

# Raman Kumar Biswas

## Dr. Raman Kumar Biswas

Foreign Researcher (Since October 2023- October 2024)  
Graduate School of Sciences and Technology for Innovation,  
Yamaguchi University, 1677-1 Yoshida, Yamaguchi City  
Postcode; 753-0841, Japan

Ex. Assistant Professor  
Shinshu University, Matsumoto,  
Nagano, Japan

(MS and Ph.D. (Tohoku University, Japan)  
Professor and Chairman (Ex)  
Dept. of Disaster Resilience and Engineering  
Faculty of Environmental Science and Disaster Management  
Patuakhali Science and Technology University, Dumki,  
Patuakhali, Bangladesh-8602.



E-mail: [rkb07\\_jh@yahoo.com](mailto:rkb07_jh@yahoo.com) and [ramanbiswas@pstu.ac.bd](mailto:ramanbiswas@pstu.ac.bd)

Cell phone: +8801300841136 (BD)  
<https://orcid.org/0000-0002-9741-9988>  
Web site: <https://www.pstu.ac.bd/teachers/mr.ramankumarbiswas>  
LinkedIn: <https://www.linkedin.com/in/raman-kumar-biswas-82981597/>  
<https://about.me/ramankumarbiswas?fbclid=IwAR0gySiyPmZTbRQ396XcY8ALZxMhembeT4EYMCIOOrIBP5sNEq-0XpyckOY>

Google Scholar: <https://scholar.google.co.jp/citations?user=jFr-pBgAAAAJ&hl=en>

Website: <https://colorgeo.com/>

## Education

**Ph. D.** (Oct 2016-Nov 2020) Tohoku University, Sendai, Japan.  
Thesis; “Terrestrial Ecosystem Collapse and Soil Erosion before the End-Permian Marine Extinction: Organic Geochemical Evidence from Marine and Non-Marine Records”

- Advisor; Prof. Dr. Kunio kaiho
- Result; Passed

 **M.S in Earth Science** (Oct 2014-Sep 2016) Tohoku University, Sendai, Japan.

- Thesis; “Land ecosystem collapse followed by marine environmental stress spanning the Permian-Triassic mass extinction”
- Advisor; Prof. Dr. Kunio kaiho
- Result; First Class

 **M.Sc. in Geology & Mining** (2005-2006) Rajshahi University, Bangladesh *(Exam held in 2008)*

- Thesis: “STUDY OF GROUNDWATER QUALITY IN SHAILAKUPA UPAZILA, JHENEAIDAH, BANGLADESH”
- Advisor: Dr. Khandaker Imamul Haque
- Result : First Class

 **B.Sc. in Geology & Mining** (2002-2005) Rajshahi University, Bangladesh *(Exam held in 2006)*

- *Research* : Geological field work on Maheshkhali Island of Cox's Bazar District, Bangladesh
- *Advisor*: Dr. Mrinal Kanti Roy
- *Result* : First Class

 **Higher Secondary school Certificate (H.S.C)** in Science Jessore Board, Bangladesh, 2000

- *Result* : First Division

 **Secondary school Certificate (S.S.C)** in Science Jessore Board, Bangladesh, 1998

- *Result* : First Division with star marks

### **Personal Information:**

Date of Birth: April 12, 1982  
 Nationality : Bangladeshi  
 Blood Group: B+  
 Marital status: Divorced

### **Research interest in Brief:**

Biogeochemistry, Mass Extinction and Paleo-climate, Evolutionary Changes and causes, Sedimentology, Marine Environmental changes, and its phenomenon. Geological Research, Paleo extinction of the earth history, GIS and Remote Sensing, Ground Water Quality. Petroleum Exploration using a biomarker analysis by GCMS/MS

### **Current Research on:**

“Recalculation of the  $2\alpha$ -methylhopanes index as a robust proxy for the stress environmental condition.

### **Post-Doctoral Research:**

Phase 1: Working as an assistant professor and research fellow under professor Dr. Yoshida Kohki at Shinshu University during the period of 1 December to 31 March 2022.

Phase 2: Renewed to October 2023 (do).

