



PLATINUM CORPORATE MEMBER



CORPORATE MEMBER



NEWSLETTER

Febbraio 2016

Indice

Attività per gli studenti
Eventi Scientifici

Agenda

15/2/2016: Deadline for EAGE2016 Workshops:
Call for Abstracts

15/3/2016: Dead line early registration
EAGE2016

30/5-2/06/2016: 78th EAGE Conference &
Exhibition 2016 – Vienna

1/4/2016: Deadline abstract submission – 86th
SEG international exposition -
Dallas

Attività per gli studenti

“Gustavo Sclocchi” Thesis Award 2015

Anche nel 2015 EAGE, la Sezione Italiana SPE ed Assomineraria (Associazione delle Industrie minerarie e petrolifere italiane) hanno premiato le migliori tesi di laurea e Ph.D. in ingegneria del petrolio e geoscienze svolte presso le università italiane e da studenti italiani all'estero. La cerimonia di premiazione si è tenuta a San Donato Milanese nel dicembre 2015. Edoardo Dellarole (*scholarship chairperson*, sezione italiana SPE) ha condotto la cerimonia insieme ad Alessandro Tiani (*chairperson*, sezione italiana SPE), Claudio D'Agosto (vice-presidente, sezione italiana EAGESEG) e Pietro Cavanna (Assomineraria).

I sei vincitori, (36 i partecipanti totali) hanno vinto 2400 Euro, mentre altri sei lavori sono stati selezionati per una menzione speciale unita ad una *membership* EAGE o SPE. I vincitori sono:

Theses Awards 2015 winners:

- *Chiara Aruffo* - Technische Universitat Darmstadt
“Geomechanical characterization of CO2CRC Otway Project site, Australia”
- *Federica Caresani* - Politecnico di Milano
“A Lumped Embedded Discrete Fracture Model for the numerical simulation of fractured reservoirs”
- *Diletta Colette Invernizzi* - Politecnico di Milano
“Using Real Options for the investment appraisal: the case of Energy Storage Systems in UK”

- *Pierpaolo Marchesini* - University of Miami
“Visualization and Quantification of Fluid Dynamics in Fractured Carbonates using 4D Ground Penetrating Radar”
- *Paolo Pace* - Università degli Studi di Chieti-Pescara
“Styles and tectonic significance of inversion structures within thrust belt-foreland systems: an Apennine-Adriatic perspective, central Italy”
- *Matteo Ravasi* - The University of Edinburgh
“Reciprocity-based imaging using multiply scattered waves”

Theses Awards 2015 special mentions:

- *Michele Azzarone* - Università degli Studi di Milano
“Quantitative facies analysis of a turbiditic succession (Ventimiglia Flysch Fm.) and its relation with a catastrophic mass wasting (Upper Eocene, Western Alps).”
- *Tommaso Ciccarone* - Politecnico di Bari
“Experimental study for the definition of a new method for the integrated characterization of gas shales”
- *Osman Gjepali* - Politecnico di Milano
“Developing an early-phase decision support tool for the client/owner in the engineering construction sector”
- *Fabrizio La Rosa* - Politecnico di Milano
“Removal of artifacts from the migration of multiple reflections in the subsurface offset common image gather domain”
- *Arianna Bonzanini* - Università degli Studi di Brescia
“A numerical code for slug capturing in pipes”
- *Marco Spagnuolo* - Imperial College London
“Low Salinity Waterflooding: from Single Well Chemical Tracer Test Interpretation to Sector Model Forecast Scenarios”

La prima edizione del Premio Sclocchi ha avuto luogo nel 1993; dal 2001 il premio é intitolato a Gustavo Sclocchi, manager Eni che fu tra i principali promotori di questa iniziativa.



Attività per gli studenti

Anche quest'anno, come in passato, la Sezione Italiana EAGESEG offre una registrazione gratuita e un rimborso spese forfettario pari a 300 euro a Studenti di Laurea Magistrale o di Dottorato in Geoscienze presso università Italiane per poter partecipare alla 78^a EAGE Conference & Exhibition che si terrà a Vienna tra il 30 Maggio e il 2 Giugno 2016. Gli studenti possono richiedere l'ingresso omaggio entro:

mercoledì 15 Aprile 2016

Inviando una mail alla Sezione Italiana (eageseg@inogs.it). Verrà data precedenza a studenti che sono già iscritti alla Sezione Italiana oppure all'EAGE. Ulteriore titolo preferenziale è l'essere co-autore o, meglio ancora, Primo Autore di un lavoro scientifico in programma al meeting EAGE di Vienna 2016.

