Curriculum Vitae

Name: Ashutosh Tripathy

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Nationality: Indian
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Current Affiliation (Address for correspondence):
Assistant Professor,
Department of Applied Geology,
Indian School of Mines Dhanbad, Dhanbad -826004, India

PROFESSIONAL PREPARATION:

- **Ph.D. 2019** *(CPI of 9.5/10)*
  Indian Institute of Technology Bombay-400076, India
- **Master of Science (Applied Geology) 2014 (CPI. of 8.55 /10.00)**
  Indian School of Mines Dhanbad, Jharkhand-826004, India
- **Bachelor of Science (Honours: Geology) 2012 (79%, First class with distinction)**
  Ravenshaw University, Cuttack, Odisha- 753003, India

WORK EXPERIENCE:

March 2021-continuing	**Assistant Professor,** Department of Applied Geology, Indian Institute of Technology (Indian School of Mines), Dhanbad, India
June. 2019 – March 2021	**Postdoctoral Researcher,** School of Mineral Resources and Geoscience, China University of Mining and Technology, Xuzhou, China.

AREA OF SPECIALIZATION AND RESEARCH INTEREST: Pore characterization of hydrocarbon-bearing rocks, Gas storage and flow in geomaterials, Experimental Rock Mechanics and its application in CBM and shale gas exploitation, Carbon Neutrality, Engineering Geology

RESEARCH EXPERIENCE: 5 years and 3 months (post PhD)

TEACHING EXPERIENCE: 3 years and 10 months (post PhD, at IIT (ISM) Dhanbad)

FELLOWSHIPS/AWARDS:

- Prof. H.R. Anireddy Memorial Award-2025
- AAPG Research Grant-in-Aid 2018
- Best Paper Award at International Conference on Global Civil Engineering Challenges in Sustainable Development and Climate Change-2017, Mangalore. ICGCSC-17
- Best Paper Award at 3rd International Conference on Earth Sciences and Engineering, Coimbatore. ICEE 2016
- Horst and Jessie von Bandat Memorial Grant from AAPG Grant-in Aid 2016
- IIT-JAM 2012

SPONSORED RESEARCH GRANTS/PROJECTS/CONSULTANCY:

Research Grants/Projects	Amount	Funding Agency
• **Start-up Research Grant** **Title:** Lithotype control over gas storage, gas permeability, and geomechanical attributes of coal seams: Implications for Coalbed Methane production and carbon dioxide sequestration in India	**Rs 32,34,000**	**DST (SERB)**

PROFESSIONAL MEMBERSHIPS

- American Association of Petroleum Geologists (AAPG)
- Indian Society of Rock Mechanics and Tunneling Technology (ISRMTT)- Life Member
- European Geoscience Union (EGU)- Annual member for 2025

PUBLICATIONS: Refereed Journal Articles **(12)**, Conference Proceedings (10).

RESEARCH - CITATION INDICES: **h-index = 12, i10-index = 13, Citations: 749.**

Source https://scholar.google.com/citations?hl=en&user=HVeHiGUAAAAJ

LIST OF PUBLICATIONS

REFEREED JOURNAL ARTICLES (PUBLISHED)

1. Madhurima Mazumder, Abinash Bal, **Ashutosh Tripathy**, Shiqi Liu, TN Singh, **2024**, Multiscale Assessment of Transformation in Pore System of Shale during Combustion: An Insight into Poromechanical Response and Sorption Dynamics, *Energy & Fuels,* 38 (18), p. 17510-17524. Q1, Impact Factor 5.2
2. BM Behera, **Ashutosh Tripathy**, TK Biswal, **2022**, Strength enhanced by pseudotachylite melt in fault zone rocks during post-seismic melting: A case study from the Gangavalli fault zone, southern India, *Journal of Earth System Science*, Vol 131, Issue 207. Impact Factor 1.912
3. Qiujia Hu, Liu Shiqi, Shuxun Sang, Huihuang Fang, **Ashutosh Tripathy,** Ling Yan, Mengfu Qin, Chonghao Mao, **2020**, Numerical Analysis of Drainage rate for Multilayer Drainage Coalbed Methane Well Group in Southern Qinshui Basin, *Energy Exploration & Exploitation*, Vol 38, Issue 5, p 1535-1558. Impact Factor 2.139
4. Vinoth Srinivasan, **Ashutosh Tripathy**, Tushar Gupta, T.N. Singh, **2020**, An investigation on the influence of thermal damage on the physical, mechanical and acoustic behavior of Indian Gondwana Shale, *Rock Mechanics and Rock Engineering*, Vol 53, Issue 6, p 2865-2885. Impact Factor 6.730

