

# TERRANOVA

## THE GEOLOGY E-Newsletter

(June-December, 2024)

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**Department of Geology, Durgapur Government College**  
J.N. AVENUE, DURGAPUR -713214

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## FROM THE HOD'S DESK



“It gives me immense pleasure to introduce the latest edition (June 2024-Dec 2024) of the newsletter of our Department of Geology “Terranova”. This publication reflects the vibrant academic and research activities within our department, highlighting the achievements of our students and faculty in various fields. I commend the editorial team for their dedication and invite all readers to engage with the content and contribute to our collective progress.”.

--Dr. Samiran Mahapatra

Head, Department of Geology,  
Durgapur Government College

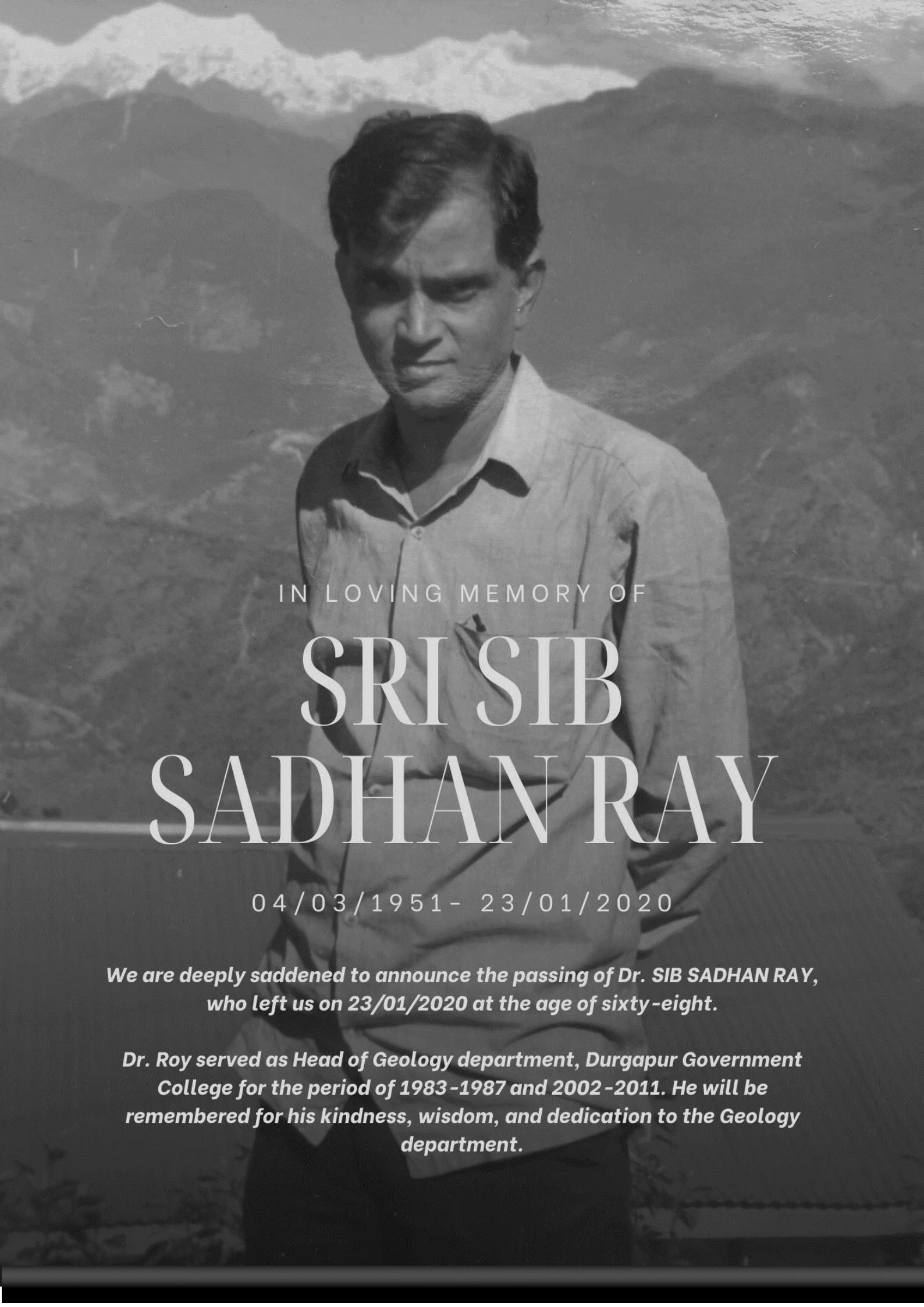
## PREAMBLE

We're excited to present the latest insights, updates of Department of Geology, Durgapur Government College, where ideas thrive, achievements are celebrated, academic and co-curricular activities are highlighted and the pulse of departmental whereabouts are captured. In the era of rigorous and disciplined lifestyle, peak level of academic stress, students have actively participated not only in academic activities but also in extra co-curricular activities. The faculty members also achieved great heights in their own domains and shined in every way, thus setting as an inspiring example for students. A year full of rollercoaster, providing students opportunities to attend seminars organized by department, conferences and hands-on training at field. Thus, now we delve into the world of major ideas of students and professors of our department.

## What's in this Issue? (June-Dec, 2024)

- Hands on fieldwork
- Published Works
- Accomplishment of Great Heights
- Conference Abstract Highlight
- Seminars Conducted by Department under DBT Star College Scheme
- New Experiments Conducted Under DBT Star College Scheme
- Extracurricular Highlights
- Involvement of faculty members/students in NSS activity
- GeoLegacy: Celebrating the Distinguished Alumni of the Department of Geology, Durgapur Government College





IN LOVING MEMORY OF

# SRI SIB SADHAN RAY

04/03/1951 - 23/01/2020

***We are deeply saddened to announce the passing of Dr. SIB SADHAN RAY,  
who left us on 23/01/2020 at the age of sixty-eight.***

