Gujarat Energy Research and Management Institute
&
Institute of Seismological Research

Cordially invite you to the Inaugural Function of

Second Indo-German Workshop on Magnetotelluric Data Acquisition, Processing and Modelling

On Thursday November 01, 2012
at 09:00 a.m.

Shri Ravi Saxena, IAS
Additional Chief Secretary
Department of Science and Technology, Government of Gujarat
has graciously consented to be the Chief Guest and
inaugurate the workshop

Prof. V.P.Dimri
President, IGU
will preside over the function

Dr. M.Sudhakar
Advisor, MoES, Government of India
will be the Guest of Honor

Venue: ISR Auditorium, Raisan Village, Gandhinagar, Gujarat, India

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Prof. T. Harinarayana	**Dr. B. K. Rastogi**	**Prof. Heinrich Brasse**	**Dr. Syed Zaheer Hasan**	**Dr.Ajay Manglik**	**Dr.Kapil Mohan**
Coordinator-India	*Coordinator-India*	*Coordinator-Germany*	*Programme Coordinator*	*Convenors*	

PROGRAMME

08:00-08:30	Registration	
08:30-08:55	Meeting the Participants	
08:55-09:00	Invitation of Dignitaries to the Dias	**Dr. Ajay Manglik** Senior Principal Scientist, CSIR-NGRI, Hyderabad
09:00	Welcome	**Dr. B.K. Rastogi** Director General, ISR, Gandhinagar
09:05	About the workshop	**Prof. T.Harinarayana** Director, GERMI, Gandhinagar
09:10	About GERMI	**Shri Amin M. Petiwala** Secretary, GERMI, Gandhinagar
09:12	Remarks	**Prof. V.P. Dimri** President, IGU
09:15	About Indo-German collaboration	**Prof. Heinrich Brasse** Freie University, Berlin, Germany
09:20	Release of Abstract Volume & Inaugural address	**Shri Ravi Saxena, IAS** Additional Chief Secretary, DST, Government of Gujarat
09:30	Observations and Remarks	**Dr. M. Sudhakar** Advisor, MoES, New Delhi
09:35	Vote of Thanks	**Dr. Syed Zaheer Hasan** Principal Research Scientist, GERMI, Gandhinagar

High Tea 09:40-10:00

Indian Geophysical Union Post - Workshop

on

Magnetotelluric Data Acquisition, Processing and Modelling

The post-workshop is a part of the 49th Annual Convention of the Indian Geophysical Union, and also a part of second Indo-German workshop being organized with the aim to impart training to students and young researchers on different facets of Magnetotelluric (MT) research. These include basic theory, data acquisition, processing & modelling, and applications to mapping of crustal and lithospheric structure as well as hydrocarbon and geothermal resource exploration.

Date
1st-3rd November, 2012

Seats
20-25 participants

Venue
Institute of Seismological Research
Raisan, Gandhinagar, Gujarat 382 009

Key takeaways :

- ✔ Workshop highlights different facets of Electromagnetic (EM) research, basics and applications to mapping of crustal and lithospheric structure, hydrocarbon and geothermal resource exploration.
- ✔ Tailored for the purpose of learning recent advances in basic concepts, data processing and analysis, numerical modelling and interpretation.

Coordinators (India)

Prof. T. Harinarayana
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Dr. B. K. Rastogi
Director General, ISR
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Coordinator (Germany)

Prof. Heinrich Brasse
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Convenors

Dr. Ajay Manglik
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Dr. Kapil Mohan
Scientist, ISR, Gandhinagar
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Members

Dr. K. Veeraswamy
CSIR-NGRI, Hyderabad

Dr. Prasanta Patro
CSIR-NGRI, Hyderabad

Dr. C.K. Rao
IIG, Mumbai

Registration : Last date September 30, 2012

Fee : Rs. 5000/- per participant
(No Registration fee for Students and Research Scholars)
To be paid as demand draft in the name of "Gujarat Energy Research and Management Institute" payable at Gandhinagar, Gujarat.

Registration form along with registration fee should reach Director, GERMI, Gandhinagar on or before the last date.

GERMI is a centre for excellence in industry learning, research & development and education. It is set up to develop human resource assets to cater to the renewable and non-renewable energy sectors, improve knowledgebase of policy-makers and technologists, and provide a competitive edge to leaders to compete in the global arena. GERMI is a Scientific and Industrial Research Organization recognized by the Department of Scientific and Industrial Research (DSIR), Govt. of India.

GERMI

Institute of Seismological Research (ISR) has been established by the Department of Science and Technology, Government of Gujarat. ISR is registered as a society under Societies Registration Act. The governing council of the Society is chaired by the Hon'ble Chief Minister, Gujarat State. ISR is the only institute in India fully dedicated to Seismological research and is planned to be developed into a premier international institute. ISR is currently involved in Earthquake Monitoring, Deep Electromagnetics, Crustal Deformation, Seismic Microzonation and Earthquake Prediction Research.

