

Dr Charan Kumar Ala

+91 7735537803

alacharan@gmail.com

EDUCATION:

Ph.D. in Mining Engineering National Institute of Technology	Jan 2014 – July 2019 Rourkela, India
M.Eng in Information and Network Security University of Limerick	Sep 2009 – Mar 2011 Limerick, Ireland
B.Tech in Mining Engineering University College of Engineering (KSM)	Aug 2004 – May 2008 Kothagudem, India
Intermediate (M.P.C) Gowtham Junior College	Aug 2002 – May 2004 Vijayawada, India
SSC S.T. Paul's E.M High School	2002 Godavarikhani, India

PROFESSIONAL EXPERIENCE:

National Institute of Technology, Rourkela

Assistant Professor: (28.04.2023 – Present)

Godavari Institute of Engineering & Technology (A)

Associate Professor: (01.02.2021 – 21.04.2023)

- » Worked as an Associate Professor in the Department of Mining Engineering.
- » In-charge HOD for Department of Mining Engineering (11.11.2021 to 21.04.2023)
- » Courses taught: Mine Safety and Health Engineering, Environmental Impacts Assessment in Mines, Mine Strata Control.
- » B. Tech Project Guidance: 04 Projects (16 students)
- » Chairman for Board of Studies in the Department of Mining Engineering.
- » External Member of Board of Studies for the Department of Mining Engineering, JNTUH.
- » In-charge HOD for Department of Petroleum Engineering (06-09-2021 to 10-11-2021).
- » Chairman for Board of Studies in the Department of Petroleum Engineering.

National Institute of Technology Karnataka, Surathkal

Temporary Faculty: (Even Semester 2019-2020)

- » Worked as a temporary faculty in the department of mining engineering.
- » Courses taught: Environmental Management and Sustainable Development, Mine Systems Engineering, Mine Mechanization, and Applied Mine Surveying Lab.
- » Involved in the Mining Department Curriculum Development Committee for M. Tech (Industrial Health and Safety Engineering).
- » B. Tech Project Co-Guidance: 03 Projects (6 students)

Temporary Faculty: (Odd Semester 2019-2020)

- » Worked as a temporary faculty in the department of mining engineering.
- » Courses taught: Surface Mining, Noise Pollution & Control Engineering, Strata Mechanics, and Mine Surveying Lab.
- » B. Tech Project Co-Guidance: 03 Projects (6 students)

Assistance rendered in Consultancy Projects:

- » Scientific study for the stability of slopes, OB dumps and highwall at Kakatiya Khani Opencast-II Project, Bhupalpalli area of SCCL (2019).
- » Scientific study for the stability of slopes, OB dumps and highwall at Kakatiya Khani Opencast-III Project, Bhupalpalli area of SCCL (2019).
- » Scientific study for stability analysis of highwall at south side quarry for proposed quarry top edge excavation shifting of around 67m at Medipalli opencast project, RG-I area of SCCL (2019).
- » Scientific study for the stability of slopes, OB dumps and highwall at Kistaram Opencast Project, Kothagudem area of SCCL (2019).
- » Scientific study for vibration analysis of excavation being carried out at Arkay towers, J.C road, Bengaluru. Sponsored by TJN Construction Private Limited, Pune (2019).
- » Scientific study for the stability of slopes, OB dumps and highwall at Ramagundam Opencast-III Expansion Project, Ramagundam area of SCCL (2020).
- » Scientific study for the stability of slopes, OB dumps and highwall at Indaram Opencast Project, Srirampur area of SCCL (2020).
- » Scientific study for the stability of slopes, OB dumps and highwall at Godavarihkani Coal Mine (No. 2 & 2A and No. 5), Ramagundam area of SCCL (2020).
- » Scientific study for the effect on the structures due to blasting vibrations and air over pressure at Kakatiya Khani Opencast-III Project, Bhupalpalli area of SCCL (2020).
- » Scientific study for the effect on the structures due to blasting vibrations and air over pressure at Indaram Opencast Project, Srirampur area of SCCL (2020).

RESEARCH EXPERIENCE:**National Institute of Technology, Rourkela**

Ph.D. Researcher (Supervisor: Dr. D.P. Tripathy)

Ph.D. Thesis Title: Qualitative and Quantitative Approaches for Evaluation of Safety Risks in Coal Mines.

University of Limerick, Ireland

Master's Dissertation (Supervisor: Dr. Reiner Dojen)

Title: Logic-Based Verification of Security Protocols.

University College of Engineering, Kothagudem

Bachelor's Dissertation

Title: Powered Support Analysis in Longwall Mining in 10 Incline in Singareni Collieries Company Limited.

PUBLICATIONS:

Internationally Indexed Journals

1. Ala, C. K., & Tripathy, D. P. (2022). TRAM: A Graphical User Interface for Risk Analysis in the Underground Coal Mines. *Disaster Advances*, 15(3), 49–61.
2. Tripathy, D. P., & Ala, C. K. (2018). Risk assessment in underground coalmines using fuzzy logic in the presence of uncertainty. *Journal of The Institution of Engineers (India): Series D*, 99(1), 157–163. <http://doi.org/10.1007/s40033-018-0154-7>
3. Tripathy, D. P., & Ala, C. K. (2018). Identification of safety hazards in Indian underground coal mines. *Journal of Sustainable Mining*, 17(4), 175–183. <http://doi.org/10.1016/j.jsm.2018.07.005>
4. Ala, C. K., & Tripathy, D. P. (2016). Qualitative assessment of strata control in an Indian underground coal mine. *Journal of The Institution of Engineers (India): Series D*, 97(1), 99–104. <http://doi.org/10.1007/s40033-015-0082-8>

Indian Journals

1. Tripathy, D. P., & Ala, C. K. (2016). Mining Safety Legislations and Role of DGMS and Major Coal Companies in Enhancing Safety. *Industrial Safety Chronicle*, 47(2), 25–33.
2. Tripathy, D. P., & Ala, C. K. (2016). Disaster Risk Management in Indian Coal Mines. *Industrial Safety Chronicle*, 47(1), 9–31.
3. Tripathy, D. P., & Ala, C. K. (2015). Investigation of equipment related fatal accidents in Indian coal mines. *Safety Equipment Review*, 16(6), 14–19.

National and International Conferences

1. Tripathy, D. P., & Ala, C. K. (2017). Overcoming safety, health and environment challenges in mining industry using risk assessment techniques. In *Indian coal mining industry: Overcoming challenges for a better tomorrow*. Sambalpur, Odisha, India: MGMI.
2. Ala, C. K., & Tripathy, D. P. (2016). A novel methodology for risk assessment in underground coal mines. In *Proceedings of Risk and Resilience Mining Solutions*. Vancouver, Canada: InfoMine.
3. Tripathy, D. P., & Ala, C. K. (2015). Assessment of genesis of accidents in underground coal mines using fault tree analysis. In *Industrial Safety & Risk Management*. NIT, Rourkela, Odisha: YMFI.

MEMBER OF PROFESSIONAL BODIES:

- » Associate member of The Institute of Engineers (India)