



Department of Geology & Geophysics  
Indian Institute of Technology-Kharagpur



**PRITHVI**

.....EXPLORE BEYOND THE HORIZON

# INFORMATION BROCHURE PRITHVI 2017

Society of Exploration Geophysicists (SEG)

Society of Petroleum Geophysicists (SPG)

American Association of Petroleum Geologists (AAPG)

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## ABOUT US

### SOCIETY OF PETROLEUM GEOPHYSICISTS

The Society of Petroleum Geophysicists, India was born on August 15, 1992, when about 30 Geophysicists met and resolved to form an association, for an improved interaction and technical exchange. The Society is a non profit organization founded with a motive to exchange technical ideas and practical experience among the geophysical community.

### AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

Founded in 1917, the American Association of Petroleum Geologists is currently the world's largest professional geological society. As the world's premier professional association of explorationists, AAPG is about the science of petroleum geology and the people who make it their profession.

### IIT KHARAGPUR

Being the first IIT to be established, Indian Institute of Technology Kharagpur, has emerged as one of the most reputed technological institution in the country. Recognized as an Institute of National importance by government of India in 1956, IIT Kharagpur spreads over 2100 acres of campus hosting most number of departments and the highest student enrolment as compared to any other government institute in India. With state of art research facilities made available to the students in a diverse range of fields, this institute has carved its path to excellence.

### SOCIETY OF EXPLORATION GEOPHYSICISTS

The Society of Exploration Geophysicists is a not-for-profit organization that promotes the science of applied geophysics and the education of geophysicists. SEG, founded in 1930, fosters the expert and ethical practice of geophysics in the exploration and development of natural resources, in characterizing the near surface, and in mitigating earth hazards.

## INTRODUCTION

Prithvi is the largest symposium of Earth Science and unique of its kind in India with participation of 600+ participants from over 60 colleges all over the country. It is an endeavour to motivate the youth in the field of Geo-Sciences by providing a platform to the youth to showcase their talents and skills in fierce competitions, display cutting edge technologies and research from all over the globe.

PRITHVI is an initiative of the IIT Kharagpur Student Chapters of the Society of Exploration Geophysicists (SEG) in association with the American Association of Petroleum Geologists (AAPG) and the Society of Petroleum Geophysicists (SPG), along with the students of the Department of Geology and Geophysics of the Institute.

Born in 2009 with the motto of promoting technology, scientific thinking and innovation. Prithvi has surpassed 8 golden years of creating an unmatched aura of a science and technology spectacle year after year. This year's Prithvi is an attempt to ponder this perspective. We take immense pleasure in presenting the 8th edition of Prithvi with theme,

**“Contemporary Geoscience and Future Implications”.**

To be held from **17th-19th March, 2017** with all new challenging Competitions, Workshops, Exhibitions and Guest Lectures focusing on Exploration and various Earth Science fronts.

## FROM HOD'S DESK



**PROF. ANINDYA SARKAR**  
HEAD - DEPARTMENT OF GEOLOGY AND GEOPHYSICS  
IIT KHARAGPUR

Prithvi 2017 is the 9th edition symposium of Department of Geology & Geophysics, IIT Kharagpur. It was initiated by the student's body of SEG, SPG and AAPG under the guidance of its parent bodies and the revered faculty members of our department. Our vision was to bring together the industry and the academic acumen on a platform to inspire students of Earth Science. I am proud to share with you the success story of our efforts so far. We have been successful in marching forward and our last edition was an evidence of it. We received a tremendous response from colleges all over India and participants were highly satisfied with the conference.

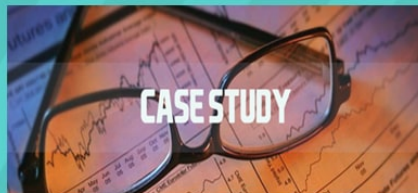
For a country to be sustainable it should promote science and technologies and the resources must be judiciously utilized. With our growing energy demands and shrinking proven resources, it is time now to build a new mindset and expertise to help industry growth. With this foresight we aim to congregate this time with eminent scientist, smart researchers and industry leaders to share ideas, associate and endorse scientific growth.

