

Dr. DEVI KORAVANGATT

Assistant Professor (on contract)

Department of Geology, Farook College (Autonomous)

Kozhikode, Kerala

Joining Date: 22-08-2022

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1. Education

Ph. D. in Coastal Geophysics, Department of Ocean Engineering, Indian Institute of Technology (IIT), Madras, 2019

M.S. Ocean Engineering, Indian Institute of Technology, Madras, 2019

M.Sc. Geology, Mahatma Gandhi University, Kottayam, 2010

2. Research Interest

Quaternary Geology, Coastal Geomorphology, Extreme coastal events, GPR, Peatlands, Biogenic Methane

3. Teaching Interest

Geophysics, Structural Geology, Paleontology, Advanced Economic Geology, Geomorphology, Petroleum Geology, Quaternary Geology, Crystallography & Mineralogy and Sedimentology

4. Professional Experience

Teaching Experience

1. *Assistant Professor (C)*, Department of Geology, Farook College (Autonomous) Kozhikode, Kerala, from October 2024 to Present
2. *Assistant Professor (C)*, Department of Geology, Farook College (Autonomous) Kozhikode, Kerala, from August 2022 to March 2024 (Two years)
3. *Assistant Professor (ADHOC)*, Department of Geology & Environmental Science, Christ College (Autonomous) Irinjalakuda, Thrissur, Kerala, from June 2019 to March 2021 (Two years).
4. *Teaching Assistant*, Petroleum Engineering Programme, Department of Ocean Engineering, IIT Madras. (01/05/ 2015 to 15/07/2018 -Three years two months).

Research Experience

1. *Project Officer*, Industrial Consultancy & Sponsored Research Centre (IC&SR), Indian Institute of Technology, Madras, Project: "Detection of leakages of underground pipes by 2D and 3D Ground Penetrating radar measurements and to detect cavities and grade of corrosion by LRUT and PUAT measurements" Client: ONGC Mangalore Petrochemicals Pvt Ltd (01/03/2019 to 30/03/2019- One month).
2. *Project Officer*, Industrial Consultancy & Sponsored Research Centre (IC&SR), Indian Institute of Technology, Madras – Project: "Delineation of buried subsurface objects hard bands in open cast mines" Client: Neyveli Lignite Corporation Ltd; Project: "Geophysical site assessment for Rageshwari Gas terminal" Client: Cairn Vedantha Pvt Ltd; Project: "Estimation of Peat gas deposits in Kerala and Konkan Peatlands" Client: Gas Authority of India Ltd (01/05/2014 to 30/04/2015 - Eleven months).
3. *Project Associate*, Industrial Consultancy & Sponsored Research Centre (IC&SR), Indian Institute of Technology, Madras- Project: "Controlling post rain damages due to surface run off and external subsoil water for CIL installation in Rajasthan" Client: Cairn India Ltd; Project:

“Hydrogeological Survey for ONGC MPL at Aromatic Complex Project, Mangalore” Client: ONGC Mangalore Petrochemicals Pvt Ltd; Project: “Identification, Mapping and Imaging of subsurface buried structures at Egmore railway station” Client: TANGEDCO; Project: “Distinguishing between Storms vs Tsunamis, dunes in Indian west and east coast based on subsurface records” Funding agency: Seed Funding IIT Madras; Project: “Coastal sedimentary activities of tsunami-affected eastern Indian coast and reconstruction of the past events based on high resolution substance records” Funding agency: INCOIS. (10/12/2010 to 30/04/2014 – Three years Five months).

5. Software Proficiency

Paradigm Software (Rock & Fluid Canvas 2009| Epos 4.0), GEOSoft Oasis Montaj & GM- SYS 3D, ArcGIS, QGIS, Grapher, Surfer and RADAN

6. Research Publications

Chapters in Edited Books

1. Estimating Belowground Free Phase Gas (FPG) in Tropical Peatlands of South-West Coast of India Using Ground Penetrating Radar (GPR), In Edited Book, Lecture Notes in Civil Engineering , Edited by K. Murali et al. Springer Nature.

