s00704-022-04300-4> [IF: **3.410**] ISSN-1434-4483, (Scopus)
2. Alkindi, K.M., Mukherjee, K., Pandey, M., Arora, A., Janizadeh, S., Pham, Q.B., Anh, D.T., Kourosh Ahmadi, K. (2021). Prediction of groundwater nitrate concentration in a semiarid region using hybrid Bayesian artificial intelligence approaches. *Environmental Science and Pollution Research (Springer)*, <https://doi.org/10.1007/s11356-021-17224-9> [IF: **5.190**] ISSN- 1614-7499, (Scopus)
3. Arabameri, A., Santosh, M., Rezaie, F., Saha, S., Coastache, R., Roy, J., Mukherjee, K., John Tiefenbacher, J., moayedi, H. (2021). Application of novel ensemble models and k-fold CV approaches for Land subsidence susceptibility modelling. *Stochastic Environmental Research and Risk Assessment (Springer)*, <https://doi.org/10.1007/s00477-021-02036-7> [IF: **3.821**] ISSN-1436-3259, (Scopus)
4. Saha, S., Kundu, B., Paul, G.C., Mukherjee, K., Pradhan, B., Dikshit, A., Maulud, K.N.A., Alamri, A.M. (2021). Spatial assessment of drought vulnerability using fuzzy-analytical hierarchical process: a case study

at the Indian state of Odisha. *Geomatics, Natural Hazards and Risk (Taylor & Francis)*, 12:1, 123-153, <https://doi.org/10.1080/19475705.2020.1861114> [IF: 3.922] ISSN- 1947-5713, (Scopus)

5. Pham, Q. B., Mukherjee, K., Norouzi, A., Linh, N.T.T., Janizadeh, S., Ahmadi, K., Cerdà, A., Doan, T.N.C., Anh, D.T. (2020). Head-cut gully erosion susceptibility modelling based on ensemble Random Forest with oblique decision trees in Fareghan watershed, Iran. *Geomatics, Natural Hazards and Risk (Taylor & Francis)*, 11:1, 2385-2410, <https://doi.org/10.1080/19475705.2020.1837968> [IF: 3.922] ISSN- 1947-5713, (Scopus)

6. Arabameri, A., Saha, S., Mukherjee, K., Blaschke, T., Chen, W., Ngo, P.T.T., Band, S.S. (2020). Modeling Spatial Flood using Novel Ensemble Artificial Intelligence Approaches in Northern Iran. *Remote Sensing (MDPI)*, 12 (20), 3423, <https://doi.org/10.3390/rs12203423> [IF: 4.848] ISSN-2072-4292, (Scopus)

7. Mukherjee, K., and Pal, S. (2020). Hydrological and landscape dynamics of floodplain wetlands of the Diara region, Eastern India. *Ecological Indicators (Elsevier)*, 121: 106961, <https://doi.org/10.1016/j.ecolind.2020.106961> [IF: 6.263]. ISSN- 1470-160X, (Scopus)

8. S. Band, S., Janizadeh, S., Saha, S., Mukherjee, K., Bozchaloei, S.K., Cerdà, A., Shokri, M., Mosavi, A. (2020). Evaluating the Efficiency of Different Regression, Decision Tree, and Bayesian Machine Learning Algorithms in Spatial Piping Erosion Susceptibility Using ALOS/PALSAR Data. *Land (MDPI)*, 9: 346, <https://doi.org/10.3390/land9100346> [IF: 3.398] ISSN - 2073-445X, (Scopus)

9. Mukherjee, K. (2020). Wetland habitat stability assessment in hydro-geomorphological (HGM) and surface water availability (SWA) conditions in a lower Gangetic floodplain region of Eastern India. *Ecological Indicators (Elsevier)*, 119: 106842, <https://doi.org/10.1016/j.ecolind.2020.106842> [IF: 6.263] ISSN- 1470-160X, (Scopus)

10. Saha, S., Saha, M., Mukherjee, K., Arabameri, A., Ngo, P. T. T., & Paul, G. C. (2020). Predicting the deforestation probability using the binary logistic regression, random forest, ensemble rotational forest and REPTree: A case study at the Gumani River Basin, India. *Science of The Total Environment (Elsevier)*, 139197, <https://doi.org/10.1016/j.scitotenv.2020.139197>. [IF: 10.754] ISSN- 0048-9697 (Scopus)

