MR. D. MYSAIAH

CSIR-NATIONAL GEOPHYSICAL RESEARCH INSTITUTE (NGRI), HYDERABAD, INDIA

http://scholar.google.co.in/citations?hl=en&user=39BWiL0AAAAJ

NGRI RESEARCH GROUP:

Near Surface Geophysics Division

FIELD OF SPECIALIZATION:

- High Resolution Seismic Surveys (HRSS) for coal/lignite and CBM Exploration.
- Multi-channel Analysis of Surface Waves (MASW) and Seismic Refraction surveys for bedrock/basement depth, site characteristic studies, groundwater, engineering parameters.
- Ground Penetrating Radar (GPR) for utilities, cavity detection environmental and archaeological applications.

EDUCATION:

- Ph.D. Pursuing in Geophysics, Osmania University, Hyderabad, India
- M.Sc. Applied Geophysics, Osmania University, Hyderabad, India
- B.Sc. (MPC) Bachelor of Science, Osmania University, Hyderabad, India

PROFESSIONAL EXPERIENCE:

09/03/2009- till to date	***Scientist,*** National Geophysical Research Institute, Hyderabad, India
09/03/2006-08/03/2009	***Scientist-B,*** National Geophysical Research Institute, Hyderabad, India

VISITING POSITIONS/DEPUTATION TO ABROAD:

01/01/2011 -31/03/2011	Participated in International field programe on Earthquake Hazard Assessment Project at Earthquake Monitoring Center (EMC), Sultan Qaboos University (SQU), Muscat, Sultanate of Oman.
02/03/2009–21/03/2009	Participated in industrial training program on 1024-channel seismic system operation for 3D/3C seismic data acquisition and basic data analysis at M/s Geometrics Inc, SanJose, San Francisco, California, USA.

Peer-reviewed Journal Publications:

National Journals

1. **Mysaiah, D.,** Maheswari, K., Sri Hari Rao, M., Senthil Kumar, P., and Seshunarayana, T, 2011, Ground penetrating radar applied to imaging sheet joints in granite bedrock, *Journal of Current Science,* Vol. 100, No. 4, PP. 473- 475.

2. Seshunarayana, T., Rajendra Prasad, B., Prasad, ASSSRS. And **Mysaiah, D**., Subsurface Structure derived from detailed Gravity and Magnetic investigations along the Pala-Maneri traverse of the Main Central Thrust, NW Himalaya, 2011, *Journal of The Geological Society of India*, Vol. 77, No. 3, PP. 213-218.

3. V. Sudha Rani, S. Trupthi, **D. Mysaiah** and Seshunarayana T., Seismic refraction and surface wave data analysis for determining the engineering design parameters, 2011, *Journal of Geophysics and Engineering*, (Under Review).

4. K. Dhanam, P. Senthil Kumar, **D. Mysaiah,** P. Prabhakara Prasad, and T. Seshunarayana, 2011, High-resolution seismic imaging of the Sohagpur Gondwana basin, central India: Evidence for syn-sedimentary subsidence and faulting, Journal of Gondwana Research, (Communicated).

5. Nageswara Rao Elisela, Narsimhulu Chindam, **Mysaiah Dasari**, Seshunarayana Tangirala, 2011, Comparative Study on Seismic Refraction Interpretation Techniques, Journal of Engineering Geology, (Communicated).

6. K. Maheswari, P. Senthil Kumar, **D. Mysaiah,** K. Ratnamala, M. Srihari Rao, and T. Seshunarayana, 2011, Ground Penetrating Radar for Groundwater Exploration in Granitic Terrains: A Case Study from Hyderabad, India, (Under Review)

7. T. Seshunarayana, P. Senthil Kumar, V. Sampath Rao, **D. Mysaiah,** K.Sathish Kumar, 2006, Multichannel analysis of surface waves reveals shear zones and fractures in a shallow granite basement: Wailapally watershed near Hyderabad, *Journ al Geological Society of India (Published February 2008)*

International Symposium:

8. K. Satish Kumar, P. Senthil Kumar, P. Prabhakara Prasad, K.N.S.S.S Srinivas, **D. Mysaiah** and T.seshunarayana, 2010, MASW imaging of the deccan basalt lava flows and their weathering zones: a case study from Ghatia, India, in *GeoFlorida 2010: Advances in Analysis, Modeling & Design,* edited by D. fratta, A.J. Puppala, and B. Muhunthan, Proceedings of the GeoFlorida 2010 Conference, p. 1394-1401, February 20-24, 2010, West Palm Beach, Florida.