Phase 3: Foreign Researcher

Graduate School of Sciences and Technology for Innovation, Yamaguchi University, 1677-1 Yoshida, Yamaguchi City, Postcode; 753-0841, Japan

### **Membership:**

The Task Group on Submarine Geohazards (TGSG)  
<https://iugs-tgsg.com/about/>

### **Publications**

1. Rahim, MA., Nur, MNB., Hasan,I.,Hasan, MF.,Hossain,T., Rafiq, MR., Rakib, MMH., Khan, A., **Biswas, RK.**, (2024). Community Perceptions on Flood Recovery and Knowledge Gaps Towards Flood Resilience at Fulchhari Upazila of Gaibandha District, Bangladesh, Environmental Challenges (Manuscript Number: ENVC-D-24-00485) **Submitted**
2. Rahim, M.A., Akter, N., Roy, D.K., Hasan, I., Salman, M.A., Goswami, S., Abir, T.M., **Biswas, R.K.** and Rakib, M.M.H., 2024. Assessment of Socio-Economic Impacts of River Bank Erosion: Enhancing Resilience in the Coastal Belt of Bangladesh. *The Journal of Environment & Development*, p.10704965241246710.

3. Rokonuzzaman MK, Rahim MA, Biswas RK, Nur MNB, Faisal M, Siddiqua A, and Roy DK. (2023). Analyzing differentiated climate change impacts on women in the wetland area: a case study on Sunamganj district. *Asian J. Soc. Sci. Leg. Stud.*, 5(6), 266-277. <https://doi.org/10.34104/ajssls.023.02660276>
4. Muna IA, **Biswas RK**, Hossain AF, Shil H, Mistry G, Rahim MA, Siddiqua A, Ghosh S, Nur MNB, Rokon MR, Maksud A, and Jame MY. (2023). Impacts of natural disaster on the people's livelihood and the adaptation strategies of Amrajuri, Pirojpur, Bangladesh. *Aust. J. Eng. Innov. Technol.*, 5(5), 229-243. <https://doi.org/10.34104/ajeit.023.02290243>
5. Islam M. A, **Biswas R.K.**, Ghosh S., Mistry G., 2023. Application of Mahogany Leaves and Sawdust Biochar for Amendment of Saline Soil Am. J. Pure Appl. (AJPAB-RA-23-078) Accepted on July 21, 2023.
6. Simu, S.A., Roy, M.K., Saha, A., Ornee, T.I., **Biswas, R.K.**, Goswami, S. and Roy, D.K., 2023, Tectonic Setting and Geochemical Characteristics in an Association of Weathering, Climate, and Provenance of the Dupi Tila Formation from Sitapahar Anticline, Kaptai, Rangamati, Bangladesh. *J. Barisal Uni.* (Accepted).
7. **Biswas R.K.**, Ghosh S., Islam A. S, Roshni F.A., and Roshnai, 2022. Assessment of Drinking Water Quality and its Effects on Health from Mongla City with Surrounding Area of Bangladesh Am. J. Pure Appl. Sci, 4(3) 47-54 pp. Published on June 10, 2022.
8. **Biswas R.K.**, SiddiquaA., Rahim M.A, Roy D.K, Ghosh S., Jame M.Y., 2022 Farming system through the Indigenous Knowledge in Wetland Agriculture Sector in Patuakhali District, Bangladesh" J.Patuakhali Sci.Tech. Uni. (Accepted, Manuscript Number: JPSTU-2021-12-09) 25 October 2022.
9. Rokonuzzaman M.H., Rahim M.A., **Biswas R.K.**, Nur M.N.B., Siddiqua A., 2022. Climate Vulnerability Assessment and Building Community Resiliency at Kalaskati Union, Bakerganj Am. J. Pure Appl. Sci, 4(3) 41-46 pp. Published on May 7 2022.
10. Khan A. H., **Biswas R.K.**, Ansary M.A., Roy D.K., Rokonuzzaman M.K., 2021. Assessment of River Bank Erosion and Channel Shifting of Lower Padma River using Multitemporal Satellite Data and GIS Technique, Journal of the Patuakhali Science and Technology University. *J. Patuakhali Sci. and Tech. Uni.* 11 (1), 29-49 pp.
11. Aftabuzzaman, M., Kaiho, K., **Biswas, R.K.**, Liu, Y., Saito, R., Tian, L., Bhat, G.M. and Chen, Z.Q., 2021. End-Permian terrestrial disturbance followed by the complete plant devastation, and the vegetation proto-recovery in the earliest-Triassic recorded in coastal sea sediments. *Global and Planetary Change*, p.103621.
12. **Biswas, R.K.**, Kaiho, K., Saito, R., Tian, L. and Shi, Z., 2020. Terrestrial ecosystem collapse and soil erosion before the end-Permian marine extinction: Organic geochemical evidence from marine and non-marine records. *Global and Planetary Change*, 195, p.103327.
13. Kaiho K., Saito R., Oba M., Ito K., Miyaji T., **Biswas R.**, Tian L., Sano H., Shi Z., Takahashi S., Tong J., Liang L., Oba M., Nara F.W., Tsuchiya N., Chen Z.Q., (2016) Effects of soil erosion and anoxic—the euxinic ocean in the Permian–Triassic marine crisis. *Heliyon* 2, 137.

