

**Curriculum Vitae (CV)**

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1. POSITION : **SCIENTIFIC OFFICER**
2. NAME OF PERSON : **NAYAN CHANDRA GHOSH**
3. DATE OF BIRTH : 01-01-1984
4. NATIONALITY : Bangladeshi
5. MEMBERSHIP IN PROFESSIONAL SOCIETIES : Life Member of Bangladesh Physical Society (BPS)  
Member, Bangladesh Crystallographic Association.  
Member, Isabela Foundation
6. EDUCATION : B.Sc. (Hons), M.Sc. (Physics), Jagannath University,  
M.Phil. (Physics), BUET, PhD. (Ongoing) (Physics),  
BUET
7. OTHER TRAINING :
  - “Training on National Portal Framework Management”, a2i, Prime Minister’s Office, Dhaka.
  - “Application of Numerical Modeling in Water Resource Engineering”, CRHLSR, Chittagong University of Engineering and Technology, Chittagong.
  - “e-GP user module course”, dohatec, Planning Commission, Dhaka.
  - “Public procurement processing and approval procedure”, Bangladesh Institute of Management, Dhaka.
  - “Certificate Training course on Fundamental of GIS”, Department of Geography and Environment, Dhaka University, Dhaka.
  - “Certificate Training course on Fundamental of Remote Sensing”, Department of Geography and Environment, Dhaka University, Dhaka.
  - “Physical and Mathematical Modeling Aspects of all the Processes in Hydrological Cycle”, RRI, Faridpur.
  - “Training Course on Hydraulic Modeling Using HEC-RAS”, RRI, Faridpur.
  - “Training on Innovation in Public Service”, RRI, Faridpur.
  - “Training on E-Filing Management System”, RRI, Faridpur.
  - “Training on PPR, Particularly on Goods”, RRI, Faridpur.
  - “Training Courses on Geo SWMM Model” RRI, Faridpur.
  - “Fundamentals of Physical Modeling, River and Coastal Hydraulics”, RRI, Faridpur.

- “Mathematical Modeling Using MIKE Software”, RRI, Faridpur.
- “Flood Risk Management and River Flood Analysis and Modelling”, RRI, Faridpur.
- “Installation and Operation & Application Training on MIKE Software Powered by DHI 2020”, RRI, Faridpur.
- “User Training Course on ArcGIS Desktop, ArcGIS Desktop Advance and Pro Extension by ESRI”, RRI, Faridpur.
- “Training on My Gov Service Implementation”, MoWR, Dhaka.
- “User Training on TOC Analyzer”, RRI, Faridpur.
- “User Training on CHNS Analyzer”, RRI, Faridpur.
- “User Training on Particle Size Analyzer”, RRI, Faridpur.
- “User Training on Tri-axial Testing Machine”, RRI, Faridpur.
- “User Training on Rotary Boring Rig”, RRI, Faridpur.
- “User Training on Soil Resistivity Meter”, RRI, Faridpur.
- “User Training on Thermal Conductivity Meter”, RRI, Faridpur.

8.	LANGUAGE & DEGREE OF PROFICIENCY :	Language	Speak	Read	Write
		English	Excellent	Excellent	Excellent
		Bangla	Excellent	Excellent	Excellent
9.	COUNTRIES OF WORK EXPERIENCE :	Bangladesh			
10.	EMPLOYMENT RECORD :				
	FROM 06-02-2014 :	TO Till date			
	EMPLOYER :	River Research Institute			
	POSITION HELD AND :	Scientific Officer			
	DESCRIPTION OF DUTIES :	Responsibilities include preparation of technical and financial proposals for different water resources and environmental research projects, primary and secondary data collection, data analysis, report writing, conduct seminar presentation and journal publications of those projects, conduct EIA of various development projects, acting as a junior scientist of soil mechanics and sediment, chemical & water pollution division.			

DETAILED  
ASSIGNED

TASKS : **Research Project:**

1. Project name: Eco-hydrological status and impact assessment of Someshwari River in Netrokona and Shitalakhya River in Dhaka, Bangladesh.  
Year: April 2020 to till date (Ongoing)  
Position held: Senior Investigator
2. Project name: Characterization of soil around Arial Khan River of Bangladesh.  
Year: March 2020 to till date (Ongoing)  
Position held: Investigator
3. Project name: Study On Coastal Processes In Bangladesh And Its Socio-Economic And Environmental Implications  
Year: July 2018 to till date (Ongoing)  
Position: Investigator
4. Project name: Development of Suitable Technologies for Removal of Manganese from Ground Water in Household, Community and Municipal Levels.  
Year: July 2017 to till date (Ongoing)  
Position held: Investigator
5. Project name: Investigation of geotechnical reasons for bank failure on Daulatdia and paturia site of Padma river of Bangladesh.  
Year: October 2017 to June 2019  
Position held: Investigator
6. Project name: Hydro-morphological study of the Mahananda river in Bangladesh with focus on problems and probable solutions of dry season flow scarcity.  
Year: July 2016 to June 2018  
Position held: Investigator
7. Project name: Hydro-morphological and Environmental study of the Karnaphuli River  
Year: July 2015 to June 2017  
Position held: Field Investigator
8. Project name: Assessment of river pollution around Dhaka and find out ways to alleviate pollution.  
Year: July 2014 to June 2016  
Position held: Research Assistant

**Exact duties rendered:** Technical and Financial research proposal preparation, procuring scientific

instruments and research materials, Primary and Secondary data collection, data analysis, find out probable solution, report writing and publications.