R&D Projects at GERMI :

- ❖ Improved and sustained production of oil through the application of laboratory based cost-effective field techniques and reservoir modelling in GSPC operated on-shore fields.
- ❖ Reconstruction of sedimentary environment with emphasis on chronology of events predicting guides to the existing sub-surface mineral resources.
- ❖ Evaluation of shale gas potential of sedimentary basins of India.
- ❖ 5 MW Gandhinagar Photovoltaic Rooftop Programme.
- ❖ GPCL 5 MW and GIPCL 5 MW PV Plant Consultancy.
- ❖ Development of Graphene and Silicon Nanowires by Chemical Vapor Deposition for Photovoltaic Applications.
- ❖ Chemicals management for integrated ozone layer and climate protection.

http://www.germi.org/igu-page.html

Indian Geophysical Union Post - Workshop

on

Magnetotelluric Data Acquisition, Processing and Modelling

Time	Day1 :	Day 2 :	Day 3 :
09.30 – 11.15	MT Theory	3-D modeling and Inversion	Field Training
11.15 - 11.45 : Tea Break			
11.45 – 13.30	Processing and Analysis	Joint Inversion	Field Training Continued...
13.30 - 14.30 : Lunch Break			
14.30 – 16.15	1-D and 2-D Modeling and Inversion	Case Studies	Field Training Continued...
16.15 - 16.45 : Tea/Snacks			
16.45 – 18.30	Tutorial on Mapros Tutorial on Decomposition Analysis	Tutorial on WinGLink	Field Training Continued...

Resource Persons:

Dr.	Abdul Azeez	CSIR-National Geophysical Research Institute
Prof.	B. R. Arora	Wadia Institute of Himalayan Geology
Mr	Narendra Babu	CSIR-National Geophysical Research Institute
Prof.	Michael Becken	University of Münster
Prof.	B.B.Bhattacharya	S. N. Bose National Centre for Basic Sciences
Prof.	Heinrich Brasse	Freie Universitaet Berlin
Dr.	E. Chandrasekhar	Indian Institute of Technology-Bombay
Dr.	G.Dhanunjaya Naidu	Central Water and Power Research Station
Prof.	S. G. Gokarn	Indian Institute of Geomagnetism
Mr	Arvind Gupta	CSIR-National Geophysical Research Institute
Prof.	P.K. Gupta	Indian Institute of Technology-Roorkee
Prof.	T. Harinarayana	Gujarat Energy Research and Management Institute
Prof.	Md. Israil	Indian Institute of Technology-Roorkee
Dr.	Ajay Manglik	CSIR-National Geophysical Research Institute
Dr.	Kapil Mohan	Institute of Seismological Research
Dr.	Nandini Nagarajan	CSIR-National Geophysical Research Institute
Dr.	B. P. K. Patro	CSIR-National Geophysical Research Institute
Mr	Peush	Institute of Seismological Research
Dr.	C. K. Rao	Indian Institute of Geomagnetism
Mr	K. Chinna Reddy	CSIR-National Geophysical Research Institute
Dr.	Katrin Schwalenberg	Bundesanstalt für Geowissenschaften und Rohstoffe (BGR)
Prof.	Shalivahan	Indian School of Mines
Prof.	Sri Nivas	Indian Institute of Technology-Roorkee
Ms	Sunita	Institute of Seismological Research
Mr	Suresh	Institute of Seismological Research
Prof.	B. Tezkan	Universität zu Köln
Dr.	K. Veeraswamy	CSIR-National Geophysical Research Institute
Dr.	Devesh Walia	NEHU, Shillong
Dr.	Bernhard Friedrichs	Metronix Measurement and Electronics GmbH
Mr.	Ulrich Matzander	Metronix Measurement and Electronics GmbH

