



# TWO DAY LECTURE SERIES ON RECENT ADVANCEMENTS IN DRILLING AND HYDROFRACKING TECHNOLOGY

**26th & 27th  
MARCH 2022**

ORGANIZED BY  
DEYSARKAR CENTRE OF  
EXCELLENCE IN PETROLEUM  
ENGINEERING

INDIAN INSTITUTE OF TECHNOLOGY  
KHARAGPUR  
WEST BENGAL-721302



<http://www.iitkgp.ac.in/departments/DE>





# ABOUT THE **WORKSHOP**

The workshop is going to unfold the recent advances and innovations, concepts and ideas in the field of drilling and hydrofracking technology. The chief faculty would demonstrate and discuss strategic planning based on lab/field evaluation and execution through best industry practices for drilling and hydrofracking technology.

## **AGENDA**

The chief faculty, Max Duncan would elaborate on desired properties of a “perfect fluid” for upstream drilling and completion operations. The faculty would discuss the types of commercially available drilling/completion fluids including high performance water-based and oil-based fluids for challenging HTHP oilfield environments. The faculty would also present the strategy for fluid selection for drilling of the extended horizontal wells as well as under-balanced drilling operations.

On the topic of hydrofracking technology, the other chief faculty, Kyle Zemlak, would provide comprehensive understanding of the unconventional shale plays – S2P (Spud to Put-On-Production) – that includes life-cycle of a well and also a broad economic outlook of the game-changing US shale plays. The faculty would also elaborate on KPI based selection strategy of the fracturing fluids, proppants and field equipment for a successful hydrofracking operation.

### **WHO CAN ATTEND ?**

- **Industry Experts**
- **Research Scientists**
- **UG/PG/Research Scholars**

### **DURATION**

- **Three Sessions**
- **10 Hrs Total**



## CHIEF FACULTIES



**Mr. Kyle Zemlak**  
COO  
PfP Industries, USA

Mr. Kyle Zemlak graduate of Southern Alberta Institute of Technology (Calgary, Canada). He started his career in the oil industry by joining Dowell Schlumberger and held positions of all levels throughout Western, Arctic and Eastern Canada. Kyle also had experience on the E&P side of the business and performed Completions and Drilling roles from onsite supervision, engineering design and project management for Amoco, BP, Chevron, Nexen and Hunt Oil in Canada, the United States and Yemen. Kyle using all his past experiences with the amazing team at PfP Industries to bring leading technology, products and services to the oil and gas industry throughout the world.



**Mr. Max Duncan**  
President  
Integrity Industries Inc., USA

Mr. Max Duncan graduate of University of Texas at Austin and graduate of Chromalloy. Max Duncan founded Integrity Industries in 1986 and served as president from 1986 until 2009 and acted as general manager from 2010 - 2017. During his 36-year term at Integrity, Max and his team has developed the current product line and grown the company from an idea into a high point of \$ 150 million in sales. The company currently manufactures products for all types of drilling fluid systems as well as chemicals for fracturing and well completion.

## About Dr. Asoke Deysarkar



Dr. Deysarkar generously founded one-of-its-kind trans-disciplinary petroleum engineering program at IIT Kharagpur. In recognition to his contribution towards country's sustainable and technological development via innovation and leadership, Dr. Deysarkar was felicitated with Life Fellow Award by IIT Kharagpur in 2021. We are grateful to Dr. Deysarkar for facilitating this workshop.



# DEYSARKAR CENTRE OF EXCELLENCE IN PETROLEUM ENGINEERING

The centre's VISION is to groom future petroleum professionals and policy makers for the country; assist achieve national goal of technology – indigenization and import – reduction for oil and gas; and contribute to global research on conventional and unconventional hydrocarbon resources to transform oil and gas industry into a sustainable and cleaner energy.

## ABOUT INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Indian Institute of Technology Kharagpur is a public technical and research university established by the government of India in 1951. It is the first of the IITs to be established and is recognised as an Institute of National Importance. In 2019 it was awarded the status of Institute of Eminence by the government of India.

### Patron

**Prof. V. K. Tewari**  
Director, IIT Kharagpur

### Convenor:

**Dr. Sandeep D. Kulkarni**  
Associate Professor

### Co-convenor:

**Dr. Aditya Vyas**  
Assistant Professor

### Head of the Centre:

**Prof. William K. Mohanty**  
Professor

### Student Co-ordinators:

**Mr. K. Navneeth Kumar**  
+91-9603946214

**Mr. Subhadip Maiti**  
+91-7001192912

**Mr. Anupal Jyoti Dutta**  
+91 - 7002624413

**Mr. M. Shahnawaz Alam**  
+91 - 9792192959

**Mr. B. Dileep Kumar**  
+91-9490386317

**Mr. Atul Kumar Singh**  
+91 - 8768886667

**REGISTER VIA LINK - <https://erp.iitkgp.ac.in/CEP/courses.htm>**

### CONTACT

Deysarkar Centre of Excellence in Petroleum Engineering  
Indian Institute of Technology Kharagpur, West Bengal, INDIA – 721302  
email - dnfgroup18@gmail.com

**Last Date**  
**25-03-22**