11. Mukherjee, K. (2019). Control of physical background on distribution of wetlands in Diara Region, Eastern India. *Spatial Information Research (Springer)*, 27, 373-384. DOI: 10.1007/s41324-019-00244-6. ISSN-2366-3294, (Scopus)

12. Mukherjee, K., Pal, S., and Mukhopadhyay, M. (2018). Impact of flood and seasonality on wetland changing trends in the Diara region of West Bengal, India. *Spatial Information Research (Springer)*, 26(4), 357-367. DOI: 10.1007/s41324-018-0177-z. ISSN-2366-3294, (Scopus)

13. Mukherjee, K., and Pal, S. (2017). Channel migration zone mapping of the River Ganga in the Diara surrounding region of Eastern India. *Environment, Development and Sustainability (Springer)*, 20(5), 2181-2203. DOI: 10.1007/s10668-017-9984-y. (IF: 3.219) ISSN- 1573-2975, (Scopus)

14. Mukherjee, K. (2017). Trend Analysis of Rainfall in the Districts of West Bengal, India: A Study For The Last Century. *Journal of Engineering Computers & Applied Sciences*, 6(1), 1-13. ISSN-2319-5606

15. Ghosh, K.G., Mukherjee, K., and Saha, S. (2015). Fly Ash of Thermal Power Plants: Review of the Problems and Management Options with Special Reference to the Bakreshwar Thermal Power Plant, Eastern India. *International Journal of Geology, Earth & Environmental Sciences*, 5(2), 74-91. ISSN: 2277-2081.

16. Mukherjee, K., and Pal, S. (2015). Control of River and Relief on Spatial Pattern of Settlement Association: A Review on Kushkarani River Basin, a Tributary of Mayurakshi River. *Indian Journal of Applied Environmental Sciences*, 2(1), 53-66. ISSN: 2348-1056.

17. Mukherjee, K. (2014). Riparian Land Use Character along Kushkarani River, a Tributary of Mayurakshi River of Eastern India. *Social Vision*, 1(3), 159-168. ISSN: 2349-0519.

#### **As Resource Person:**

Sl. No.	Date	Topic	Institution	Sponsored
1	April 04, 2018.	Invited Lecture on “Classification of Settlement”	Department of Geography, Krishna Chandra College, Hetampur, Birbhum.	Krishna Chandra College, Hetampur, Birbhum.
2	March 13, 2019.	One Day Workshop on “QGIS Learning”	Department of Geography, Krishna Chandra College, Hetampur, Birbhum.	Krishna Chandra College, Hetampur, Birbhum.
3	April 18 – 19, 2022.	Two-Day Workshop on Historical Studies and Interdisciplinary Methodology on the occasion of World Heritage Day Celebration Programme	Department of Ancient Indian and World History (AIWH), The Sanskrit College and University, Kolkata	The Sanskrit College and University, Kolkata

#### **Paper Presented in seminars:**

Sl. No.	Date	Level/Nature of Seminar	Title of the Paper	Title of the Seminar	Organised by	Sponsored by
1	10-12 Feb., 2021	International	The Future of Floodplain Wetlands from the Perspective of Hydro-Geomorphological Background: A Study on a very dynamic Flood Plain of River Ganga in Eastern India.	40 <sup>th</sup> INCA International Congress on ‘Digital Mapping Innovations in Make India Initiatives	National Atlas and Thematic Mapping Organisation ( <b>NATMO</b> ), DST, Govt. of India.	Self
2	21-24 Oct., 2019	International	Channel Migration of River Ganga and Wetland Potentiality in the Dynamic Floodplain of Eastern India: A RS-GIS – MCDM based Approach.	IGWC-2019 on Sustainable Management of Soil-Water Resources	Department of Hydrology, <b>IIT Roorkee</b>	Self
3	21-22 March, 2018	International	Role of Physical Background on Wetland Concentration of Diara region, Malda District, West Bengal	Population, Urbanization and Environment: <u>Contemporary Issues</u>	Department of Geography, <b>University of Gour Banga</b>	Self
4	25.02. 2017	National	Delineation of Channel Migration Zone of River Ganga in Diara Region: Malda district of Eastern India	Geography: A Science of Man and Environment	<b>Foundation of Practising Geographers</b> , Kolkata	Self

