

St. Joseph's Degree & PG College Autonomous – Affiliated to Osmania University Accredited by NAAC with 'A' Grade Basheerbagh -King Koti Road, Hyderabad – 29

Department of Physics & Electronics

Activity Report

Date: 11th October 2020

Venue: Online

As a part of Departmental Activity, the **Department of Physics & Electronics** invited students of B.Sc (MPCs &MECs) of I/II/III Years to the Online Webinar conducted by the **Council of Scientific and Industrial Research-National Geophysical Research Institute** (**CSIR-NGRI**) which organized a **Virtual Open Day** at NGRI on 11th October 2020 from 3.00 –5.00 pm.

Students joined the online webinar through the link "https://www.ngri.org.in/DJYC2021".

About CSIR-NGRI Institute:



The National Geophysical Research Institute (NGRI) is a <u>Geo-scientific</u> research organization established in 1961 under the <u>Council of Scientific and Industrial Research</u> (CSIR), India's largest Research and Development organization. It is supported by more than 200 scientists and other technical staff whose research activities are published in several journals of national and international interest.

Research areas covered by this institute include <u>hydrocarbon</u> and <u>coal</u> exploration, <u>mineral</u> exploration, deep seismic sounding studies, exploration and management of <u>groundwater</u> resources, <u>earthquake</u> hazard assessment, structure of earth's interior and its evolution (theoretical studies), <u>geophysical</u> instrument development and <u>geothermal</u> exploration.

On the occasion of Diamond Jubilee Celebrations of CSIR-NGRI, as a part of inaugural function the institute had organized a Virtual Open Day session between 3:00-5:00pm.

Brief Details of the Webinar Program:

3.00 - 3.05	Welcome Address		Dr. V. M. Tiwari		
			Director, CSIR-NGRI		
3.05 - 3.10	Short film on CSIR-NGRI		To be played		
Open Day Lectures (Popular Talks)					
Moderator: Dr. Vineet K. Gahalaut Chief Scientist, CSIR-NGRI					
3.10 - 3.30	Earthquakes	Dr. D. Srinagesh, Chief Scientist, CSIR-NGRI			
3.30 - 3.50	Tsunamis	Dr. Kirti Srivastava Chief Scientist, CSIR-NGRI			
3.50 -4.10	Ground Water	Dr. Subhash Chandra Senior Principal Scientist, CSIR-NGRI			
4.10 – 5.00 Q & A session between Students and Scientists					
Panel: Dr. N. Purnachandra Rao Dr. Ajay Manglik Dr. B. Srinivas					
Dr. M. Ram Mohan Dr. M. J. Nandan Dr. Devender					
Kumar Dr. N. Satyavani					

Program Details:

Date of the Event: 11th October 2020

Time of Program commencement: 3:00 pm

Closing Time: 5:00 pm

Mode of Program: Online Webinar through Youtube & Face book

The program started with a warm Welcome Address followed by a short video about CSIR-NGRI showing their Research Centers & Observatories, the technology used in their research, Appliances, Gadgets & other instruments and also Simulations.

We had a formal Welcome Speech from some of the Seniors Scientists. Then we had lectures

Lecture on "Earthquakes" by Chief-Scientist Dr. Srinagesh:

In this lecture, sir has given a great explanation about Earthquakes and covered topics like Plate Tectonics, Interacting Plates, 3F's of Earthquakes, Elastic waves, Seismographs, etc. It was very informative for the students with the presentation. Students got a clear picture about the Earthquakes.

Lecture on "Tsunamis" by Chief-Scientist Dr. Kirti Srivastava:

In this lecture, madam has given a great explanation about Tsunamis, its causes, Physical characteristics, etc.Students got a clear idea about the Tsunamis.

Lecture on "Ground Water" by Chief-Scientist Dr. Subhash Chandra:

In this lecture, sir had explained about Groundwater, importance of water, exploration of Groundwater, water dowsing, technology for water solutions, etc.

After this, we had a doubt clarification session where the panel scientists answered to the queries of students & audience.

At the end, the program closed with a vote thanks.

Overall, students found it very useful & informative and they enjoyed it. Unfortunately this time, due to the pandemic situation, they couldn't have a practical experience & students couldn't have a proper interaction with the scientists' staff of CSIR-NGRI.

Once again, Students were thankful for the college for such a informative session. And they also thanked their faculty organizers & Department.

Conclusion:

As it is said "a day spent with learning and knowing something is productive and fruitful". Through this virtual webinar we have gained a scientific knowledge regarding natural disaster like earthquake and tsunami's, measures to be taken in order to control them. Some useful knowledge about ground waters its importance and Supplies to various sectors like agriculture, industries etc. Overall it is a fruitful and informative webinar conducted by CSIR-NGRI.

Organizers: 1.M.SRAVAN KUMAR	2.MLN RAO	3.R.ASHOK KUMAR
9963900347	9393005522	9700927230

.







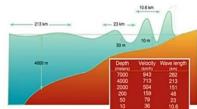


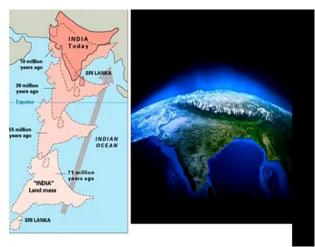
PHYSICAL CHARACTERISTICS OF TSUNAMI

>Wavelength: Tsunamis have wavelengths from 10km-500 km.

>Wave period: Tsunamis have periods of 2 min-30 min.

 \succ Wave velocity: Tsunamis have velocities of 600km/hr-950 km/hr.



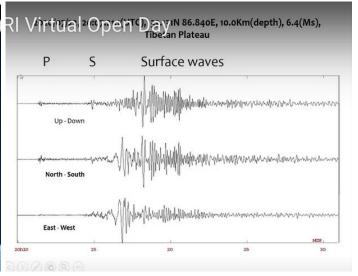






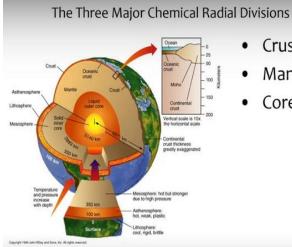












- - Mantle

Crust

Core







