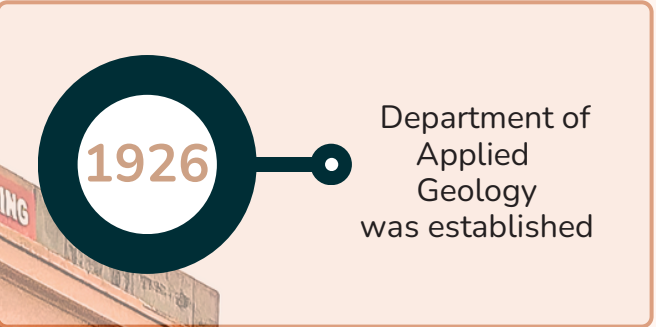
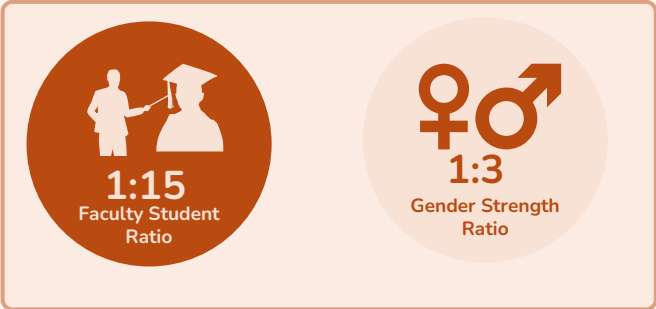




DEPARTMENT OF APPLIED GEOLOGY

The department was established with the principal long-range goal to establish itself as a centre of excellence in Applied Geology with special reference to Mineral Exploration, Engineering Geology, Coal Geology, Hydrogeology and Petroleum Geology. It imparts training to students not only from all over India, but also from abroad. The department houses an excellent treasure trove Geological museum, which is one of the oldest and richest in terms of collections, exhibits, models and displays in the country.



DOMAINS OF STUDY

- Crystallography and Mineralogy
- Physical and Structural Geology
- Introduction to Petrology
- Stratigraphy
- Micropaleontology and Vertebrate Palaeontology
- Applied Geochemistry
- Engineering Geology
- Hydrogeology
- Petroleum Geology
- Coalbed Methane, Shale Gas and Gas Hydrate Exploration
- Engineering Geology
- Applied Sedimentology

LABORATORIES - UG, PG

- Coal Geology Laboratory
- Hydrogeology Laboratory
- Micropaleontology Laboratory
- Mineralogy and Geochemistry Laboratory
- Atmosphere, Ocean & Climate Dynamics Laboratory
- Igneous Petrology Laboratory

Courses	Strength
MSc. Tech	60
Integrated M.Tech	13
Ph.D	52

PLACEMENTS & INTERNSHIPS

24+ LPA Max. CTC **12+ LPA** Median CTC

34k / mo
Median Stipend during Internship

Core Companies



& many more...

updated data from 23-24'

Research & Development

Meet our Head of Department



PROF. Mrinal Kanti Mukherjee

(Professor)

17-08-2022 - Present



Ph.D. - Indian Statistical Institute, Kolkata

Primary Areas of Research

Structural Geology In Exploration And Engineering Geology, Deformation Of Proterozoic Basins

Achievements

- 21 PhD supervised
- 6 Research projects Completed with a total cost of Rs. 442.55 Lakh
- 23 Consultancy projects completed (Rs.196.06 Lakh as PI; Rs.79.61 Lakh as Co-PI)