Articles in refereed/indexed/listed Journals

1. Integrated approach of assessing sedimentary characteristics of onshore sand deposits on the Velankanni coast, Tamil Nadu, India: sheds light on extreme wave event signatures, Devi et.al., **Springer, Journal of Coastal Conservation**, 17(2013), 167-178. (Cite Score 1.95, Impact factor 2.17)
2. Assessment of coastal dune characteristics using georadar imaging and sedimentological analysis: Odisha and Visakhapatnam, India (Devi et al., **Springer, Journal of Coastal Conservation**, 17(2013), 729-742. (Cite Score 1.95, Impact factor 2.17)
3. Sediment Characteristics of Tidal Deposits at Mandvi, Gulf of Kutch, Gujarat, India: Geophysical, Textural and Mineralogical Attributes. **SCRIP International Journal of Geosciences**, 3 (2012), 515-524. (Cite Score 8.1, Impact factor 1.46)
4. Interpretation of Dune Genesis from Sedimentological Data and Ground Penetrating Radar (GPR) Signatures: A Case Study from Ashirmata Dune Field, Mandvi Beach, Gujarat, India. Devi K. et al., **SCRIP International Journal of Geosciences**, 3 (2012), 772-779. (Cite Score 8.1, Impact factor 1.46)
5. Evaluating spatial variability of subsurface carbon stock and free-phase gas using ground penetrating radar and direct measurements in coastal landforms of South-West Indian peatlands, Devi K. et al., **Journal of Physics Conference Series**, (2021), 2141(1):012011. (Cite Score 1.3)

Papers In Proceedings/Book chapters

1. Shallow Surface Geochemical Assessment of Subsoil Methane Deposits and its Implications, CRPASE: Transactions of Civil and Environmental Engineering 8 (2): 2456, 1–5, June 2022.
2. Estimation of Methane from Kerala-Konkan Onshore Peatlands of West Coast India by Ground Penetrating Radar Method. AAPG/SEG 2017 International Conference & Exhibition (ICE), 15-18 October 2017.

7. Papers Presented in Seminar/ Conferences

International

1. Presented a paper titled 'Estimating belowground Free Phase Gas (FPG) in tropical peatlands of South West Coast of India using Ground Penetrating Radar (GPR)' in 4th International Conference in Ocean Engineering (ICOE 2018) organized by IIT Madras at Chennai on 18-21, February, 2018.
2. Presented a paper titled 'Estimation of Methane from Kerala-Konkan Onshore Peatlands of West Coast India by Ground Penetrating Radar Method' in International Conference & Exhibition (ICE) organized by AAPG and SEG at London on 15-18, October 2017.
3. Presented a paper titled 'Non-Invasive Field Scale Characterisation of Methane Dynamics in South- West Indian Tropical Peatlands Using Ground Penetrating Radar Method' in The European Conference on Sustainability, Energy & the Environment organized by International Academic Forum at Brighton UK on 7-9, July, 2017.
4. Presented a paper titled 'Spatial variability in free phase gas dynamics using common offset ground penetrating radar in South West Indian Peatlands' in 2016 IAGR convention and international conference on Gondwana to Asia organized by University of Kerala at Trivandrum at 18-22, November 2016.
5. Presented a paper titled 'Field scale exploration of free phase gas dynamics in tropical peatlands of southwest India with ground penetrating radar' in 1st Triennial Congress of FIGA, 53rd Annual Convention of IGU & 34th Annual Convention of AHI on "Geosciences for Sustainability" at IIT(ISM), Dhanbad on 8-10, November 2016.

8. Resource Persons served

Invited Talks

1. Invited speaker for Two days seminar on Emerging areas of Chemical science, Department of Chemistry, KAHM Unity Women's College, Manjery on 5/06/2023
2. Resource Person for the National seminar on archeology on 'Ground Penetrating application in archeological research', organized by Christ college, Irinjalakuda on 29th January, 2020.