Per ulteriori informazioni su questo evento scientifico, consultare il sito:

<http://www.eage.org/>



Attività per gli studenti

L'edizione 2016 del **Geophysics Boot Camp** è purtroppo stata annullata, EAGE intende organizzare la prossima edizione nella primavera 2017 a *Emlichheim*, Germania in collaborazione con l'operatore Wintershall.

L'obiettivo del *Geophysics Boot Camp* è dare a studenti e giovani professionisti esperienze pratiche "hands on", realizzando diverse attività geofisiche in ambito petrolifero.

Altre informazioni sul *Geophysics Boot Camp*, si trovano sul sito [EAGE](http://www.eage.org/).



Eventi Scientifici**SEG Europe Honorary Lecture 2016**

Questa primavera si terrà in Italia la lezione SEG di Michael A.C. Kemper, intitolata:

Infusing rock physics into seismic inversion

24 Maggio	Torino, Italy	Politecnico di Torino
25 Maggio	San Donato Milanese, Italy	eni
26 Maggio	Pisa, Italy	Università di Pisa
27 Maggio	Napoli, Italy	Università di Napoli

Il programma completo si può vedere [qui](#).

Abstract:

Mick Jagger, philosopher and singer of The Rolling Stones back in 1969, sang rather pessimistically “You can’t always get what you want.” These words should ring true to all geoscientists: What we really want are measures of rock properties (such as facies/rock types, porosity, saturation, etc.), but what we typically measure in the field are quantities like resistivity, density, seismic wiggles, etc., —signals that are “somehow” related (to a smaller or larger degree) to these desired rock properties.

Obtaining profiles of rock properties from measured well logs is called petrophysical evaluation. Geologists, when they want to obtain estimates of overpressures, talk about prediction. Geophysicists, trying to obtain 3D images of rock properties from processed 3D seismic data, have a perhaps better, more formal name for this process: inversion.

Seismic inversion is a difficult endeavor, for the simple reason that the earth filters out a lot of the useful signal as it travels from a source through the subsurface to the receivers. What we are left with is a band-limited signal with restricted information content. This can be readily seen when we compare a seismic trace against a corresponding impedance profile: The latter typically becomes larger as we go deeper (compaction hardens the earth), whereas the former keeps wiggling around zero. What a mismatch!

Even though the new broadband seismic acquisition technique increases the seismic information content (good!), the signal is still band-limited, and keeps wiggling around zero. Thus, the mismatch with the hardening impedance profile is still there.

In that same song, Jagger also sings of a more optimistic moment: “If you try sometimes, you might find ... you get what you need!” — a sentiment I wholeheartedly agree with! Seismic inversion may be difficult, and the information content of the seismic signal may be limited, but there are ever more sophisticated ways to perform seismic inversion, and that is what this lecture is all about.

The trick really is that somehow we need to add information to the seismic inversion process that is not in the seismic itself. For instance, low-frequency information (as the seismic is band-limited), or high-frequency information (for the same reason). Much of this lecture is about adding this extra information, because there are many ways to do this, though not all equally successful. We shall focus specifically on using rock-physics models to better derive the extra information, because these are nothing other than relationships between what we get and what we want!

Biography:

Michael Kemper is a geoscientist/petroleum engineer with 28 years experience in geophysics, petrophysics, and reservoir engineering. He spent the first 13 years with Shell International in The Hague, Nigeria, and London, during which time he made a number of contributions to the interface between petrophysics and geophysics.

In May 1999, Kemper became team leader of petrophysics/petroacoustics at Ikoda Ltd., working on a wide variety of projects. It is during this time that RokDoc, now one of Ikon Science's main products, was started. As one of the cofounders of Ikon Science, Kemper now serves as director of research and innovation. In this role, he is responsible for the development of new, innovative, and impactful algorithms and

workflows in the area of rock physics, seismic inversion, and numerical earth modeling in the Ikon Science software portfolio.

Per ulteriori informazioni riguardo all'evento scientifico associato, consultare il sito:

<http://www.seg.org>

