

16:00 – 17:00 PM

LECTURE

FORMATION EVALUATION CHALLENGES IN UNCONVENTIONAL TIGHT HYDROCARBON RESERVOIRS

by Mauro Gonfalini

➤ ABSTRACT

In an era of declining production and increasing demand, producing hydrocarbon from unconventional sources is the next step forward in the fossil fuel recovery challenge. Unconventional hydrocarbon sources are tight oil, heavy oil and oil shales, tight sands, gas shales, coal bed methane and gas hydrates. While some of these unconventional sources of hydrocarbon are already being developed in some area of the world (i.e. heavy oil, coal bed methane, tight gas sands, etc.), oil and natural gas prices are presently at levels that make exploration and development of unconventional hydrocarbon sources economical.

Since these types of reservoirs are more difficult to find and exploit with respect to the conventional ones, existing technologies are often inadequate to reduce operational costs and/or increase recovery. Therefore the industry is asked to develop the necessary technologies and expertise to achieve such challenging goals. Among these, advanced drilling technologies, better stimulation methods and improved characterization methodologies are the key elements. In this context we must recognize the pivotal role of geosciences in general and Formation Evaluation in particular.

The lecture covers the key aspects of Formation Evaluation techniques that can be used in the characterization of Unconventional Tight Hydrocarbon Reservoirs and the need for further organizational and knowledge efforts in this area. Major improvements are deemed necessary in the area of data acquisition (i.e. improved surface and well logging technologies), interpretation and integration among all the different Reservoir Characterization, Production and Drilling disciplines. Pay off of these effort and investments will be of huge and of relevant importance for the future of our industry and for the mankind.

➤ BIOGRAPHY

Mauro Gonfalini has been the Senior Professional Formation Evaluation of Eni E&P since December 2003. In this position he was mainly responsible for keeping Eni E&P in a position of excellence with respect to Formation Evaluation technologies, monitoring and improving the petrophysical interpretation process applied by the company and enhancing the integration of the different disciplines in the process itself.

In the last few years, Mauro was the reference person for the development of the R&D Technology Plan of Eni E&P in the area of Petrophysics and Well Logging, a technical leader of R&D projects dedicated to the effective application of innovative well data acquisition and interpretation technologies, technical leader of several multidisciplinary studies covering a large variety of reservoir types. Mauro has also been deeply involved with the organization and delivery of educational programs in Petrophysical Interpretation of well logs, both in internal courses and with Academia. Mauro is author or co-author of more than 20 technical papers in the area of well log interpretation. As active member of the Society of Petrophysicist and Well Log Analysts (SPWLA) he received in 1999 a Technical Achievement Award and served the Society as Distinguished Speaker.

As an active member of SPE, Mauro served for several years in the Board of the Italian Section as Program Chairman, as Committee Member of several SPE worldwide events, Chairman of the SPE Well Logging Committee (ACTE 2000), Chairman of a Forum on Fractured Reservoirs (Europe Series, 2000) and an ATW on Management of Petrophysical Uncertainties (Europe Series, 2001).

17:00 – 18:00

ELECTIONS OF THE BOARD OF DIRECTORS 2005-2006

**All the members of the Italian Section are invited to take part to
the Elections of the Board of Directors for the year 2005-2006.**

20:00 – 22:30

SOCIAL DINNER

*Restaurant Villa Toscanini
via 25 Aprile 33 – Ripalta Guerina (CR)*

*The price of the dinner is 30.00€ per person.
A free bus will be available at Eni E&P Office Building, via Emilia 1, San Donato Milanese:
departure at 19:00, return at 23:30*

Booking is requested, both for the dinner and bus trip

*For booking and info please contact: Rosi Bellè 02.847451, rbelle@miswaco.com
Carlo D'Angelo 02.36.52.99.31 cdangelo@ecomед-intl.com*

*Instructions to reach the Restaurant and more information about it can be found on our site:
www.speitaly.org*

"ALVES BADINI" PAPER AWARD

*The Prize Ceremony for the two best papers
published on the Quarterly Bulletin
in the year 2004
will take place during the dinner*