9. Conferences/Seminars/ Workshops attended

Conferences

1. Participated and volunteered in First International Conference on Developing Unconventional Oil and Gas Resources at IIT Madras on 1-3 March, 2013.

Seminars

1. Participated and volunteered in an international seminar on Talent Crisis in global Oil and Gas Industry at IIT Madras and LSES, London on 16-17 March, 2012.

Workshops

1. Participated in an International workshop on Advanced Petroleum Process modeling and simulation using ASPEN PLUS at IIT Madras, December 4, 2017.
2. Attended three days' workshop on Teaching Assistantship Training program conducted by Teaching Learning Centre, IIT Madras, 2016
3. Attended Workshop on Detection & Mapping of Underground Utilities (Subsurface Utility Engineering) conducted by Aqua Foundation, July 30-31, 2014, Mumbai
4. Participated & volunteered in the international workshop on Natural Gas Hydrates –Exploration and Production conducted by Department of Ocean Engineering, IIT Madras during August 7 – 9, 2012.

Others

1. Participated in the Nature Education Camp organized by Parambikulam Tiger Reserve

on 2nd & 3rd September, 2019.

10. Career Advancement

Short-term Course

1. Attended Five days GIAN course on “Hydroclimate Extremes and Climate Change Impacts” held at Department of Civil Engineering at NIT Calicut during 01st to 05th December 2025
2. Participated Empowering educators: Online teaching excellence, one week faculty development programme organized by IQAC-SAFI Institute of Advanced studies, Vazhayur, Malappuram 1st to 5th May 2023.
3. Attended 30-day International Online Workshop on Scholarly Writing & Publishing: Emerging Areas and Challenges from AI conducted from 29 May - 03 July 2023.
4. Attended one day workshop on Design and Development of online course organized by EMMRC, University of Calicut, Kerala on 28th March 2023
5. Participated in the National e-Awareness cum Training on IPR (NeAT IPR), Joint Workshop conducted in Association with University of Madras & CSIR-Institute of Minerals & Materials Technology, Bhubaneswar, India from 25th to 30th July, 2022.
6. Participated FDP On Quality Science Education in India in the 21st Century jointly organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) of Ministry of Education (MoE) and Christ College (Autonomous), Irinjalakuda, Kerala, from 3 – 9, November 2020.
7. Participated 1st Intensive training programme for the Young geomorphologists of India conducted by the Department of Geography, University of Calcutta from 2 - 5 March, 2020.

11. Conferences/Seminars/Workshops Organized

1. Member, organizing committee, FDP On Quality Science Education in India in the 21st Century jointly organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) of Ministry of Education (MoE) and Christ College (Autonomous), Irinjalakuda, Kerala, from 3 – 9, November 2020.
2. Organizing Secretary, two days international webinar on Geological Outreach and Career Development with the theme of Opportunities of an Earth Scientist in Academia and Beyond, from 13th -14th August, 2020.

12. Membership in Professional Bodies

1. Life-time Member, Society of Petroleum Engineers

13. Awards / Prizes Conferred

1. Qualified Kerala State Eligibility Test (SET) (2019)
2. Received scholarship funded by DAAD to participate summer school on “Coastal and River Hazards & Management Strategies” in RWTH university, Aachen, Germany (2018)
3. Received two international travel grants from DST-SERB and MHRD to present research in International conferences (2017)
4. Received First Rank in MSc. Geology from Mahatma Gandhi University, Kerala (2010)

14. E-Learning materials produced

1. Video lectures of Disaster management (Audit course) made available in Youtube channel of Christ college Irinjalakuda <https://www.youtube.com/watch?v=HunCtPOrw3g&t=99s>

15. Author profiles and identifiers

1. Linked in: www.linkedin.com/in/dr-devi-koravangatt/
2. Google Scholar: <https://scholar.google.com/citations?hl=en&authuser=1&user=GFcCEKMAAAAJ>
3. ResearchGate: <https://www.researchgate.net/profile/Devi-Koravangatt>