14. Saito, R., Kaiho, K., Oba, M., Tong, J., Chen, Z.Q., Takahashi, S., Chen, J., Tian, L. and **Biswas, R.K.**, (2016) Secular changes in environmental stresses and eukaryotes during the Early Triassic to the early Middle Triassic. *Palaeogeogr. Palaeoclimatol. Palaeoecol.* 451, 35-45.
15. Kunio, K., ITO, K., Saito., R., MIYAJI, T., OBA, M., Satoshi, T., **BISWAS, R.K.** 2015, Abrupt surface-water reduction accompanied by massive soil inflow during the end-Permian mass extinction Japan Geoscience meeting BPT 17-11
16. Kulatunga U; Gayan W; Dilanthi A; Parvez A and **Biswas R.K.**; Disaster Risk Reduction in Bangladesh 2012, World Construction Conferences; Colombo, Srilanka; 209-220pp.
17. **Biswas R.K.**; Shamsuzzoha M; Islam A.R.M.T; 2012. Suitability Assessment of some Groundwater samples for Irrigation of Shailakupa Upazila under Jhenaidah District, Journal of the Patuakhali Science and Technology University.
18. **Biswas R.K.**, Roy M.K. and Haque K.I. 2013. Assessment of groundwater quality for drinking purposes in some parts of Jhenaidah District, Bangladesh. *International Journal of Geology, Earth and Environmental Sciences*; Jaipur, India. Vol. 3 (1) pp.195-204.
19. **Biswas, R.K.**, Roy, D.K., Islam, A.R.M.T., Rahman, M.M. and Ali, M.M., 2014. Assessment of drinking water related to arsenic and salinity hazard in Patuakhali district, Bangladesh. *International journal of advanced geosciences*, 2(2), pp.82-85.
20. Islam, A.R.M.T., Islam, M.A., Tasnuva, A., **Biswas, R.K.** and Jahan, K., 2014. Petro physical parameter studies for characterization of gas reservoir of Norshingdi gas field, Bangladesh. *International Journal of Advanced Geosciences*, 2(2), pp.53-58.

#### Books;

1. **নিউটনের ঘত আবিষ্কার নিউটনের ঘত আবিষ্কার (হার্ডকভার)** by Dr. Raman Kumar Biswas, Product Specification & Summary Specification Author Title **নিউটনের ঘত আবিষ্কার (The Discovery of Newton)** Author ড. রমন কুমার বিশ্বাস Publisher বাবুই ISBN 9789849661030 Edition 1st Published, 2022 Country (Bangladesh) বাংলাদেশ Language (Bangla) বাংলা <https://www.rokomari.com/book/231869/newtoner-joto-abishkar>
2. **বাংলাদেশের গণহত্যা (হার্ডকভার)** by Dr. Raman Kumar Biswas, রয়েল পাবলিকেশন ISBN: 9789849738763. <https://www.rokomari.com/book/365181/bangladeshhar-gonohotta>
3. **প্রাগৈতিহাসিক দুর্যোগ ও গণ বিলুপ্তির উপাখ্যান (হার্ডকভার)** by Dr. Raman Kumar Biswas, রয়েল পাবলিকেশন, ISBN: 9789849714897. <https://www.rokomari.com/book/365262/pragoithasik-durjog-o-gono-biluptir-upakkan>

#### International Conference attended;

- ❖ Conference of Japan Geosciences Meeting on 06 May, 2017.  
Paper Presented; Biswas, R.K, Saito, R., Kaiho, and., Zhiqiang Shi, “Land ecosystem collapse followed by marine environmental stress spanning the Permian-Triassic mass extinction” *Journal of Geochim. Cosmochim. Acta*.