***Dr. Roy served as Head of Geology department, Durgapur Government  
College for the period of 1983-1987 and 2002-2011. He will be  
remembered for his kindness, wisdom, and dedication to the Geology  
department.***



## HANDS ON FIELDWORK

A hands-on training programme was pioneered between 28<sup>th</sup> November, 2024 to 1<sup>st</sup> December, 2024 i.e. for four days of 1<sup>st</sup> Semester Geology Honours students in and around Maithon township by Dr. Supratim Pal and Dr. Pinaki Roy. The fieldwork mainly revolved around the study different geological features, recognition and lithology of different types of rocks, analysing principal structural formations and deformations and studying the Geological Toposheet of the area.

## PUBLISHED WORKS

The incredible accomplishment of our Respected Professors along with their fellow researchers is a testament to their dedication, knowledge, passion for education and learning. We, as, students take their hardwork as an inspiration, that would definitely help us for a better future.

1. **Pritha Goswami**, Shiladri S. Das, and Shanta Panja. "Discovery of Miocene whale fall fauna from India: Taphonomy and palaeoecology of a vertebrate-invertebrate assemblage." *Historical Biology* (2024): 1-14.
2. Monojit Dey, Aniket Chakrabarty, Roger H. Mitchell, Sourav Bhattacharjee, **Supratim Pal**, Jindrich Kynicky, and Kirsten Drüppel. "Unraveling the Magmatic-to-Carbothermal Processes in the Ba-Sr-REE Mineralization of the Sevattur Carbonatites, India." *Journal of Petrology* 65, no. 10 (2024): egae096.



## ACCOMPLISHMENT OF GREAT HEIGHTS

A moment to cherish where **Dr. Proloy Ganguly** was felicitated as associate of West Bengal Academy of Science and Technology (WAST) for his contributions to Proterozoic tectonics and terrane evolution.

## CONFERENCE ABSTRACTS HIGHLIGHTS

The sleepless nights for a better opportunity and the hardwork behind unveiling the deepest secrets of Earth and its hidden truth has been shown below:

1. Proloy Ganguly, Aparupa Banerjee, Sankar Bose, Nilanjana Sorcar, Sneha Mukherjee and Kaushik Das. Petrology and geochemistry of olivine-bearing metanorite and gabbro from the Angul domain: Insights to the mafic magmatism at the northern Eastern Ghats Belt, India. Goldschmidt Conference 2024.

