



St. Xavier's College

Dr. Camil Bulcke Path, Ranchi

Faculty Profile

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| Name of Faculty Member | : | Dr. Somesh Sengupta |
| Gender | : | Male |
| Email ID | : | drsomeshsengupta@sxcran.org |
| Name of Department | : | Department of Geology |
| Designation | : | Assistant Professor |
| Level of Teaching | : | Undergraduate and Postgraduate |
| Academic Qualification | : | M.Sc., Ph.D. |
| Total Teaching Experience | : | 05 Years and 06 Months |
| UGC NET/SET Qualified | : | No |

Research Papers Published:

- 1) Verma S, **Sengupta S**, Varadharajan S and Kumar A., (2018); "**A preliminary assessment of microstructural and compositional characteristics of two variants of pre and post carbonated concrete mixes**"; X-Ray Spectrometry, Volume 47, Issue 4, ISSN: 1097-4539, pp. 277–286, DOI: 10.1002/xrs.2839 (indexed in SCI, SCOPUS etc.).
- 2) **Sengupta S.**, Krishna A. P. and Roy I., (2017); "**Slope failure susceptibility zonation using integrated remote sensing and GIS techniques: A case study over Jhingurdah open pit coal mine, Singrauli Coalfield, India**"; Journal of Earth System Science, Published by the Indian Academy of Sciences, ISSN: 0253-4126 (print version)/0973-774X (electronic version), indexed in SCIE, SCOPUS.
- 3) **Sengupta S**, Sharma S and Roy I., (2016); "**Stability analysis of overburden internal dump material of Amlohri opencast coal mine, India**"; ARPN Journal of Earth Sciences (Asian Research Publishing Network), Vol. 5, No. 1, June 2016; ISSN: 2305-493X; pp. 50-57 (indexed in SCOPUS).

- 4) Sharma S, **Sengupta S** and Roy I., (2015); "**Identification of failure surfaces in dragline dumps of opencast coal mines**"; ARPN Journal of Earth Sciences (Asian Research Publishing Network), Vol. 2, No. 2, June 2015; ISSN: 2305-493X; pp. 43-53 (indexed in SCOPUS).
- 5) **Sengupta S** and Roy I., (2015); "**Study of internal dump stability of Dudhichua open cast project, Northern Coalfields Limited, India**"; Journal of Institute of Engineers – Series D (Springer Series); Volume 96, Issue 1, pp. 67-75, ISSN 2250-2122; J. Inst. Eng. India Ser. D DOI 10.1007/s40033-014-0061-5.
- 6) **Sengupta S**, Sharma S and Roy I., (2014); "**Investigation of shear strength parameters of highwall rock slopes and overburden dump mass in opencast coal mines**"; International Journal of Engineering, Management, Humanities and Social Sciences Paradigms (IJEMHS) Vol. 7, Issue 1, June 2014; ISSN: 2347 - 601X.

Participation in UGC-HRDC Course/FDP/OC/RC:

- 1) Successfully completed Orientation Programme for "**Faculty in Universities / Colleges / Institutes of Higher Education**" conducted by Teaching Learning Centre, Ramanujan College, University of Delhi in collaboration with Women's College, Tinsukia under the aegis of Ministry of Education, Pandit Madan Mohan Malviya National Mission on Teachers and Training from 20th Oct 2022 to 18th Nov 2022 and obtained **Grade A+**.

Paper Presented in Seminar/Conference (National/International):

A. International Seminar/Conference: -

- 1) Verma S, **Sengupta S**, Varadharajan S and Tomar R K., (2018); "**Corrosion current density modelling using artificial neural network**", 8th International (IEEE) Conference, CONFLUENCE 2018, 11th-12th January 2018, Amity University, Noida (SCOPUS indexed).
- 2) Roy I, Vyas D and **Sengupta S.**, (2014); "**A solution to dump slope stability problems of Tadkeshwar lignite opencast mine**", 5th Asian Mining Congress 13th-15th February 2014, The Mining, Geological and Metallurgical Institute of India, Kolkata; pp. 1-6.

- 3) Das N, Roy I and **Sengupta S.**, (2012); "**Investigation and mitigation of structural failures in Jhingurdah open cast mine - A case study**", 4th Asian Mining Congress 29th-31st January 2012, The Mining, Geological and Metallurgical Institute of India, Kolkata; pp. 309-313.

B. National Seminar/Conference

- 1) Successfully completed the workshop on "**Geodynamic genesis of Indo Burma range – A Conundrum in Earth Science (GeolIBR' 22)**", conducted by Geosciences and Technology Division, CSIR – North East Institute of Science and Technology, Jorhat from 06.06.2022 to 07.06.2022.
- 2) Successfully completed a two-day workshop on "**Hydrological modelling of watershed with geospatial techniques**", held on 10th and 11th March, 2022 at the Department of Remote Sensing, Birla Institute of Technology, Mesra, Ranchi.
- 3) 31st January 2019; "**National Information System for Climate and Environment Studies (NICES) Data Products**", organized by Department of Remote Sensing, Birla Institute of Technology, Mesra, Ranchi.
- 4) **Sengupta S** and Roy I., (2017); "**Stability analysis of highwall slope with presence of competent and incompetent rock strata – A case study**"; National Conference on Construction Management, Mechanization and Environmental Sustainability (CMMES 2017), 21 – 22nd February, 2017, Birla Institute of Technology, Mesra, Ranchi, India; ISBN: 978-93-86210-85-2; pp. 189-203.
- 5) Roy I and **Sengupta S.**, (2013); "**A study on dump slope stability of dragline operated opencast mines of Coal India**"; National Seminar on Dragline Mining: Prospects and Challenges, Northern Coalfields Limited; 6-8th December, 2013; pp. 149-158.
- 6) Singh B and **Sengupta S.**, (2009); "**Moonstone mining in Lokai-Inderwa area, Koderma Mica Belt, Jharkhand**"; National Seminar on Emerging Research and Development Trends in Earth System Science; 22nd February 2009; Utkal University, Bhubaneswar; pp. 69-72.
- 7) 15th December 2008 to 20th December 2008; "**National Training Course in Gemology - 2008**", organized by Ranchi University with academic collaboration of Geological Society of India, Bangalore

Books / Chapter(s) Published:

- 1) Roy I and **Sengupta S.**, (2016); "**A Handbook on dragline dump profiles in surface coal mines of India**"; published by Central Mine Planning and Design Institute of India.
- 2) **Sengupta S** and Roy I., (2015); "**Sustainable development of Indian coal industry – slope stability challenges**"; Development and Conflicts, Published by Nirmala College, Ranchi in Association with University Grants Commission, Eastern Region Office, Kolkata; ISBN: 978-93-80036-75-5; pp. 300-312.
- 3) Sharma S, Srivastava M and **Sengupta S.**, (2013); "**LU/LC Map and Digital Elevation Model of Jharia Town Using RS-GIS**"; LAP Lambert Academic Publishing, Saarbrucken, Germany; ISBN No. 978-3-659-40465-8.

Guest Lecture/Special Lecture Delivered:

- 1) **Invited lecture: Resource person** for a webinar on "**Influence of Geological and geoengineering parameters in assessment of stability of slopes in open pit coal mines**", conducted by Department of Civil Engineering, School of Engineering and Technology, The Assam Kaziranga University, Jorhat, Assam, held on 11th August 2022

[Dr. Somesh Sengupta]