- ❖ IGCP 630 Meeting in Japan, 2017 (Permian-Triassic Climatic & Environmental Extremes and Biotic Response) Sendai, Japan. June 14-20, 2017  
Peper Presented; “Land ecosystem collapse followed by marine environmental stress spanning the Permian-Triassic mass extinction”
- ❖ International meeting of Paleontological Society of Japan at Tohoku University held on 22 June 2018 to 24 June 2018. Paper presented: Biswas, R.K, Saito, R., Kaiho, and., Zhiqiang Shi “Terrestrial collapse spanning the end-Permian mass extinction”
- ❖ Participated and Certified for the Joint Staff and International Stakeholder Training at the BECK Project; a Collaborative work among Russia, Srilanka, and Bangladesh on 30 June, 2020 (Virtual Training).

#### **Awards/Certificates:**

- ❖ A certificate in Data Acquisition, Preprocessing, and Modelling using the PCRaster Phyton Framework Module 14, 19 - 30 September 2022 at the IHE Delft Institute for Water Education, The Netherlands.
- ❖ A certificate of completion on Basic ArcGIS Training for Beginners and Professionals during the Period of 1<sup>st</sup> September to 1<sup>st</sup> December 2021 by the ESDM Club, PSTU.
- ❖ A certificate on Basic ArcGIS Training for Beginners and Professionals during the Period of 05 July to 02 August 2021 by the ESDM Club, PSTU.
- ❖ MEXT Scholarship for the MS Leading to the Ph.D. program at Tohoku University from 30 September 2014 to 1 October 2019.
- ❖ A Certificate training course on Disaster management and monitoring using integrated space technology(**RS-GIS-GNSS-GTV&V**) by Bangladesh Space Research and Remote Sensing Organization(SPARRSO). (25 Sep-05 Oct. 2011).
- ❖ A certificate from Graduate Training Institute (GTI) maymonshing, Bangladesh on “9<sup>th</sup> foundation Training for University Teachers” (12 May-10 June 2013).
- ❖ A certificate by the University of Sal ford, Manchester, UK for participating, data analysis and conducted a presentation on **Earthquake scenario in Bangladesh** by INSPIRE Scheme CEREBELLA Research project funded by British Council from 26 Feb-05 Mar. 2012)
- ❖ Academic **Gold Medal** from Rajshahi University for obtaining 1<sup>st</sup> Class in B.Sc in Geology and mining.
- ❖ Musical & cultural competition 2007, Shaheed Suhrawardi Hall, Rajshahi University.
- ❖ Incentive trip in Manila, Philippine for 7 days in 2011. by Novartis (Bangladesh) Limited.
- ❖ Incentive trip in India for 5 days in 2010. By Novartis (Bangladesh) Limited

#### **Teaching Experience (Bangladesh):**

From 06 March 2011 –till date in the Dept. of Disaster Resilience and Engineering Faculty of Disaster Management, Patuakhali Science and Technology University, Dumki, Patuakhali, Bangladesh-8602.

#### **Teaching Experience (Japan):**

1. Working as an assistant professor and research fellow under Professor Dr. Yoshida Kohki at Shinshu University during the period of 1 December to 31 March 2022.
2. Graduate School of Sciences and Technology for Innovation, Yamaguchi University, 1677-1 Yoshida, Yamaguchi City, Postcode; 753-0841, Japan

### **Geological Field Sampling Experience (Japan):**

I am involved in a Research Lab that has extensive field sampling in the Yamaguchi University area. I have collected many limestone samples from karst mountain and prepared more than 100 microscopic thin-section samples. I like to travel and collect samples from the hills and other geological sections. I have a Japanese driving license.