## SEMINARS CONDUCTED BY DEPARTMENT UNDER DBT STAR COLEGE SCHEME:

1. **"Aspects of Metamorphic Petrology"** by Professor Pulak Sengupta, Department of Geological Sciences, Jadavpur University, Kolkata, on 13-06-2024



2. **"Aspects of Sedimentology"** by Professor Subir Sarkar, Department of Geological Sciences, Jadavpur University, Kolkata, on 13-06-2024



3. **"lunar crustal composition and hydration through imaging spectroscopy"** by Mr. Satadru Bhattacharya, Indian Space Research Organization, ISRO Planetary Sciences Division on 20-08-2024.



4. **"Statistical methods in classification of fossilized organism"** by Dr. Pinaki Roy, Assistant professor, Durgapur Government College on 18-12-2024



# New Experiments and Visits Conducted Under DBT-STAR College Scheme

As part of the DBT-STAR College Scheme, various groundbreaking sessions brought fresh momentum to experiential learning.

## ***"Uses of Handheld GPS"***



23rd July 2024

**Dr. Pinaki Roy**, Assistant Professor, Durgapur Government College, introduced students to the world of satellite navigation through handheld GPS devices.

## ***"Working principle of home appliances"***



18/7/24

A Workshop was organized in **ITI Durgapur**, that mainly focused on Uses and working principle of basic home appliance.

## ***"Groundwater Exploration"***



27th September 2024

**Mr. Tamal Sur's** (Department of Geology, Presidency University) session dived beneath the surface literally and scientifically introducing students to methods of locating groundwater resources.

## ***"Industrial Visit to Sun Ceramics"***



20/7/24

Students visited **Sun Ceramics**, Durgapur to gain insights into modern ceramics manufacturing processes and technologies, enhancing their practical knowledge.

# New Experiments and Visits Conducted Under DBT-STAR College Scheme

As part of the DBT-STAR College Scheme, various groundbreaking sessions brought fresh momentum to experiential learning.

## ***"Visit to NIBMG"***



07/08/24

Visit to **NIBMG (National Institute of Bio-Medical Genomics)**, Kalyani offered valuable insights into genetic studies, research methodologies.

## ***"Visit to Illambazar Fossil Park"***



24/09/24

Students embarked on a One-day field trip to **Illambazar Wood Fossil Park**, Amkhoi, Birbhum, exploring fossilized trees and gained a unique glimpse into processes of fossilization.

## ***"Visit to Geological Survey of India"***



30/09/24

Visit to **Geological Survey of India (Salt Lake Building)** enriched the students into understanding of earth's processes and the vital role of geology in national development.

# Extracurricular Activities of Students

The students of the Department of Geology continue to excel both academically and in broader cultural and social spheres. Their active participation in conferences, competitions, and community initiatives reflects a balanced pursuit of knowledge, creativity, and responsibility.



## Distinction in Poster Presentation at Lithify '24

**Ankit Sengupta** and **Dhruba Mandal** from UG Sem III, earned 3rd place in the Poster Presentation at Lithify '24, hosted by the Department of Geology, Jadavpur University, on 27th September 2024.

## Participation in ICEES 2024

**Dhruba Mandal** and **Kunal Deasi** attended the International Conference on Earth and Environmental Sciences (ICEES 2024) from 21th to 22nd October 2024, organized by IE & ES in association with Amity University, Jharkhand.



## Involvement in RDS 8 Conference

**Shankhadeep Ghosal** and **Ankit Sengupta** from UG Sem III, **Jeet Ganguly, Arnab Saha, Supratim Sathpati, Sunanda Chowdhury and Debjyoti Ghar** from PG Sem III participated as audience in RDS 8, held from 21th to 24th October 2024, organized by IISER Bhopal in collaboration with the Society of Geoscientists and Allied Technologists (SGTSG India). They also participated in the Post Conference Field Work from 25th to 26th October 2024 around Bhopal.



# Extracurricular Activities of Students

The students of the Department of Geology continue to excel both academically and in broader cultural and social spheres. Their active participation in conferences, competitions, and community initiatives reflects a balanced pursuit of knowledge, creativity, and responsibility.