Registration Form

Name _____

Affiliation _____

Organization/ Institute _____

_____

Postal Address _____

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Tel./Mobile _____

Email ID _____

Registration Fee detail _____

_____

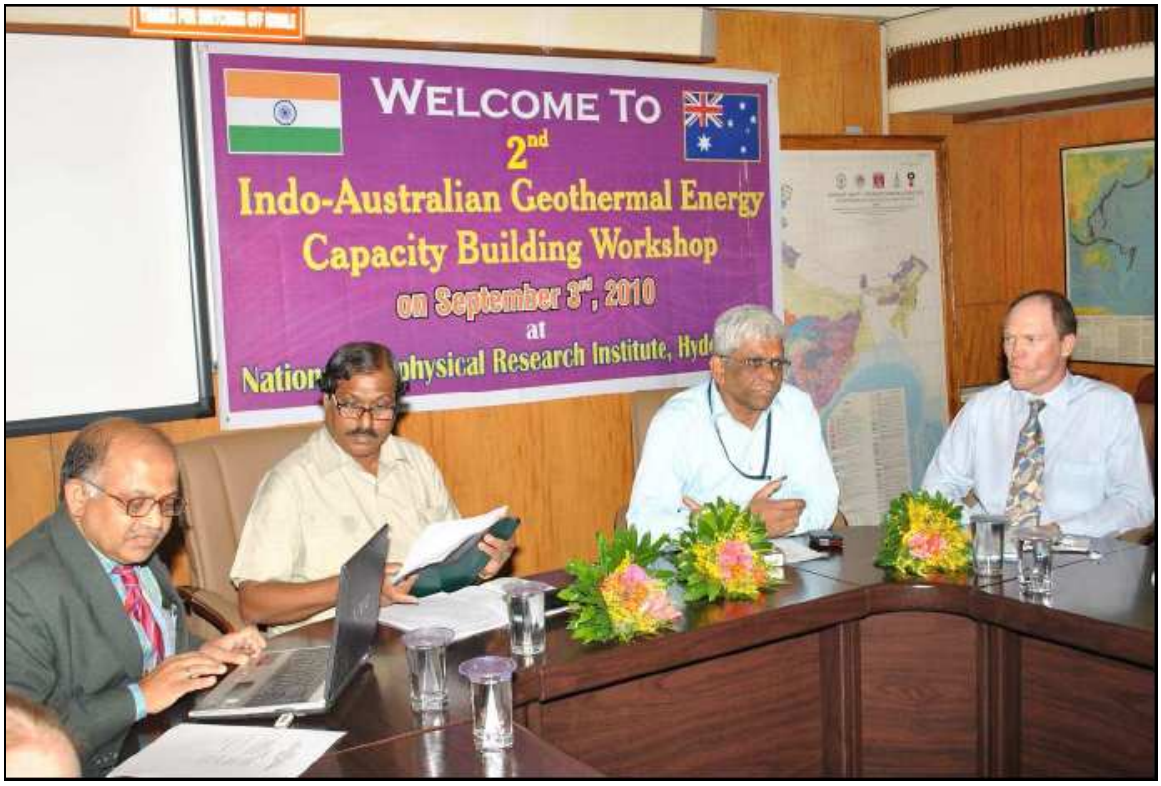
(In case of student/ Research Scholar, attach proof)

Date _____ Signature _____

Organized and Conducted by:
Gujarat Energy Research & Management Institute
&
Institute of Seismological Research (ISR)

Director, Gujarat Energy Research & Management Institute (GERMI)
Training & Development Centre
1st Floor, Energy Building, Pandit Deendayal Petroleum University Campus, Raisan Village, Gandhinagar, GUJARAT 382 007.
http://www.germi.org/igu-page.html

SECOND INDO-AUSTRALIAN GEOTHERMAL ENERGY BUILDING CAPACITY



The inauguration of 2nd Indo-Australian Geothermal capacity building workshop held at NGRI, Hyderabad on 3rd Sep. 2010. Sitting (Right to Left): Dr.Anthony Budd, Geoscience Australia, Dr.Y.J.Bhaskar Rao, Acting Director, NGRI, Dr.R.N.Sawant, Director, MNRE, Dr.T.Harinarayana, Scientist G, NGRI.

The second Indo-Australian Geothermal Energy Building Capacity workshop was held on 3rd September 2010 at National Geophysical Research Institute, Hyderabad. After successful organization of the first Indo-Australian workshop during February 8-9, 2010, it was felt that more concerted efforts needed to be made to assess the geothermal potential of a region in India. Accordingly, a field visit was organized during August 31st to 3rd September 2010 for the visiting four Australian scientists from Geoscience Australia, Government of Australia along with Indian scientists to Tattapani geothermal area, Surguja district, Chhattisgarh state. During the field visit, water samples and rock samples were collected in addition to visiting the existing boreholes in and around the Tattapani geothermal field. The workshop at NGRI was deliberated on the field visit and decided to initiate the 3D modeling by compiling all the available geological,

geochemical and geophysical data of the Tattapani area. Thus the development of a 3D model under Indo-Australian cooperation will be helpful in identification of a deep borehole target for exploitation of geothermal energy for electrical power generation.

The workshop was inaugurated by Dr.R.N.Sawant, Director, Ministry of New and Renewable Energy, Government of India and presided over by Dr.Y.J.Bhaskara Rao, the Acting Director, NGRI, Hyderabad and coordinated by Dr.T.Harinarayana, Sct.G, Head, Magnetotelluric Group. Dr. Anthony Budd from Geoscience Australia, the Head of the Australian team and other three Australian colleagues – Mr. Edward Gerner, Mr. Tony Meixner and Ms. Alison Kirkby - have made detailed presentations on the field visit, geothermal modeling, power generation etc. Dr. O.P.Pandey, Dr. Sukanta Roy, Dr.A.M. Dayal, Sri D.N. Murthy, Dr. B.P.K.Patro, Dr. K.K.Abdul Azeez and other NGRI scientists and students have participated in the discussions. Dr.K.Veeraswamy concluded the workshop with vote of thanks.

At the workshop, it was agreed that the third phase of the collaboration is for four scientists from NGRI and MNRE to attend the Australian Geothermal Energy Conference, Adelaide, 15-19 November. This is an opportunity to make contacts with Australia and international geothermal researchers and industrialists. In the following week the Indian party will visit Geoscience Australia, Canberra, to progress the Tattapani 3D map and thermal model, and to discuss geothermal policy issues with officials at the Australia Government Department of Resources, Energy and Tourism.