5. Liu Shiqi, Huihuang Fang, Shuxun Sang, **Ashutosh Tripathy**, Jianguang Wu, Shouren Zhang, Bing Zhang, **2020**, CO_2 injectability and CH_4 recovery of the engineering test in Qinshui Basin, China based on numerical simulation, *International Journal of Greenhouse Gas Control*, 95, 102980. Impact Factor 3.738.
6. **Ashutosh Tripathy**, Vinoth Srinivasan, T. N. Singh, **2019**, Fractal Analysis and Spatial Disposition of porosity in major Indian Gas Shales using Low-Pressure Gas Adsorption and advanced Image Segmentation, *Journal of Natural Gas Science and Engineering*, Vol 72, 103009. Impact Factor 4.965.
7. **Ashutosh Tripathy**, Vinoth Srinivasan, T. N. Singh, **2018**, A Comparative Study on the Pore Size Distribution of Different Indian Shale Gas Reservoirs for Gas Production and Potential CO_2 Sequestration, *Energy & Fuels*, 32 (3), p. 3322–3334. Q1, Impact Factor 5.2
8. Jagadish Kundu, Kripamoy Sarkar, **A Tripathy**, TN Singh, **2017**, Qualitative stability assessment of cut slopes along the National Highway-05 around Jhakri area, Himachal Pradesh, India, *Journal of Earth System Science*, 126: 112. Impact Factor 1.371.
9. Debanjan Guha Roy, **Ashutosh Tripathy**, TN Singh, **2017**, Effect of different wall roughness on the frictional behavior of rock joints, *Journal of the Geological Society of India*, Vol 89, Issue 3, p. 303-306. Impact Factor 1.459.
10. Bankim Mahanta, **A Tripathy**, V Vishal, TN Singh, PG Ranjith, **2017**, Effects of strain rate on fracture toughness and energy release rate of gas shales, *Engineering Geology*, Vol 218, p. 39-49. Impact Factor: 6.755.
11. N Madhubabu, P.K. Singh, Ashutosh Kainthola, Bankim Mahanta, **A Tripathy**, TN Singh, **2016**, Prediction of compressive strength and elastic modulus of carbonate rocks, *Measurement*, Vol 88, p. 202-213. Impact Factor: 3.927.
12. P.K. Singh, **A Tripathy**, Ashutosh Kainthola, Bankim Mahanta, TN Singh, **2016**, Indirect estimation of compressive and shear strength from simple Index tests. *Engineering with Computers,* Vol 33, Issue 1, p.1-11. Impact Factor: 7.963.
13. **A Tripathy**, TN Singh, Jagadish Kundu, **2015**, Prediction of abrasiveness index of some Indian rocks using soft computing methods, *Measurement*, Vol 68, p. 302-309. Impact Factor: 3.927.

CONFERENCE PROCEEDINGS

1. **Ashutosh Tripathy**, Vinoth Srinivasan, TN Singh, 2018, Pore Characterization of Cambay Shale Using Low-pressure Gas Adsorption and MIP Analysis, *80th EAGE Conference and Exhibition 2018*
2. **Ashutosh Tripathy**, Vinoth Srinivasan, K.K. Maurya, Nikhil Sirdesai, T.N. Singh, 2018, Acoustic and failure behavior of Gondwana shale under uniaxial compressive and indirect Brazilian tensile loading - an experimental study, Geomechanics and Geodynamics of Rock Masses: Proceedings of *EUROCK 2018*
3. **Ashutosh Tripathy**, Vinoth Srinivasan, TN Singh, 2018, Pore Size Distribution of shale using Advanced analytical techniques, *EGU- 2018*.

4. K.M. Sharma, N.N. Sirdesai, **A. Tripathy**, T.N. Singh, 2018, Micro-Pores and Fluid Flow – A Numerical Study, *52nd U.S. Rock Mechanics/Geomechanics Symposium - 2018*
5. **Ashutosh Tripathy**, Amit Verma, TN Singh, 2017, Adsorption behavior of Gondwana shale with variable loading, *ICGCSC -2017*
6. Jagadish Kundu, Bankim Mahanta, **A Tripathy**, Kripamoy Sarkar, TN Singh, 2016, Stability Evaluation of Jointed Rock Slope with curved face, *Indorock 2016*.
7. Shesh Mani Sonkar, Shyo Prasad, **A Tripathy**, TN Singh, 2016, Wedge failure due to adverse geological conditions and its remedial measures for underground oil storage cavern- A case study, *Indorock 2016*.
8. **A Tripathy,** Bankim Mahanta, TN Singh, 2016, Deformational behaviour of coal measure rocks**,** *International Conference on Earth Sciences and Engineering (ICEE 2016)*.
9. **A Tripathy**, TN Singh, 2016, Cryogenic Fracture behavior of Indian Gondwana Shale- A Laboratory Study, *35th International Geological Congress*.
10. **A Tripathy,** TN Singh, 2016, Physical and Numerical Simulation of Instability of Slope, *Advanced Trends in Civil Engineering and Sustainable Development,* p. 83-85.

REVIEWER ASSIGNMENTS

- International Journal of Rock Mechanics and Geotechnical Engineering
- Journal of Testing and Evaluation
- Measurement
- International Journal of Applied Geophysics

Declaration: I hereby affirm that the information furnished in this document is true, complete and accurate to the best of my knowledge and belief.

Place: Dhanbad, India **(Ashutosh Tripathy)**