## 1<sup>st</sup> Runner up in GEO India Quiz (Kolkata Chapter) 2024 & Representing DGC in GEO India 2024 (6<sup>th</sup> South Asian Geosciences Conference and Exhibition)

**Subhajit Sarkar and Payel Mondal** two PG final year students earned 2<sup>nd</sup> place in GEO India Quiz Competition (Kolkata Chapter) on 20/09/2024 and represented out department and college in GEO India International Conference organized by APG (Association of Petroleum Geologist India) held from 15/11/24-17/11/24.

## Involvement of faculty members/students in NSS activity

**Dr. Pritha Goswami**, Department faculty member of the department, also serving as the NSS Programme Officer, led an afforestation awareness drive through the distribution of seed balls across the campus and nearby areas. This eco-conscious initiative received wide recognition and was covered by multiple newspapers.



# Cultural Programs at the Department

2024

## "XENOLITH'24: Farewell of Batch 2020- '23"



As the academic session drew to a close, the Farewell Ceremony namely "**XENOLITH**" for the outgoing batch of 2020-2023 was held on **29th June 2024**, in the Department itself. The event was filled with nostalgic moments, heartfelt speeches, and entertaining performances by the juniors. Faculty members were present, expressing their best wishes and encouraging students for their bright future.

## "XENOLITH 2.0: Farewell of Batches 2021-'24 & 2022-'24 "



As Batch 2021-2024 bid another adieu, the vibrant hues of Batch 2024-2028 welcomed a new beginning on and from **17th December, 2024** with the programme named "**XENOLITH 2.0**". The spirit of celebration filled the air as the newcomers, along with the Organizing batch, were involved in an energetic and colorful program, featuring a soulful musical performance and a hilarious skit that left the audience in stitches. The farewell ended with emotional goodbyes and a promise to stay connected beyond college life.



# GeoLegacy:

*Celebrating the Distinguished Alumni of the Department of Geology, Durgapur Government College*



## Alumni in Spotlight

### Dr. Bhabani Prasad Mukhopadhyay

YEAR OF PASSING FROM DGC- 1984(B.Sc.),1986(M.Sc.)

PHONE NO- +91-33-2668-4561(ext-482)

EMAIL ID- [bpmukhopadhyay.iests@outlook.com](mailto:bpmukhopadhyay.iests@outlook.com)



#### PRESENT DESIGNATION & ACHIEVEMENTS-

Professor and Head, Department of Earth Sciences, Indian Institute of Engineering Science and Technology (IEST), Shibpur.

University Gold Medal, University of Burdwan,1986.

'Satyendra Puroskar' awarded by Department of Science and Technology, Govt. of West Bengal,2005 as the best popular science writer of the Year,2005.



### Dr. Anol K Mukhopadhyay

YEAR OF PASSING FROM DGC -1986(B.Sc.)

PHONE NO- [979-571-0631](tel:9795710631)

EMAIL ID- [anol@tamu.edu](mailto:anol@tamu.edu)

#### PRESENT DESIGNATION & ACHIEVEMENTS-

Senior Research Scientist, Texas A&M Transportation Institute (TTI).

Adjunct Professor, Zachry Department of Civil Engineering, Texas A&M University.

Director, Concrete Innovation Lab, CIR, TAMU.

Appointed by invitation as the **Executive Board (EB) member** of the International Cement Microscopy Association (ICMA) in July 2018.

Recipient of **outstanding researcher award** from Texas A&M Transportation Institute, 2017

### Mr. Debasish Bhattacharya

YEAR OF PASSING FROM DGC -1988(B.Sc.)



#### PRESENT DESIGNITION & ACHIEVEMENTS-

**Deputy Director General, Geological Survey of India** and his team made significant discoveries of vertebrate fossils in the Mesozoic Sequences of Jaisalmer Basin.

Identification of a new species of Hybodont shark (*Strophodus jaisalmerensis*) from the Jurassic, the first record of Jurassic Hybodonts in the Jaisalmer Basin

In recognition of his significant contributions in the field of Basic Geosciences, **the National Geosciences Award 2023** is conferred on Mr. Debasish Bhattacharya



## Dr. Debasish Mitra

YEAR OF PASSING FROM DGC -1988(B.Sc.)

