

Summer School

Registration

open until July 30th, 2017
(participants: max. 40)

Registration fee:

- Student: free
- Non-students registration fee:
USD 500 (certificate and
lunch)

How to apply:

visit

[https://sites.google.com/view/
itbsschoolrockphys/](https://sites.google.com/view/itbsschoolrockphys/)

Notes:

- Accommodation (lodging) for
foreign student participants
during the program will be
fully supported by the
committee.
- Credit transfer of the
program to credit unit is
possible.



Summer School



Laboratory of Rock Physics

Gedung Prodi Fisika
Jalan Ganesha 10

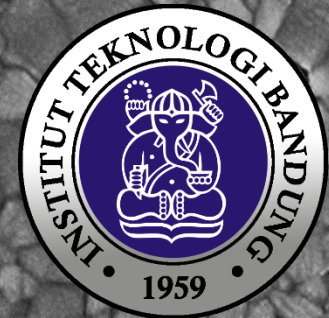
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[https://sites.google.com/view/itbssch
oolrockphys/](https://sites.google.com/view/itbsschoolrockphys/)

Summer School

Computational Modeling in Rock Physics



INSTITUT TEKNOLOGI
BANDUNG
INDONESIA

7TH – 18TH August, 2017

Introduction

Modeling in geosciences is necessary in a wide range of fields of physics, geophysics, petroleum, geothermal, oceanography, hydrology, and can even be utilized and applied in other fields. Through the summer school program, students are expected to be able to obtain a comprehensive knowledge and brief experience in the topic of inversion modeling, digital rock physics, and multi-phase fluid transport. The inversion modeling includes forward and inverse modeling. Topics of rock physics include seismic rock physics and digital rock physics. The multi-phase fluid transport topics will discuss the discrete approach of modeling multi-phase fluid flow in porous medium. The topics are very useful for the students both for research and for industry-related works. Inversion, rock physics and fluid transport is an intensive topic studied by researchers and practitioners, given that the material is still open to be developed as a research topic or application in the industry.

Lecturers

- **Dr. Zubair Kalam** (*Discipline Expert in ADCO Technical Center (RM & EOR) and Founder member of ADCO Center of Excellence.*): *digital rock physics*
- **Dr. Ahmad Riza Ghazali** (Head of R&D Exploration Technology, Kuala Lumpur, Malaysia): wave form inversion, Seismic imaging
- **Prof. Umar Fauzi**: rock physics
- Prof. Doddy Sutarno: geo-electromagnetic
- Dr. Wahyu Srigutomo,: inverse modelling
- Dr. Fourier Dzar Eljabbar Latief: rock image processing
- Dr. Muhammad Rizqie Arbie: fluid flow modelling
- Antonia Gibrata: core logscale and porescale – reservoir modeling application
- Ulin Nuha Abdul Qohar, Msi: fluid flow modeling
- Luluan A. Lubis: rock physics for hydrocarbon prediction
- Additional Lecturers (TBA)

Venue

LABORATORY OF ROCK PHYSICS, Department of Physics, Faculty of Mathematics and Natural Sciences, Institut Teknologi Bandung,
Jalan Ganesha 10, Bandung 40132
Indonesia

Date

7-18 August 2017

Topics

Computational Modeling in Rock Physics

- Introduction
- Inversion
- Seismic rock physics
- Introduction to digital rock physics: data acquisition, reconstruction and data processing, characterization
- Fluid flow modelling and transport properties: multiphase flow using LBM
- Laboratory activities