**Environmental Impact Assessment (EIA):**

1. Project name: ESIA for Sheikh Hasina Specialized Jute Textiles Mill Project.  
Year: December 2019 to till date (Ongoing)  
Position held: Member of EIA team
2. Project name: Topographical, Hydrological and Morphological Study using Mathematical Model for Madanpur-Dirai-Sullah (Dirai-Sullah Portion) Road under Sunamganj Road Division.  
Year: February 2018 to May 2019  
Position held: Member of EIA team
3. Project name: Topographical, Hydrological and Morphological Study using mathematical model and Environmental Impact Assessment (EIA) study for the proposed new Sachna-Golakpur Road Under Sunamganj Road Division.  
Year: September 2016 to April 2017  
Position held: Member of EIA team

**Exact duties rendered:** Primary and Secondary data collection, data analysis, environmental impact assessment and remedy study, report writing and publication.

PUBLICATIONS

: **Journal Publications Related to RRI**

1. U. Saha, M. Moniruzzaman, **N. C. Ghosh**, S. Ferdoush, K. R. Karim and S. K. Das, "A Study on Geotechnical Characterization of Red Soil of Dhaka City of Bangladesh", Tech. J. River Res. Inst. 15(1), 2020: 87-94.
2. F. Rukshana, **N. C. Ghosh**, M. Moniruzzaman, K.R. Karim, M. Shahabuddin, K.R. Ahmed and M.M. R. Mondol, "Spatial and Temporal Distribution of Heavy Metals in the Buriganga River", Tech. J. River Res. Inst. 15(1), 2020: 48-58.
3. Rahman M.L., F. Rukshana, **N. C. Ghosh**, M. Moniruzzaman, M. Shahabuddin and M.K.R. Ahmed, "Polluted River Water Enhances Accumulation of Heavy Metals in Soil and Crops", Vegetos 30(Special), 2017: 220-226.
4. Uma Saha, Sheela Rani Chowdhury, Md. Shabauddin, Khondoker Rajib Ahmed and **Nayan Chandra Ghosh**, "A Geotechnical Profile of Haor Area of Bangladesh", Tech. J. River Res. Inst. 13(1), 2016: 125-135.

5. Uma Saha, Fatima Rukshana, Md. Shahabuddin, Syed Md. Anwaruzzaman, Md. Matiar Rahman Mondol and **Nayan Chandra Ghosh**, "Effect of Particle Shape on its Other Granular Soil Properties", Tech. J. River Res. Inst. 13(1), 2016: 53-64.

### Other Publications

#### Journal

1. **Ghosh, N. C.**, Das, H. N., Gafur, M. A., Akther Hossain, A. K. M., "Formation and Magnetic Properties of Nanocrystalline 78.5-Permalloy by Mechanical Alloying", Procedia Engineering, 90 (2014): 136 – 139, doi: 10.1016/j.proeng.2014.11.826.
2. **Ghosh, N. C.**, Das, H. N., Gafur, M. A., Akther Hossain, A. K. M., "Investigation of Structural And Magnetic Properties of Ni-FeMo Nanocrystalline Alloy Synthesized By Mechanical Alloying", Journal of Engineering Science 06(1&2), 2015, 105-110.

#### Abstract

1. **Ghosh, N. C.**, Quadri, R., Gafur, M. A., Akther Hossain, A. K. M., Structural and XRD profile refinement analysis of nanocrystalline NiFeMo alloy synthesized by mechanical alloying, "International Conference on Physics for Energy and Environment", 06-08 March, 2014, Bangladesh Physical Society, Dhaka.
2. **Ghosh, N. C.**, Das, H. N., Gafur, M. A., Akther Hossain, A. K. M., "Investigation of structural and magnetic properties of Ni-Fe-Mo nanocrystalline alloy synthesized by mechanical alloying", National conference on Physics for sustainable development, 15 February, 2014, Khulna University of Engineering and Technology, Khulna.
3. **Ghosh, N. C.**, Das, H. N., Gafur, M. A., Akther Hossain, A. K. M., "Structural and magnetic properties of nanocrystalline NiFeMo alloy", First National Conference of Bangladesh Crystallographic Association (BCA), 05 December, 2013, BCA, Dhaka.

11. WORK UNDERTAKEN THAT BEST ILLUSTRATES CAPABILITY TO HANDLE THIS POSITION

I, Nayan Chandra Ghosh, a physicist, have extensive working experience in preparing technical and financial proposal of research project, data collection, data interpretation and analysing environmental, sediment, soil, hydrological and modelling data for finding out solutions of different environmental and hydraulic problems and optimization of different design parameters of hydraulic structures and remedy of environmental problems due to hydraulic and different types of infrastructures development by means of different research projects and industrialisation. My educational qualification and working experience are fully compatible with the proposed position and I am well competent to carry out the future tasks. I have conducted a number of researches in water sector. I am efficiently working in project preparation, data collection, data analysis, Origin, ArcGIS, ERDAS Imagine, SPSS software, etc. for preparation of different types of project maps and environmental issues study in Bangladesh.

CERTIFICATION

I, the undersigned, certify that: to the best of my knowledge and belief, this bio-data correctly describes me, my qualifications, and my experience. I understand that any wilful mis-statement described herein may lead to my disqualification or dismissal, if engaged.

I have been employed by River Research Institute, Faridpur continuously for the last eighty eight (88) months as regular full time staff. Indicate "Yes" or "No" in the box below:

Yes  No



Signature: (NAYAN CHANDRA GHOSH)

Date of Signing: 20.06.2021