



One Week One Lab Program (OWOL)

1
week
One Lab

September 04-09, 2023

**CSIR-National Geophysical Research Institute (CSIR-NGRI)
Hyderabad, Telangana, India**

1
week

One Lab

**4-9 September
2023**



CSIR-National Geophysical Research Institute (CSIR-NGRI), Hyderabad, is celebrating the 'One Week One Lab' program showcasing its scientific excellence and outstanding contributions in the thematic areas encompassing Geodynamics, Natural Resource Exploration and Earthquake Hazard. Researchers, Academicians, Students, Industrialists, Start-ups, MSMEs, Govt. Officials, Policy Makers and General Public are invited to participate in the event and make it memorable.

One Week One Lab Program (OWOL)

DAY 1

4th Sept, 2023

INAUGURAL

- Program Launch
- MoU Ceremony
- R&D Exhibition

DAY 2

5th Sept, 2023

GEOSCIENCE

CONCLAVE

- Invited Talks
- Public Lectures

DAY 3

6th Sept, 2023

STAKEHOLDER

CONNECT

- Industry Interactions
- Panel Discussions

DAY 4

7th Sept, 2023

SOCIETY CONNECT

- Kisan Meet
- Meeting with Beneficiaries
- Geothermal Workshop

DAY 5

8th Sept, 2023

PUBLIC/STUDENT

CONNECT

- Open Day & Outreach
- Jigyasa Student Connect
- Geothermal Workshop

DAY 6

9th Sept, 2023

VALEDICTORY

- Valedictory Function

Showcase

R&D Achievements |
Posters | Exhibits |
Models | Quiz Competition for Students
Societal Connect: Ground water |
Earthquake Hazard



Shri Narendra Modi
Hon'ble Prime Minister of India
President, CSIR



Dr. Jitendra Singh
Hon'ble Minister of State (I/C)
Vice President, CSIR



Dr. N. Kalaiselvi
Director General, CSIR
& Secretary, DSIR



Dr. Prakash Kumar
Director, CSIR-NGRI

One Week One Lab Program

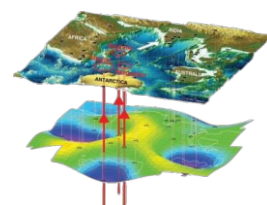
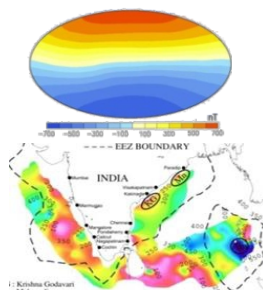
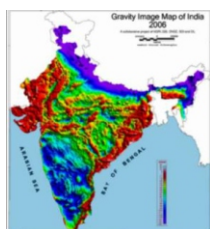
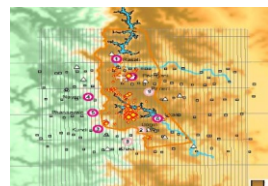
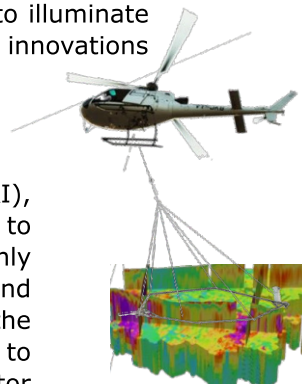
About The Program

Hon'ble Minister (S&T) Dr. Jitendra Singh highlighted that each of the 37 Council of Scientific and Industrial Research (CSIR) laboratories possesses distinctiveness, specializing in a wide array of fields ranging from genomics to geology, minerals to materials, food to fuel, and more. With the aim of spotlighting and disseminating this diverse expertise throughout society, the Hon'ble Minister introduced the concept of **"One Week One Lab."** This endeavour is envisioned as a nationwide thematic campaign strategically crafted to illuminate the remarkable technological advancements and innovations originating from the CSIR labs for the people of India.

About CSIR-NGRI

CSIR-National Geophysical Research Institute (CSIR-NGRI), Hyderabad, was established in 1961 with the mission to carry out research in multidisciplinary areas of the highly complex structure and processes of the Earth system and its extensively interlinked subsystems. CSIR-NGRI has the mandate to conduct research for public-good science to enable government agencies, public and private sector stakeholders to make informed decisions about the use of geo-resources sustainably and improve preparedness and resilience to natural hazards. With more than 110 qualified scientists and an equal number of technical staff, 150 project researchers and 50 PhD students, state-of-art computational and laboratory facilities, and a nationwide network of observation sites, NGRI is committed to addressing the challenges of the near future and bringing the benefits of science to impact societal priorities.