Papers Presented in seminars/symposia/conferences/workshops:

9. A. Rajasekhara Reddy, G. Vinod Mathews, K. Maheswari, K. Satish Kumar, **D. Mysaiah,** P. Prabhakara Prasad and T. Seshunarayana " Micro Gravity Survey for Old Mine Workings- A Case study from Jharia Coal Fields, Dhanbad", Presented in National seminar on Contemporary Practices in Geophysical Exploration for Fossil Fuel (CPGEFF), held at Andhra University, Visakhapatnam from December 10th to 11th, 2009.

10. V. Sudha Rani, **D. Mysaiah,** P. Prabhakara Prasad and T.seshunarayana "Mapping of Coal Seams and its Structural Variations Using High Resolution Seismic Survey" Presented in National seminar on Contemporary Practices in Geophysical Exploration for Fossil Fuel (CPGEFF), held at Andhra University, Visakhapatnam from December 10th to 11th, 2009.

Abstracts:

11. A paper "Multichannel analysis of surface waves detects potential groundwater zones in granite bedrock" by *K. Satish Kumar*, P. Senthil Kumar, **D. Mysaiah,** Y. Ramamohan Rao, P. Pavan Kishore and T. Seshunarayana was presented by me, at the 45th annual convention of Indian Geophysical Union, which was held at Banaras Hindu University in Varnasi, U.P., from November 5th to 7th, 2008.

12. A paper"Micro Gravity Survey For Old Mine Workings -A Case Study from Jharia Coal Fields, Dhanbad", G. Vinod Mathews A. Rajasekar Reddy, K. Maheswari, *K.Satish Kumar,* **D. Mysaiah,** P. Prabhakar Prasad and T. Seshunarayana *presented in National seminar on CPGEFF, held at Andhra University, VisakhaPatnam from December 10th to 11th,2009.*

13. Micro Gravity Survey for Old Mine Workings: A Case Study from Jharia Coal Fields, Dhanbad, Rajasekar Reddy, G. Vinod Mathews, K. Maheswari, K. Satish Kumar, D. Mysaiah, P. Prabhakara Prasad and T. Seshunarayana

14. Mapping of Coal Seams and its Structural Variations Using High Resolution Seismic Survey ,V. Sudha Rani, D. Mysaiah, P. Prabhakara Prasad and T.seshunarayana

Participated Projects:

[1] Integrated Geophysical studies along the hydroelectric HeadRace Tunnel Alignment (HRT) at Pala-Maneri Damsite near Uttarkashi, Uttarakhand. Under Project No. SSP-360- 28 (TSN)

[2] Ground Penetrating Radar (GPR) Studies on Granites near Siddipet and in Limestone of Belum Caves: Project No. SSP- 444- 28 (TSN)

[3] Geophysical Surveys for Bedrock Depth Determination at Raidurgam, Hyderabad under Project No. SSP- 420-28 (TSN)

[4] High Resolution Seismic Survey (HRSS) for CoalBed Methane (CBM) Exploration in Sohagpur West Block, Shahdol, Madhya Pradesh, under Project No. SSP-441-28 (TSN)

[5] High Resolution Seismic Survey (HRSS) for Coal Bed Methane (CBM) Exploration in and around Durgapur District, West Bengal State, under Project No. SSP-449-28 (TSN)

[6] Geophysical Studies at JHLP Site, Hyderabad under Project No. SSP- 472-28 (TSN)