### **MS and Intern Thesis Supervision:**

Four (4) MS students and three (3) Undergraduate students (Completed).

### **Current Research on:**

“Recalculation of  $2\alpha$ -methylhopanes index as a robust proxy for the stress environmental condition.

### **Courses conducted by me:**

Case Studies of International Projects on Disaster Resilience, Credit Hours 2

Sustainable Water Resource Management Credit Hours 2

Earthquake Engineering and Geo-Hazard Studies, Credit Hours 2

Disaster in Mining Exploration and Management, Credit Hours 2

Applied Hydrology and Water Engineering, Credit Hours 2

Project Management, Credit Hours 2

Research Methodology, Credit Hours 2

Disaster Risk Reduction: Principle and Practices, Credit Hours 2

Introduction to Hazard risk and disaster, Credit hour: 2

Indigenous Knowledge for Disaster Management, Credit hour: 2

Fundamentals of Hydrology, (Theory and Practical), Credit hour: (2+1)

Introduction to Earth Science Credit hour: 2

Earthquake Management and Engineering (Theory and Practical), Credit hour: (2+1)

Disaster Risk Management in Business Sector, Credit Hour: 2

Disaster Risk Management in Tourism Sector Credit Hours: 2

Fundamentals of Geophysics, CR 2

Oceanography, CR 2

Remote Sensing; CR 2

Presentation and argumentation skill CR 1

**Administrative Experience:** Assistant Provost, Sher-E-Bangla Hall-2, Patuakhali Science and Technology University. Since 01 Aug. 2012 to 31 July 2014

### **Implementation of Bangladesh Govt. Project;**

1. “Feasibility study to construct the Flood shelter in the River erosion and flood-prone area of Bangladesh” funded by the Ministry of Disaster Management and Relief (MoDMR) organized by the Department of Disaster Management (DDM) of the Govt. of Bangladesh from 03 March 2022 to 03 July 2022.

- “Feasibility study to construct the cyclone shelter in the coastal and cyclone prone area of Bangladesh” funded by the Ministry of Disaster Management and Relief (MoDMR) organized by the Department of Disaster Management (DDM) of the Govt. of Bangladesh. 03 March 2022 to 03 July 2022.

### **Undergraduate Reports:**

**Title:** *Geological field report on the Sitakund anticline, Chittagong District, Bangladesh.*

### **Training:**

- ❖ Training on Data Acquisition, Preprocessing, and Modelling using the PCRaster Phyton Framework Module 14, 19 - 30 September 2022 at the IHE Delft Institute for Water Education, The Netherlands.
- ❖ A certificate of participation in virtual joint staff and stakeholders training events of the projects 'Integrated education with consumer behavior related to energy efficiency and climate change at the universities of Russia, Sri Lanka, and Bangladesh (BECK) at Vilnius Gediminas Technical University on 30 June 2020, Vilnius, Lithuania.
- ❖ A certificate giving training on Outcome Based Curriculum and Education by Institutional Quality Assurance Cell (IQAC) of Patuakhali Science and Technology University (PSTU), Dumki, Patuakhali, Bangladesh-8602 (10 June-17 June 2021), 6 days.
- ❖ A training course on Disaster management and monitoring using integrated space technology(**RS-GIS-GNSS-GTV&V**) by Bangladesh Space Research and Remote Sensing Organization(SPARRSO).(25 Sep-05 oct.2011).
- ❖ A training from Graduate Training Institute (GTI) Maymenshing, Bangladesh on “9<sup>th</sup> foundation Training for University Teachers” (12 May-10 June 2013).

### **Skills:**

- ❖ Able to do geological field sampling and make a geological map
- ❖ Gas Chromatography-Mass Spectrometry Mass Spectrometry (GCMSMS) and Familiar with LCMS
- ❖ Professional quality of Microscopic thin sections (especially Limestone Rock)
- ❖ Able to drive a Car and Motorbike. (Japanese Driving License)
- ❖ Energetic and capable to adopt in any type of environment.
- ❖ Ability to work independently as a member of any team.
- ❖ Can work under pressure and enjoy working to meet the challenge.
- ❖ Singer and Plays Musical Instruments
- ❖ Able to use Python Programming for hydrological analysis
- ❖ Able to use QGIS and its application on the hydrological catchment area delineation.
- ❖ Able to use Agilent Mass Hunter Software for Gas Chromatography and Mass Spectrometry
- ❖ Able to do Video Editing and audio editing with Audacity, Adobe Illustrator, Photoshop, Kaleida Graph, Camptasia9, and VideoScribe video editing.
- ❖ Skilled in Shopify e-Commerce Platform, for online store developments.