I, on behalf of my department take the opportunity to invite you at Prithvi 2017 at IIT Kharagpur and hope that you will make the best out of this occasion and succeed in your future endeavor. Special thanks to our sponsors who bestowed their trust on us and choose to associate with the biggest festival of Earth Science in India.

Looking forward to a great experience.



## CASE STUDY



Case Study will be based on current live problems from the industry and the solutions will be judged on basis of their innovativeness, practicality and the in-depth investigation done on the particular topic. They will provide a systematic way looking at events, collecting data, analyzing information, and reporting the results. As a result the company experts, professors and the student community will gain a sharpened understanding of why the instance happened as it did, and what might become important to look at more extensively in future research. The Sponsor can choose to pay the sponsorship amount and/or provide Internships to the winners.

## GEO SPECTRUM



GEO-Spectrum is a Quiz competition which will test the participant's quizzing aptitude on a broad spectrum of subjects from Earth Sciences. Though the major emphasis will be on exploration, it will touch many other facets of Geo-Sciences with a very interesting format. It will be held in two phases. The first phase being the written round and the next phase comprising of oral questions including audio and visual rounds. Initial short listing would be done in the first rounds and the top scorers would advance to the next stage. This is going to check their command over the wide range of subjects.

## MAJOR EVENTS

### BRAIN STORM



When the whole world would be sleeping the students at the PRITHVI arena would be battling to solve questions in the overnight Problem solving Questions designed to test the aptitude, intelligence and the knowledge of the students. Groups of 2-4 students will exercise their brains to solve questions which will be from various fields such as Physical Geology, Sequence Stratigraphy, Seismic Interpretation to Structural Geology. The students will be given a night for coming up with their solutions and would be judged on the number of questions solved by each group. This event requires analytical aptitude with good accuracy.

### EXPLIQUE



Prithvi presents you a platform to present your innovative ideas and research work. Mesmerize the audience with the presentation of your completely new idea or an improvement of any existing research work on any topic related to Unconventional hydrocarbons sources. Grab this opportunity to spark your idea into the minds of the experts.

## GEO-MODELLING



If you are highly creative so there is no point in locking your fantasy inside your mind. Geomodelling provides a platform for the depiction of the various surface/subsurface geological processes taking place in Earth system with dynamic models. Free yourself : use your incredible ideas in the most professional way and share your 3D models. Participating team need to present a working model. Model can depict a geological/ geophysical/ petroleum setting or phenomenon. Participants can also present a 3D design of model on any software.

## TECHNICAL SESSIONS

### Technical Sessions

Prithvi brings to you an opportunity to interact with personalities from across the world. We invite you to witness sheer awesomeness - the pioneer of evolution and revolution are here, at IIT Kharagpur; a group of prodigies holding their own in Geo-fields. The feather in the crown of Prithvi, Lecture series has been and this time introduces Technical Sessions. It includes a presentation from students just after every lecture series. Presentation can include powerpoints, posters etc. related to that topic.

## MAJOR EVENTS

### MINEROLOGIQUE



This fresh event is aimed at testing the students' mineral identification skills. It will be a challenging experience for them to maneuver the minerals and rock samples through the various properties: observing the streak, hardness, luster, cleavages and other physical properties as well as to see the minerals in depth - as deep as with microscopes on thin sections. A combination of these two is sure to complete a proper sweep of the student's mineral identification skills in all authenticity. This is a truly mind churning event.

### POSTER PRESENTATION

Poster-Presentation



Making Posters is the best way to convey information about a topic. It requires submission of poster on recently published papers (2008-2009) or on-going research / projects in the field of Geo-Exploration. Typically posters include both textual and graphic elements, although a poster may be either wholly graphical or wholly textual. Posters are designed to be both eye-catching and convey information. The precise topics will be displayed on the website. Last date of submission of abstract will be 2 weeks before the event. Authors of selected abstract will be informed within a week. The judges panel will comprise of eminent people from the academia and industry.