[7] Geophysical surveys for Development of comprehensive Technology for Disaster prevention and management for Jharia Coal field, Dhanbad, Jharkhand, under Project No. COR-0019-28 (TSN)

[8] Preliminary site visit for 3D Seismic Survey investigations at SCCL Blocks of Bhoopalapalli- Venkatapuram, Adriyala, Dorli-Bellampalli and Asifabad, under Project No. SIP-0012-28 (TSN) during 04-12-08 to 06-12-08. It is proposed to conduct 3D surveys on 40LKm (Approx)

[9] Seismic Refraction Survey field work for estimation of overburden material below the surface Up to a depth of about 40 meters at Madanapalli, Chittoor District, Andhra Pradesh state, Project Code No. SSP-519-29 (TSN).

[10] 2D-HRS Survey for mapping of limestone and lignite deposites at Lakhpath area, Kutchch, Gujarat, Project No. SSP-541-28 (TSN) with ECF Rs 14, 70, 000 (14.70 Lakhs)

[11] 2D Seismic Reflection studies to map subsurface structural features at Mundra port area, Kutchch, Gujarat, Project No. SSP-543-28 (TSN) with Rs 52, 00, 000/- (52 Lakhs)

[12] Ground Penetrating Radar (GPR) scanning to locate underground pipes, cables and utilities, Numiligarh Refinery Limited (NRL), Numaligarh, Assam, Project No. SSP-557-28 (TSN) with ECF Rs 12, 00, 000/- (12 Lakhs)

[13] 2D-HRS Survey for identification of lignite and structural features at Kagau block, Barmer, Rajasthan State, Project No. GAP-576-28 (TSN) with ECF Rs 6 crores

[14] 3D-High Resolution Seismic Surveys (HRSS) for mapping coal deposits at Bhoopalpally, Warangal District, Andhra Pradesh Project No. SSP-585-28 (TSN)

[15] Engineering of Structures against natural and other disasters: Site Characterization Studies in and
around Chennai City. Project No. NWP-039 -28 (TSN).

[16] Geophysical and Geological surveys to study the 'Lonar Impact Crater' at Lonar Taluk, Bhuldhana District, Maharastra State. Project No. SIP-0012-28 (TSN).

[17] Geophysical and Geological surveys for Kailana lake reservoir for understanding the fracture pattern and ground water seepage characteristic studies at Jodhpur, Rajasthan State. Project No. SS-571-28 (TSN).

Participated Training Programs:

1. Training Program on 'Radiation Safety Aspects on Nucleonic Gauges' at Bhabha Atomic Research Centre (BARC), Mumbai, under Project No. MLP-5203-28 (TSN)

2. LINUX Programming Course for processing of 2D/3D-seismic data using FroMax and Focus processing software's at Orbit Turbo Technologies" Tarnaka, Hyderabad.

3. Training Course on "An introduction to the Diamomd Bearing Rocks and Modern Methods in the Exploration for, and Evaluation of, Primary Diamond Deposits" at Geological Survey of India (GSI), Bangalore.

4. Refresher Course on Electro Magnetic Methods at National Geophysical Research Institute (NGRI), Hyderabad:

5. Modern Training in Petroleum Exploration at Oil and Natural Gas Corporation (ONGC), Dehradun, which is jointly organized by Petrotech-ONGC.

6. Training program on 1024-channel 3D Seismic system operation and basic data analysis at M/s Geometrics Inc, factory facility, Sanjose, California, USA.

7. Participated training programme on "Communication & Presentation Skills" for scientists at Xavier Institute of Management, Bhubaneswar, sponsored by Department of Science and Technology (DST) to improve communication and presentation skills.
8. Participated training course on "Conceptual Seismic Interpretation for Young Industry Professionals" organized by Saturn Energy Solutions for Oil & Gas Hyderabad, Andhra Pradesh State.
9. Attended the new seismic equipment field demonstration on cable-less continuous recording seismic system at Mandya district, Karnataka Site, India.