



GERMI

EDUCATION | RESEARCH | TRAINING | CONSULTANCY

**Gujarat Energy Research and Management Institute (GERMI) organizes a six day comprehensive course on
FOUNDATIONS OF BASIC TOOL PHYSICS AND FORMATION EVALUATION**

22 to 27 September 2014 at Gandhinagar, Gujarat

About GERMI

GERMI, an ISO 9001 : 2008 certified institute, is a Centre of Excellence in industry learning, research and development and education. It is set up to develop human resource assets to cater to both renewable and non-renewable energy sectors, improve knowledge base of policy makers and technologists, and provide a competitive edge to compete in the global arena.

GERMI was brought into existence and is promoted by Gujarat State Petroleum Corporation Limited (GSPC), a Government of Gujarat Undertaking. GERMI has already established specialized research, education, management and training institutes, and is continuously expanding its horizons to cater to the allied energy sectors. GERMI is a registered Society and a Trust under the Societies Registration Act, 1860 and the Bombay Public Trust Act, 1950. GERMI is a recognized Scientific and Industrial Research Organization (SIRO) by the Department of Scientific and Industrial Research (DSIR), Government of India.

GERMI has established three research wings

The **Petroleum Research Wing** concentrates on research and development of increasingly efficient and well adapted technologies to extract, upgrade, manage and commercialize the oil and gas resources and economic impacts of their production and use

The results so generated will directly support the GERMI's mission of protecting and responsibly managing country's hydrocarbon resources by advancing the scientific understanding to plan for a balanced and secure energy future

Petroleum Research Wing has two major groups:

Petroleum Research Laboratories: The capabilities of the Petroleum Research Laboratories are in Petro Graphic Studies, Rock Physics and Geochemical Studies

Data Interpretation Centre: The capabilities of the DIC are

- Seismic data enhancement
- Complicated fault block analysis & fracture geometry extraction

- Reservoir characterization
- Coal characterization using seismics
- Identification of channels & thin sands/ coals using spectral decomposition & inversion studies
- Integration of multiple domain data for interpretation
- G&G data analysis for exploratory block evaluation
- 2D / 3D Seismic data acquisition, parameterisation/ planning & designing of survey & quality control of seismic data acquisition
- Processing of 2D & 3D seismic data

The **Renewable Energy Research Wing** is positioned to reach national energy goals by developing new ways to power our homes and businesses and to fuel our vehicles. A Solar Energy Research Laboratory has been established as the first initiative of this wing to address research as well as undertake pilot energy programmes.

The **Environment and Energy Efficiency Research Wing** conducts research on local, national, regional and international issues related to climate change and climate policy. The climate issue is extensive and the wing explores mitigation of man-made climate changes and adapting its impacts.

Date

22 to 27 September 2014

Fee

INR 25,000/- per participant (plus 12.36% service tax)

Venue

Gujarat Energy Research and Management Institute, Pandit Deendayal Petroleum University Campus, Raisan, Gandhinagar, Gujarat - 382 007

Who should attend?

The course is designed for young Geophysicists, Petrophysicists, Geologists and Reservoir Engineers to enrich their knowledge in petrophysical data analysis, for formation evaluation and testing. The course targets young Geoscientists who just commenced their career and students who are about to enter the industry

Course Outline

The 6-day course covers basic tool physics and formation evaluation using basic well logs with adequate exposure to relevant geological aspects.

Basic Tool Physics

Day-1 Caliper, SP, GR, Spectral GR, Resistivity, covering old Russian logs, lateral and latro logs, dual induction, dual latro, micrologs and micro spherically focused logs and array induction logs.

Day-2 Density, Neutron and Borehole compensated acoustic logs.

Basic Formation Evaluation

Day-3 Log quality control and basic geological principles, qualitative analysis of Caliper, SP, GR and spectral GR logs.

Day-4 Qualitative analysis of resistivity logs including invasion aspects and environmental corrections, qualitative analysis in integrating with Caliper, SP, GR and spectral GR logs, qualitative analysis of porosity logs including quick look presentations, compatible scales and also includes qualitative analysis of integrated approach in using all basic logs.

Day-5 Quantitative analysis covering environmental corrections, computation of formation water resistivity, volume of shale, porosity estimation, saturation estimation using clean sand and shaly sand models.

Day-6 Practical manual interpretation using logs.

Course Co-ordinators



Mr. A. K. S. Kakani

Mr. Kakani has over 35 years experience in Well Log Data processing and Formation Evaluation and has rich experience of working with several companies within India and abroad namely BG E&P India Limited, Sperry Sun Drilling Services, Halliburton Energy Services, HLS India Ltd., and ONGC. He has successfully managed AFE teams in India and overseas rendering formation evaluation services to different oil and service companies. He has conducted log analysis courses for logging engineers, students and is currently engaged as Chief Technical Advisor at Varpal Energy Services. He was a visiting professor in IIT Mumbai teaching Petrophysics, during the period 2008 to 2010.



Mr. K. S. V. R. Krishna Rao

Mr. Rao has extensive experience in logging operations, log analysis, formation evaluation, and reservoir characterization for more than 35 years in ONGC. During his service in ONGC Ltd he held many prominent positions with respect to logging function that include in-charge of logging division, Karaikal; Project leader in KDMIPE and Head of log interpretation group in WoB, Mumbai. He has been a trainer and has delivered series of sessions on logging related topics. Post retirement he serves as a consultant and has provided consultancy to different companies namely, Adani, Wellspun, Eesh Energy Enterprises Pvt. Ltd., BPRL (GoI- PSU) and Blade Energy, USA.



Mr. P. H. Rao

Mr. P. H. Rao, Ex General Manager (Geophysics) is presently heading the Data Interpretation Centre of Petroleum Research Wing, GERMI. He is backed by 33 years of oil industry experience as a seismic data acquisition and exploration manager and exploration and development geoscientist with strong multi-disciplinary integration skills and proven record of oil and gas discoveries. Proven experience as an effective and successful project and team leader as well as team member of involving complex geological studies. Possess excellent communication skills, aware of latest state-of-art technologies. Posses sound knowledge of G&G data interpretation on workstations using LandMark and Hampson Russel softwares and lead G&G teams at various levels for interpretation of 3D and 2D Seismic data for prospect delineation and evaluation. Mr. P.H. Rao is well versed with various Seismic interpretation softwares.

Organized and Conducted By

**GUJARAT ENERGY RESEARCH & MANAGEMENT INSTITUTE
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