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EMAIL ID- [masdoffice@iirs.gov.in](mailto:masdoffice@iirs.gov.in) , [mitra@iirs.gov.in](mailto:mitra@iirs.gov.in)

### PRESENT DESIGNTION & ACHIEVEMENTS-

Dr. Mitra is working with Indian Space Research Organization (**ISRO**) for the last 28 years and presently he is Group Director of Marine and Atmospheric Sciences Group at **Indian Institute of Remote Sensing (IIRS)**, Dehradun.

## Dr. Rajat Mazumder

YEAR OF PASSING FROM DGC -1989(B.Sc.)

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### PRESENT DESIGNTION & ACHIEVEMENTS-

Professor and Head, Department of Applied Geosciences; Dean, Faculty of Science

**German University of Technology in Oman (GUtech).**

17 years of post-doctoral field and laboratory experience in India, Japan, Germany, Australia, Malaysia and Oman; visited and worked at Geology and Geochemistry Laboratories of Yokohama National University, National Institute of Polar Research (Tokyo), Munich University (Germany), University of New South Wales, Curtin University (Australia); participated in field expedition in remote areas of Japanese islands, east Malaysia, Western Australia (Pilbara) and Germany (Alps).

## Mr. Rajib Shaw

YEAR OF PASSING FROM DGC -1989(B.Sc.)

EMAIL ID- [shaw@sfc.keio.ac.jp](mailto:shaw@sfc.keio.ac.jp)

### PRESENT DESIGNTION & ACHIEVEMENTS-

**Professor**, Keio University, Japan

**Director**, India Japan Laboratory, Keio University [<http://indiajapanlab.org>]

**Co-Founder**: Resilience Innovation Knowledge Academy (RIKA) and RIKA Institute, DTECH, India

**Co-Chair**: UN DRR Asia Pacific Science Technology Advisory Group (AP-STAG)

**Editor-in-Chief**: Progress in Disaster Science (Elsevier Publisher)

**Google Scholar**: h-index: 75, Citation: 27,991 (as of March 2025), i10-index: 388

Professor Shaw is the recipient of prestigious **“Pravasi Bharatiya Samman Award (PBSA)”** in 2021 for his contribution in education sector.

**United Nations Sasakawa Award for Disaster Risk Reduction in 2022**

**Norio Okada Implementation Science Award 2022**



## Dr. Saikat Sengupta

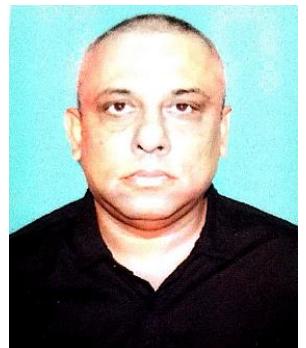
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### PRESENT DESIGNTION –

Additional Commissioner of Revenue, WB GST.,



## Dr. Shantanu Banerjee



**YEAR OF PASSING FROM DGC -1990(B.Sc.)**

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### **PRESENT DESIGNTION & ACHIEVEMENTS-**

Professor at IIT Bombay, Department of Earth Science.

Fellow, **National Academy of Sciences India**, 2024

**National Geoscience Award** in Basic Geosciences, 2016

BOYSCAST Fellowship, Government of India, 2002-2003

International Councilor, Society for Sedimentary Geology (SEPM), 2014-2016

**Ambassador**, Society for Sedimentary Geology (SEPM) since 2007

Institute Chair Professor, IIT Bombay (top 10% among Professor)

Research Publication Award, IIT Bombay, 2009, 2020, 2022

Excellent in Teaching Award, IIT Bombay, 2003, 2017,2023

## Dr. Sandip Nandy

**YEAR OF PASSING FROM DGC -1992(B.Sc.), 1994(M.Sc.)**

### **PRESENT DESIGNTION –**

Joined GSI on 2000

a) Expert in Electron Probe Micro Analyser (EPMA). Developed probe culture in GSI as well as in India especially Eastern part. Carried out several researches works in Petrology & Meteorites within GSI as well as in collaboration with different Universities/ research organisations & PRL.

b) Installed First SIMS (Secondary Ion Mass Spectrometer) lab in India. Published First paper in Chemical Geology, 2024 on Sulphur & Oxygen isotopes of Singhbhum craton from this SIMS lab.

c) Representing GSI as a leader of the team for a joint collaboration with Geoscience Australia, Canberra on Geochronology especially U-Pb Zircon study at their SHRIMP lab in Canberra.