5	March 11 – 12,	International	Identification of Riparian Wetlands of Diara Region, Malda District of West Bengal	Fluvial Processes and Anthropogenic Foot Print	Department of Geography, <b>University of Gour Banga</b>	Self
6	05.03. 2016	National	Trend Analysis of Rainfall and its Impact in the Districts of West Bengal: A Study for the Last Century.	Climate Change and Extreme Weather: Assessment of Vulnerability for Early Warning	<b>Disaster Management Department</b> , Govt. of West Bengal, <b>IMS – Kolkata Chapter &amp; University of Calcutta</b>	Self
7	07.01. 2015	National	An approach for wise use of Wetlands in the context of Social Well-being: a study in AmritiDhap of Diara region of Malda, West Bengal	Social Well-being: Issues and Challenges in 21 <sup>st</sup> Century India	Department of Geography, <b>University of Gour Banga</b>	Self
8	March 1 – 2, 2014	National	Riparian Landuse Character of Kushkarini River: A Tributary of Mayurakshi River of Eastern India	Research Frontiers in Man-Nature Interface	Department of Geography, <b>Visva-Bharati, Santiniketan &amp; Foundation of Practising Geographers</b> , Kolkata	Self
9	September 20 – 21, 2013	National	Wasteland and Its Potential Uses: A Case Study on Labpur C.D. Block, Birbhum District, West Bengal	Contemporary Issues on Environment and Development in India & Adjacent Countries	Department of Geography, <b>Kalyani Mahavidyalaya</b> & Department of Environmental Science, <b>University of Kalyani</b>	Self
10	23.02. 2013	National	Wasteland and Its Management Strategy: A Case Study on Labpur C.D. Block, Birbhum District	River, Flood and Sustainable Resource Management	Department of Geography, <b>University of Gour Banga</b>	Self

### **Participation in Seminars/Workshops:**

Sl.	Date	Level	Topic of the Seminar	Place	Sponsor ed by
1	21st to 27th July 2020.	International	Seven Days International Online Workshop on ‘COVID-19 and its Impact in India’	IQAC, Chandidas Mahavidyalaya, Khujutipara, Birbhum in collaboration with IQAC, Ananda Chandra College, Jalpaiguri	Self
2	August 6, 2020	International	Webinar on ‘Mental Health: Significance, Issues and Representations in Literature’	Department of English & IQAC, Chandidas Mahavidyalaya In collaboration with Department of English, Hiralal Bhakat College	Self
3	July 18, 2020	National	Webinar On ‘Revisiting History of Science, Technology & Medicine’	Department of History, Chandidas Mahavidyalaya	Self

<b>4</b>	14.09.2019 – 23.09.2019	National Workshop	Application of 'R' in Research & Development	AKD Centre for Planning and Development, <b>Visva-Bharati, Santiniketan.</b>	Self
<b>5</b>	14.03.2015 – 15.03.2015	International Workshop	Climate Studies and Emerging Issues	Centre for Climate Studies, Siksha Bhavana, <b>Visva-Bharati.</b>	Self

## Skills

- **Remote Sensing and GIS** based softwares like – ArcGIS, QGIS, Erdas Imagine, PCI Geomatica, Global Mapper, ENVI
- **Spatial Data Handling** – MS-Excel, SPSS, Surfer, Drin-C, GW Vista
- **Programming** – R and Python
- **Machine Learning and Deep Learning based softwares** - WEKA, KNIME
- Have practical experience in handling **GPS, DGPS, hydrometeorological instruments, surveying instruments, soil and water testing kits** etc.

## Research Interests

- Wetland Hydrology and Hydrogeomorphology
- Floodplain Geomorphology
- Natural Hazard Modelling

## Contribution and Performance at a Glance:

<b>Publication</b>	<b>Resource person</b>	<b>Paper presentation</b>	<b>Participation</b>	<b>OP/RC Course</b>	<b>STC/ Training Programme</b>	<b>Research Project</b>
Seventeen (17) Journal Article [UGC-Listed (13) PR (4)]	Three (3)	Ten (10)	Five (5)	Four (4):- FIP (2) RC (2)	Eleven (11)	Nil