1
week
One Lab





One Week One Lab Program

PROGRAM

Day 1

4th September, 2023

1
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INAUGURAL

10:00 - 10:05 Welcome & Lighting of Lamp

10:05 - 10:15 About CSIR-NGRI One Week One Lab (OWOL) Program

Dr. Prakash Kumar, Director, CSIR-NGRI

10:15 - 10:30 Address by the Guest of Honour (Online)

Dr. N. Kalaiselvi, DG, CSIR & Secretary DSIR

10:30 - 10:45 Address by the Guest of Honour

Sri Jayesh Ranjan, IAS, Principal Sec. (I&C, IT), Govt. of Telangana

10:45 - 11:05 Address by the Chief Guest

Dr. P.S. Goel, Former Secretary, MoES, Govt. of India

11:05 - 11:15 Exchange of MoUs

11:15 - 11:20 Vote of Thanks

Dr. N. Purnachandra Rao, Chief Scientist, CSIR-NGRI

11:20 National Anthem

11:30 Inauguration of R&D Exhibition

Dr. P.S. Goel, Former Secretary, MoES, Govt. of India



S.B. Hall, CSIR-NGRI Campus



One Week One Lab Program

PROGRAM

Day 2

5th September, 2023

1
week
One Lab

GEOSCIENCE CONCLAVE

- | | |
|---------------|--|
| 10:00 - 10:40 | Overview of R&D activities of CSIR-NGRI
Dr. Prakash Kumar , Director, CSIR-NGRI |
| 10:40 - 11:20 | Artificial Water Reservoir Triggered Earthquakes
Dr. H.K. Gupta , President, Geological Society of India |
| 11:20 - 11:30 | Tea Break |
| 11:30 - 12:10 | Disequilibrium in metamorphic minerals as tape recorder of petrogenetic and orogenic processes
Dr. Somnath Dasgupta , INSA Sr. Scientist, ISI Kolkata & IISER, Kolkata |
| 12:10 - 12:50 | Himalayan foreland – A traverse through the past 50 million years
Dr. S. K. Tandon , Adjunct Professor, IISER Bhopal |
| 12:50 - 14:05 | Lunch |
| 14:10 - 14:50 | Emerging Areas in Hydrology
Dr. Vijay P Singh , Texas A & M University, Texas, USA |
| 14:50 - 15:30 | Hydrated Moon: New insights from Indian Lunar Exploration Missions
Dr. Prakash Chauhan , Director NRSC, Hyderabad |
| 15:30 - 16:10 | Evolution of continental margin segments along the east coast of India and Bangladesh and sediment deposition patterns in the Bay of Bengal
Dr. K.S. Krishna , Dean, School of Sciences, GITAM University |
| 16:10 - 16:50 | The plate tectonic history of India and mantle convection
Dr. Attreyee Ghosh , Associate Professor, IISc, Bangalore |
| 16:50 - 17:00 | Tea Break |
| 17:00 - 17:40 | Interactive Session (Q&A) and Future R&D discussion |



S.B. Hall, CSIR-NGRI Campus



One Week One Lab Program

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Day 3

6th September, 2023

1
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STAKEHOLDER CONNECT

10:00 - 10:05 Welcome Address

Dr. Prakash Kumar, Director, CSIR-NGRI

10:05 - 10:15 Ease of Doing Business with CSIR (online)

Dr. Mahendra Darokar, Chief Scientist, CSIR Hq.

10:15 - 10:25 Address by Chief Guest

Shri. Bhuwan Chandra Pathak, CMD NPCIL

Session: R&D Business Offerings from CSIR-NGRI

10:25 - 10:40 CCUs and Energy

Dr. Ranjana Ghosh, Pr. Scientist & **Dr. B. Mandal**, Sr. Pr. Scientist,
CSIR-NGRI

10:40 - 10:50 Water

Dr. Subhash Chandra, Sr. Pr. Scientist, CSIR-NGRI

10:50 - 11:00 Hazard

Dr. N. Purnachandra Rao, Chief Scientist, CSIR-NGRI

11:00 - 11:10 Minerals

Dr. EVSSK Babu, Chief Scientist, CSIR-NGRI

11:10 - 11:20 Geotechnical Investigation

Dr. HVS Satyanarayana, Chief Scientist, CSIR-NGRI

11:20 - 11:35 Tea Break

11:35 - 12:55 Discussions between scientists and stakeholders about R&D challenges and Sum-up