## Dr. Lopamudra Saha



**YEAR OF PASSING FROM DGC -1996(B.Sc.),2000(M.Sc.)**

**PHONE NO- 01332285343**

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### **PRESENT DESIGNTION & ACHIEVEMENTS-**

In January 2013, she joined the Department of Earth Sciences, IIT Roorkee, and is presently working there as an Associate Professor.

Her key achievements in the above research fields include the records of high-pressure Archaean metamorphic events from central India and SE Kaapvaal Craton in South Africa and establishing Precambrian Tectonics from the cratons and mobile belts of the Indian subcontinent.

## Mr. Sourav Dasgupta

**YEAR OF PASSING FROM DGC -1996(B.Sc.)**

**PRESENT DESIGNTION – JOINT BLOCK DEVELOPMENT OFFICER UNDER P&RD DEPT., GOVT. OF WB**



## Dr. Anirban Guha



YEAR OF PASSING FROM DGC -1998(B.Sc.)

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### PRESENT DESIGNTION –

Dr. Arindam Guha has been serving as Head, Applications and Scientist SG at RRSC-East, Indian Space Research Organization since July,2021. Prior to this posting, He was Head, Mineral Exploration and Geoenvironment Division at National Remote Sensing Centre (NRSC), Hyderabad.

He has been the core team member/working group member for many prestigious science missions of ISRO e.g. AVIRIS-NG and Chandrayan -02.

He has been recipient of three ISRO team excellence awards for different projects of ISRO.

He is also a fellow of Geological Society of India.

## Mr. Sukalyan Chakraborty

YEAR OF PASSING FROM DGC -2001(B.Sc.)

EMAIL ID- [sukalyan\\_c@yahoo.co.in](mailto:sukalyan_c@yahoo.co.in)



### PRESENT DESIGNTION –

Worked in Oil and Gas since 2004, in different countries and companies.

Currently working as consultant geologist through various agencies in Middle East.

Present location, Montreal, Canada.

## Mr. Sumit Saha

YEAR OF PASSING FROM DGC -2007 (B.Sc.) , 2009(M.Sc.)

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### PRESENT DESIGNTION –

Operational Manager at ESSAR Oil and Gas Exploration and Production Ltd, Durgapur, West Bengal, India.

Recognition in KOC for stuck pipe analysis in an Oil Well by using ACE Analysis.

Award of increasing and reaching recorded Field ROP in Essar.

Award for controlling Kick and taking production in Essar.



## Dr. Ishita Das

YEAR OF PASSING FROM DGC -2011 (B.Sc.)

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### PRESENT DESIGNTION –

Worked as Petro-physicist in Schlumberger from August 2013 to December 2014.

Working as Assistant Professor in the Department of Geology, University of Calcutta from September 2015 till present.

Qualified National Eligibility Test with rank 25 (Earth and Atmospheric Sciences) in December 2012.

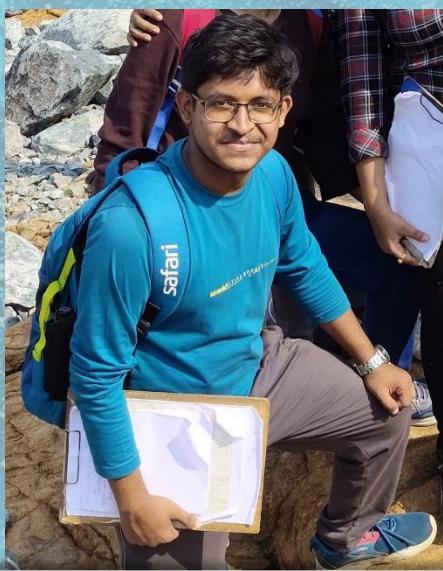
# MEET THE STUDENT EDITORS



**SHANKHADEEP GHOSAL**  
UG Sem IV



**SUMONA GHOSH**  
UG Sem II



**DHIRAJ BAIDYA**  
UG Sem II



**SHRIJITA MONDAL**  
UG Sem II