### INDIANA GEONES



PRITHVI presents a treasure hunt for our budding young Geoscientists who fashion themselves as modern Indiana Jones. The task involves using geophysical prospecting methods to locate objects whose expected geophysical properties are known. The instruments and data processing equipments will be provided. The design of the survey / experiment and its successful execution will be the challenge. It will be exactly what is done in the field for exploration.



## ONLINE EVENTS

### ● GEO CLICK



Every geoscience student is passionate about capturing the beauty of the Mother Earth. We all love to present our creative side by clicking some beautiful scenic pictures. Prithvi 17 will help you presenting the pictures. Through online event in social media we will display your pictures from excursion, field trip that has any significant geological and natural radiance. Based on audience response winning photographer will be rewarded cash prize and picture will be displayed in Prithvi 17.

### ● ONLINE QUIZ



Is quizzing your forte? If yes, Prithvi brings you a platform to check on your Earth science knowledge. Also it is handy to those aspiring for competitive examinations. So before appearing for the next competitive exam or class test, measure your aptitude with our Online Quiz designed exclusively for you

## WORKSHOPS

Prithvi'17 brings to you a wonderful learning experience in form of workshops. There will be informative lecture/discussion focused on teaching specialized skills and new technologies and softwares that serve as backbone in the field of Hydrocarbon/Mineral exploration, followed by a problem statement to realize the actual problem solving aptitude.

Following are some of the Workshops organised during Prithvi'16 :

### OVERVIEW OF NGL SCENARIO ON LAND EXPLORATION ADDRESSING ENVIRONMENT CONCERN by ONGC

Sh. Debashis Chakraborty  
Deputy General Manager (Geology), ONGC, Kolkata

Sh. Subhajit Brahma  
Deputy General Manager (Geology)



### AN INTEGRAL APPROACH TO SOLVE THE PUZZLES OF GEOSCIENCE by GEOVALE



It is always inspiring to listen the leader & learn from them. Prithvi guest lecture series is best among any earth science institute in India. We have had the privilege to host some of the best sessions in the past. Here is a glimpse of our previous year Guest Lectures, earlier guests and their topics.



### MR. UDIT GURU

Ex-Advisor, Petrophysicist  
at Schlumberger

Reservoir Evaluation for shale **Schlumberger**



### MR. MD. EJAZ UDDIN

Former Director  
Bangladesh Water  
Development

Monitoring of  
Groundwater and Surface  
Water in the Bengal Basin:  
an Overview



## GUEST LECTURES



### MR. DRONAMRAJU SHARMA

Director, AKD Professional  
Solutions  
Houston

Role of Geoscientist in  
Developing Oil and Gas  
Fields



### DR. R.V. KRISHNAMURTHY

Prof. Stable Isotope  
Geochemistry  
Western Michigan Univer-  
sity

Isotopic "Sore thumbs":  
Implications to geo and  
cosmochemical processes.



### MR. ASIM SAMANTA

Ret. Group General Manager  
ONGC

Recent Advances in Well  
logging Techniques





## KING'S CROWN TITLE



The fight for the king's crown begins this season. Prithvi'17 brings you a battleground where you will have to battle it out not just for your ownself but for the prestige of your college. Each event would take you a step closer to the ultimate prize, the Geological King's crown which would be awarded to the college with maximum number of event winners. So get ready to give in all you have got, put everything at stake for the prized honour.

College winning "King's Crown" will lift the grand Trophy of Prithvi'17 and all participants of the winning college will get various goodies/prizes. College's name will be updated on our website with its winning participants.

So participate not as an individual but college as a whole

## CONTACTS

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## GLIMPSES OF PRITHVI 16



## GLIMPSES OF PRITHVI 15