Ongoing & Completed Departmental Research

- Geological CO₂ removal.CO₂- Geological storage: Research in to monitoring and verification technology (CO₂ReMoVe); Approx.73000/- Euros Team Member Dr Emily F M Elewaut, Holland PI Prof A K Varma Team Leader from India and Prof A S Venkatesh, Team Member from India European Commission Funded project; 2009 & extended up to 2013 Completed 2013
- Financial Assistance as FIST programme "Augmentation of rock/ore/coal/kerogen characterization and processing facility" Rs. 2, 38, 000, 00/- (Rupees Two Crores and Thirty Eight Lakhs only); Co-PI; 2 Co-PIs and One PI; DST FIST LEVEL-II; 05 Years; 23.08.2013 - 22.08.2018; Completed in 2019
- Metallogenetic Evolution of Gold (+PGE) Mineralization with implications for crust-mantle processes, invisible gold and the role of organic matter linked to mineralization events in parts of Archean Singhbhum organic belts. Rs. 51, 80, 240.00/- (Rupees Fifty one lakhs, eighty thousand and two hundred and forty only); PI One Co-PI ; DST SERBCRG (DST No: CRG/2019/0055 03) IIT (ISM) Project No. (DST(SERB)(2 51)/2019- 2020/700/AGL); Three Years; Date of Start 12.02. 2020; Ongoing
- Geochemical, petrogenetic and metallogenetic study of Malankhand and Dongargarh Supergroup volcanics and plutons along Dongargarh Kotri mobile belt with insights from LA-ICPMS data of relict magmatic minerals; Rs. 23,38,000/-; Applied and under review Co-PI PI: Prof Sunil Khare, UPES, Dehradun DST (SERB); 3 Yrs Submitted -2022
- Evaluation study of the Central Sector Schemes for their continuation beyond 2019- 2020; 33, 30, 000.00/- (Rupees Thirty Three lakhs and thirty thousand only) Member (COPI); 3 Co-PIs and One PI from MIN Ministry of Coal; Project No: MoC(3)/201- 2020/693/ME; 06 months, effective from 21.10.2019; Submitted 2021
- Geospatial Fusion of Parameters Controlling orogenic Gold Mineralization and Delineation of Gold prospective Zones within Chandil Formation, North Singhbhum Mobile belt, Eastern Indian Craton. A Regional Scale Analytical Approach through the Integrated Applications of GIS, GPS and Remote Sensing Technology (Total Amount: Rs. 38.5 Lakh sponsored by NRDS Division, DST, New Delhi). Project No: DST (128) / 2015-2016/ 447/AGL
- Trace element systematics and sulfur isotope signature of auriferous sulfides within the Vempalle dolostone: Implications for refractory gold mineralization in and around Tummalapalle area of South-western Cuddapah basin, Andhra Pradesh". Sponsored by SERB, Department of Science & Technology, New Delhi. CRG/2021/007183 dated 10.03.2022 (Total outlay is Rs. 73,20,240.00 (Rupees Seventy Three Lakh Twenty Thousand Two Hundred and Forty only). Institute project No : DST(SERB)(325)/2021-2022/881/AGL
- . Geophysical prospecting along northern fringes of Dalma Volcanics around Kantaldih – Pharenga area", Sponsored by DAE (BRNS). Department of Atomic Energy (Board of Research in Nuclear Sciences. Rs. 29,93, 600.00 (Rupees Twenty Nine Lakh Ninety Three Thousand Six Hundred only). Institute Project No : DAE(BRNS) (7)/2019-2020/669/AGP

Students & Alumnis

Active Student Run Societies



Guest Talks by the Societies

American Association of Petroleum Geologists (AAPG):

- Special Lecture on Groundwater Management for Oil Field Development by Dr. Ranjan Sinha, DGM Hydrogeologist, Cairn Oil & Gas, Vedanta Ltd.

Alumni Network

- Subodh Pandey, Managing Director at Hindia Engineers.
- Susanta Mishra, Joint Commissioner at Ministry of Finance, India
- Monosvita Chaliha, Chief of Geology at Cairn Oil & Gas
- Mrutunjaya Lenka, Vice President (Projects) at Hindalco Industries Limited
- Shameek Chattopadhyay, Director and Principal Consultant (Resource Geology) at SRK Consulting
- Jyoti Pandey, Regional Director & Chief General Manager - Reserve Bank of India (RBI)

GATE Results

GATE 2024

- Suman Behra AIR-33
- Shradha Singh AIR-39

GATE 2023

- Debrata Santra AIR- 56
- Susmita Kanu AIR- 71

GATE 2022

- Raima Ghosh -AIR 3
- Sakshi Sharma-AIR 18
- Parameshvar Kumar - AIR 24
- Rupayan Sen- AIR 74
- Soumya Ghosh - AIR 59

Foreign University Collaborations

- The University of Texas at Dallas, USA on Tectonics and Sedimentation.
- Southern Illinois University, Carbondale, Illinois, USA on Stable isotope geochemistry of gold ores.
- Juniata College, Huntingdon, Pennsylvania, USA on Re-Os collaboration.
- University of New Castle Upon Tyne, UK on Methane and carbon dioxide adsorption dynamics in coal.
- The Queens University of Belfast, UK on Stable isotope geochemistry of planktonic foraminiferal tests,
- Hokkaido University, Japan on mineralogical and petrochemical analysis of high-grade rocks.
- Kobe University, Japan on nano-scale deformation microstructure analysis under TEM.