



Overpressure in Sedimentary Basins Workshop & Fieldtrip:
Mechanism, Prediction, and Estimation, Application to
Geohazard and Petroleum Systems Analysis, and some Case
Studies from Indonesia's Sedimentary Basins

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Bandung, West Java

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Investment Fee : IDR 26.000.000,- / participant

The course fee includes meals (2x coffee break and lunch), training kits, training materials, group photograph, certificate. In order to allow sufficient time for arranging travel and processing document, participants are recommended to make an early enrollment.

About The Course

Overpressure analysis may be a routine job for everyone working in the oil industry. The analysis in the industry may mainly be dedicated to ensure that the geological objective can be achieved safely by drilling. Overpressure is a geological phenomenon, and like other geological phenomena, if we ignore geology in analysing overpressure, the result will most likely be wrong. Therefore, this course will discuss the very basic of the geology of overpressure, so that the overpressure analysis could be performed as accurately as possible. The understanding of overpressure concept could also aid exploration program such as the exploration of 'unconventional' hydrodynamic trap and analysing sealing capacity of a trap. The course will also deal with this subject.

The course will comprise the introduction to subsurface pressure, data source to analyse subsurface pressure, overpressure generating mechanisms, overpressure prediction and estimation, practical application of overpressure, and introduction to the application of overpressure to petroleum play analysis. Overpressure cases in some Indonesia's sedimentary basins will also be discussed at the end of the course.

The course will be in an interactive format, i.e. the participants will actively be involved by doing lots of exercises.

You Will Learn

- **Basic concept of subsurface pressure**
 - o Normal hydrostatic pressure reconstruction
 - o Minimum horizontal stress/fracture pressure reconstruction
 - o Data source for subsurface pressure analysis
 - o Lihtostatic stress/overburden gradient
 - o Effective stress concept (Terzaghi's equation)
- **Overpressure generating mechanism**
 - o Disequilibrium compaction overpressuring
 - o Other generating mechanisms (e.g. buoyancy, lateral and vertical overpressure transfer, hydraulic head)
 - o Introduction to unloading overpressuring
- **Overpressure estimation methods**
 - o Equivalent depth method
 - o Bowers' method
 - o Eaton's method
- **Practical overpressure application (well design)**
 - o Mudweight program
 - o Casing program
- **The application of overpressure to hydrocarbon play**
 - o Unconventional' hydrodynamic trap
 - o Modified' Gussows' principle
 - o Overpressure vs sealing capacity of a trap
- **Overpressure in Indonesia's sedimentary basins**
 - o Overpressure in North Sumatra Basin
 - o Overpressure in East Java Basin
 - o Overpressure in Central Sumatra Basin
 - o Overpressure in South Sumatra Basin
 - o Overpressure in Lower Kutai Basin

Who Should Attend

All personnel who are involved in Drilling Operations (including Operations Geologists, Drilling Supervisors, and Drilling Engineers); geophysicists, exploration manager, geoscientists, petroleum engineers, well engineers, production technologists, reservoir engineer and other personnel who work in oil and gas industry.

About Instructor

Agus M. Ramdhan, Ph.D.

Is a lecturer at the Department of Geology, Institut Teknologi Bandung (ITB). He received a scholarship from Total E&P Indonesia (TEPI) to pursue his PhD study at Durham University, UK. Durham is well known as one of the biggest overpressure research centre in the world. He is an active member of IAGI (Indonesian Association of Geologist) and EAGE (European Association of Geoscientists and Engineers). He maintains his overpressure research by actively publishing his research in scientific journals (e.g. Petroleum Geoscience and AAPG Bulletin) as well as by presenting it in scientific meeting (e.g. AAPG workshop, EAGE workshop, IPA, and IAGI). Currently, he is an investigator in a multi-sponsor advanced overpressure research at Durham, and also one of main investigators at a multi-sponsor overpressure research at ITB (www.inov-id.com). He got Best Paper Geology and Best Paper Overall on 38th IPA Convention and Exhibition Jakarta.

Cancellation, Substitution & Non Attendance Policy

Tuition fees are transferable but not refundable. Notification is required to substitute another participant, no later 5 working days prior to the program, should the nominated person be unable to attend. Late cancellation sometimes causes event to be abandoned. Non attendance participant will be full charged as all preparations will have been done.

Information & Registration

Biro Kursus IAGI

Phone : 022 2517886 (Bandung Office)
Mobile Phone : 08156200197 (Hari Utomo)
Email : birokursus.iagi2@gmail.com
Website : www.iagi.or.id/kursus/



Biro Kursus



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Biro Kursus



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