Dr. Shib Sankar Ganguli, Scientist - Rapporteur, CSIR-NGRI

12:55 - 13:00 Vote of Thanks

Dr. HVS Satyanarayana, Chief Scientist, CSIR-NGRI

13:00 - 14:00 Lunch



S.B. Hall, CSIR-NGRI Campus



One Week One Lab Program

PROGRAM

Day 4-I

7th September, 2023

SOCIETY CONNECT

1
week
One Lab

8:30 - 11:15	Registration & Field Visit to Experimental Hydrogeological Park (Venue: EHP, NGRI Campus, Choutuppal)
11:15 - 11:20	Lighting of a Lamp
11:20 - 11:25	Welcome Address by Coordinator Dr. Subash Chandra , Sr. Principal Scientist, CSIR-NGRI
11:25 - 11:30	Introductory Remarks by Project Leader Dr. V.M. Tiwari , Outstanding Scientist, CSIR-NGRI
11:30 - 11:40	Opening Remarks Dr. Prakash Kumar , Director, CSIR-NGRI
11:40 - 11:45	Remarks by Local Sarpanch
11:45 - 12:00	Address by Chief Guest Sri. Vedire Sriram , Adviser to the Hon'ble Minister, Min.of Jal Shakti, Gov. of India
12:00 - 12:15	Address by Guest of Honour Sri. V.K. Upadhyay , Director, UPGWD Dr. P. Rajendra Prasad , Sir Arthur Cotton Geospatial Chair Professor, Andhra University
12:15 - 12:20	Vote of Thanks
12:20 - 12:40	Talk-1: Rainfall-Groundwater-Agriculture Practices Dr. Sahebrao Sonkamble , Sr. Scientist, CSIR-NGRI
12:40 - 13:05	Talk-2: Science & Technologies for Water Security Dr. Subash Chandra , Sr. Principal Scientist, CSIR-NGRI
13:05 - 13:20	Talk-3: Managed Aquifer Recharge- a success story of NGRI-EHP, Choutuppal Dr. Ved P. Maurya , Scientist & Dr. L. Surinaidu , CSIR-NGRI
13:20 - 14:15	Lunch
14:15 - 15:45	Interactive sessions with farmers Quiz on Water Conservation
15:45 - 16:00	Tea Break
16:00 - 17:00	Feedback and appreciation to farmers, closing remarks and Vote of thanks



Shubham Garden & Function Hall (SGFH), Choutuppal



One Week One Lab Program

PROGRAM

Day 4-II

7th September, 2023

GEOHERMAL WORKSHOP DAY-1

1
week
One Lab

09:00 - 10:00 Registration

Inaugural Session, Venue: S.B. Hall, CSIR-NGRI

10:00 - 10:05 Lighting of Lamp

10:05 - 10:10 Welcome Address

Dr. Prakash Kumar, Director, CSIR-NGRI

10:10 - 10:20 Address by Guest of Honour

Prof. H.K. Gupta, President, Geological Society of India

10:20 - 10:30 Address by Guest of Honour

Prof. S.K. Mehta, Vice Chancellor, University of Ladakh

10:30 - 10:50 Keynote Address by Chief Guest

Dr. V.K. Saraswat, Hon'ble Member, NITI Aayog

10:50 - 10:55 Release of Abstract Volume

10:55 - 11:10 Introductory Talk: Geophysical Methods for Geothermal Energy Exploration with Special Reference to Thermal Studies

Dr. Labani Ray, Sr. Principal Scientist, CSIR-NGRI

11:10 - 11:15 Vote of Thanks

11:15 National Anthem

11:15 - 11:40 Poster Session & Tea Break

- Keynote Talk: Geothermal Manifestations & World Scenario with Special Reference to Geothermal fields in India
Dr. P. B. Sarolkar, GSI (Rtd.)
- Importance of Magnetotelluric Studies in Geothermal Resource Exploration
Dr. Prasanta K. Patro, CSIR-NGRI
- Enhanced Geothermal Systems: Geothermal Energy from Deep Down Under
Dr. Sudipta Tapan Sinha, Reliance Industries Limited (RIL)

13:00 - 14:00 Lunch

Venue: E-classroom, Ground Floor, Main Building, CSIR-NGRI

14:00 - 15:30 • Geochemistry of Water and Methods for Fluid Sampling

Sri. S. N. Girhe, GSI (Rtd.)