- ❖ Skilled on the Fiverr digital marketplace as a freelancer
- ❖ Able to design WordPress front-end and SEO-based content writing/ Youtube
- ❖ Able to design Blogger Theme and front-end developments, theme customized.
- ❖ Highly skilled in internet browsing.

#### **Computer literacy:**

- ❖ Most of my work with Adobe Illustrator, MS Office, Video Editing, Google Products, and Tools.
- ❖ QGIS and ArcGIS
- ❖ A certificate course has been completed on Visual Basic Programs at the organization of PN Technical Institute (PNTTI) Sapura, Rajshahi.
- ❖ Python Programming Language and Data Science
- ❖ I have completed two courses on Remote Sensing & GIS from the Department of Geology & Mining, University of Rajshahi.

#### **Language Proficiency:**

- ❖ Strong writing and verbal communication ability in Bangla
- ❖ Strong writing and verbal communication ability in English.
- ❖ Good at Japanese Speaking

#### **Hobby:**

- ❖ Reading Books, Newspapers, Watching documentaries and historical movies, Journeys, Music, and Watching Natural Beauty.

#### **Name of Referees:**

---

- ❖ **Professor Dr. Kohki Yoshida**  
Institute of Mountain Science,  
Department of Geology, Faculty of Science,  
Shinshu University,  
Matsumoto, 390-8621, Japan  
+81-263-37-2517(tel), +81-263-37-2506(fax)

吉田孝紀  
信州大学山岳研究拠点  
信州大学理学部理学科地球学コース  
松本市旭 3-1-1, 390-8621  
kxyoshid@shinshu-u.ac.jp  
0263-37-2517(tel), 0263-37-2506(fax)

- ❖ **Professor Dr. Kunio Kaiho**  
Faculty of Science  
Department of Earth Science  
Tohoku University,  
6-3, Aoba, Aramaki, Aoba-ku, Sendai 980-8578 Japan  
Email; [kaiho@m.tohoku.ac.jp](mailto:kaiho@m.tohoku.ac.jp)

❖ **Dr Md Nurul Amin**

Dean

Faculty of Environmental Science and Disaster Management, PSTU, Dumki,  
Ptuakhali -8602

Phone: [+8801741603001](tel:+8801741603001)

Email: [namines@pstu.ac.bd](mailto:namines@pstu.ac.bd)

❖ **Dr. Dhiman Kumer Roy**

Assistant Professor & Chairman

Department of Geology and Mining

University of Barisal

Barisal-8200, Bangladesh

Web : <http://www.barisaluniv.edu.bd>

Mobile No: +88-01779246902

E-mail: [dhimans14@yahoo.com](mailto:dhimans14@yahoo.com)

Web site: [http://www.geo.shimane-u.ac.jp/spfs/c\\_students/mext/09roy/roy09.html](http://www.geo.shimane-u.ac.jp/spfs/c_students/mext/09roy/roy09.html)

[http://www.geo.shimane-u.ac.jp/spfs/g\\_students/mext/07roy/roy07.html](http://www.geo.shimane-u.ac.jp/spfs/g_students/mext/07roy/roy07.html)

❖ **Dr. Ryosuke Saito**

Graduate School of Sciences and Technology for Innovation

Yamaguchi University, 1677-1 Yoshida, Yamaguchi City

Postcode: 753-0841

Email: [saitor@yamaguchi-u.ac.jp](mailto:saitor@yamaguchi-u.ac.jp)

Email: [olivinline@yahoo.com](mailto:olivinline@yahoo.com)

Phone: +81839335623.

I hereby declare that the information provided in this curriculum vitae are true and correct.

Date: 14 June 2024



(Dr. Raman Kumar Biswas)