• Hydrogeochemistry of Hot Springs in Geothermal Potential Zones in India

Dr. K. Rama Mohan & Dr. M. Satyanarayanan, CSIR-NGRI

• Geothermal Drilling: Techniques & Challenges with Solutions

Dr. J. N. Chaudhari, GSI

15:30 - 16:00 Tea Break

16:00 - 17:30 • Operational Activities of HP-HT Wells and Data Generation

Sri. T. R. Nanda, ONGC

• Geothermal Renewable Energy Utilization to Generate Clean Electricity

Dr. Bhupesh Sharma, SIIR & **Sri. Himanshu Gupta**, RIPL

• Environmental Aspects of Geothermal Power Development

Dr. P. B. Sarolkar, GSI (Rtd.)



One Week One Lab Program

PROGRAM

Day 5-I

8th September, 2023

GEOHERMAL WORKSHOP DAY-2

1
week
One Lab

Venue: E-classroom, Ground Floor, Main Building, CSIR-NGRI

09:00 - 11:00

- **Exploitation of Geothermal Energy – Indian Endeavor, Recent Findings and Global Advances**
Shri. Uday Shankar, Reliance Industries Limited (RIL)
- **Geothermal Exploration at Puga-Chumathang, Ladakh**
Sri. Rajendra Kumar Aggarwal, GSI (Rtd.)
- **Outcome of Some of the Recent Studies in the Puga Geothermal System, Ladakh, India**
Dr. A. Absar, ONGC Energy Center
- **Resistivity Structure of the Puga Hot Spring Area in Ladakh: Implications for Geothermal Prospects**
Dr. K. K. Abdul Azeez, CSIR-NGRI

11:00 - 11:30

Tea Break

11:30 - 13:00

- **Overview of Geothermal Energy Resources of India - A Case Study from Manuguru Geothermal Field, Telangana**
Sri. Vishal Sakhare, GSI
- **Challenges in Development of Tatapani Geothermal Project in Chhattisgarh**
Sri. Sanjeev Jain, CREDA
- **Magnetotelluric Survey for Geothermal Exploration of Bakreswar Geothermal Province, Eastern India**
Prof. Rajib K. Sinharay, MIT World Peace University (MITWPU)

13:00 - 14:00

Lunch

14:00 - 15:00

- **Geothermal Development of Gujarat**
Prof. Anirbid Sircar, Pandit Deendayal Energy University (PDEU)
- **Geothermal Energy Exploration and Exploitation: Key Knowledge Gaps and the Way Forward**
Dr. Sukanta Roy, Borehole Geophysics Research Laboratory-MoES

15:00 - 16:00

Laboratory Visit at CSIR-NGRI
Thermal, Geochemistry & Magnetotellurics

16:00 - 16:30

Tea Break

16:00 - 17:30

Panel Discussion and Vote of Thanks
NITI Aayog/MNRE/CSIR/CSIR-NGRI/GSI/ONGC/BGRL-MoES/
AMD/PDEU/CREDA/RIL/MITWPU/Univ. of Ladakh/RIPL/SIIR

One Week One Lab Program

PROGRAM

Day 5-II

8th September, 2023

1
week
One Lab

PUBLIC/STUDENT CONNECT

09:30 - 15:00 Exhibition of Different R&D Activities
CSIR-NGRI Campus

10:30 & 11:30 Nukkad Naatak (Street Play)
In front of CSIR-NGRI Main Building

12:00 - 13:00 Quiz for students/public
CSIR-NGRI Open Air Theatre



CSIR-NGRI Campus



One Week One Lab Program

PROGRAM

Day 6

9th September, 2023

1
week
One Lab

VALEDICTORY PROGRAMME

10:00 - 10:05 Welcome

10:05 - 10:15 Appraisal on Geoscience Conclave

Dr. Vineet Gahalaut, Chief Scientist, CSIR-NGRI

10:15 - 10:25 Appraisal on Stake Holder Connect

Dr. EVSSK Babu, Chief Scientist, CSIR-NGRI

10:25 - 10:35 Appraisal on Society Connect

Dr. Subhash Chandra, Sr. Pr. Scientist, CSIR-NGRI

10:35 - 10:45 Appraisal on Public/Student Connect

Dr. Sandeep Gupta, Sr. Pr. Scientist, CSIR-NGRI

10:45 - 10:55 Appraisal on Geothermal Workshop

Dr. Labani Ray, Sr. Pr. Scientist, CSIR-NGRI

10:55 - 11:15 Address by Dignataries

Dr. D. Srinivasa Reddy, Director, CSIR-IICT

Dr. Vinay K. Nandicoori, Director, CSIR-CCMB

11:15 Vote of Thanks

Dr. N. Purnachandra Rao, Chief Scientist, CSIR-NGRI

11:25 National Anthem



S.B. Hall, CSIR NGRI Campus



1
week



One Lab

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For more details
about CSIR-NGRI
OWOL Program

