

## **EDUCATION DAYS** LONDON 2019

17-18 SEPTEMBER 2019 | LONDON, UK





# Welcome to London!

EAGE is pleased to invite you to visit London for our Edcuation Days London 2019





Dear Colleagues,

The European Association of Geoscientists and Engineers (EAGE) recognizes the necessity for high-quality training and education throughout the lifetime of the industry professional. Indeed, we see educational tools as a key deliverable to our membership, especially relevant in our rapidly changing industry, and develop these accordingly. To this end, I would like to introduce the EAGE Short Course Catalogue in which you will find an overview of more than 90 short courses from a range of experienced instructors from industry and academia. We have carefully selected these courses to be multidisciplinary, in keeping with our association's ethos, and to keep abreast of the latest trends in geoscience and engineering. Many of our courses are designed to be easily digested in bites of one to two days, sometimes longer depending on the topic, and are delivered by specialists who blend classroom theory and practical application. The EAGE organizes its courses in different formats worldwide:

- EAGE Education Days
- EAGE Education Tours
- Public short courses
- In-house courses

We also include abbreviated versions of our educational material as E-Lectures on YouTube. I strongly encourage you to participate in our short courses, which I am sure that you will find both high quality and professional in nature.

Finally, I should add that the EAGE is continually refreshing the catalogue to ensure it keeps pace with, and is relevant to, current industry developments. Should you have any suggestions or proposals for new courses please let me know.

I wish you an enjoyable and informative learning experience!

Colin MacBeth | Education Officer (EAGE Board)

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#### **Short Course Programme**

#### 17 SEPTEMBER 2019

**AVO in an Inversion World** Dr Anthony Fogg

#### 17-18 SEPTEMBER 2019

Seismic Depth Imaging and Anisotropic Velocity Model Building

Mr Etienne Robein

#### **Venue**

Hilton London Gatwick Airport,

South Terminal Gatwick Airport, Gatwick RH6 OLL, United Kingdom

#### **Accreditation**

In March 2013 EAGE became the first official Continuing Professional Development (CPD) Provider of the "European Geologist" title, which is a professional accreditation established by the European Federation of Geologists (EFG). In order to obtain and maintain this title, the holder must provide a record of high quality CPD activities, which include the short courses like the ones presented in this brochure. For an overview of the provided points for EAGE Short Courses and for more information about this accreditation system and corresponding EAGE learning activities please visit www.eage.org and www.LearningGeoscience.org.

#### **Sponsorship**

Education Days London 2019 offers excellent sponsorship opportunities to create high visibility. For more information, please refer to the EAGE website or contact us at education@eage.org.

#### **EAGE Economic Hardship Programme**

EAGE recognizes the current challenging status of the industry and, priding itself on the inclusive character of the Association, now has a special economic hardship assistance programme in place to reach out to its members.

#### **EAGE Short Course discount**

EAGE aims to assist its long-term members who are currently unemployed by providing contributions towards educational programmes. Under this element of the EAGE Economic Hardship Programme, members currently unemployed can attend public short courses at the Education Days London for a discounted course fee equal 75 euros for either one- or two-day course. The discounted registration fee is the same as in another supported programme – EAGE Education Tours, where everyone can benefit from a discounted fee.

For more information we would like to refer you to the event website at events.eage.org

#### **Registration Fees**

All fees include digital course material, lunch and coffee breaks.

#### **One-day Course**

Registered and paid	Until 21 July	22 July - 18 August	19 August - On-site
EAGE Member	€ 480	€ 585	€ 685
EAGE Platinum Member	€ 480	€ 480	€ 480
EAGE Green Member	€ 530	€ 635	€ 735
Non-member	€ 580	€ 685	€ 785
EAGE Student Member	€ 240	€ 290	€ 340
EAGE Student Green Member	€ 215	€ 265	€ 315
Student Non-member	€ 290	€ 340	€ 390

#### **Two-day Course**

Registered and paid	Until 21 July	22 July - 18 August	19 August - On-site
EAGE Member	€ 705	€ 760	€ 860
EAGE Platinum Member	€ 705	€ 705	€ 705
EAGE Green Member	€ 755	€810	€910
Non-member*	€ 805	€ 860	€ 960
EAGE Student Member	€ 355	€ 380	€ 430
EAGE Student Green Member	€ 380	€ 430	€ 480
Student Non-member*	€ 430	€ 480	€ 530

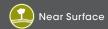


#### DISCIPLINES















#### **17 SEPTEMBER 2019**

#### **AVO in an Inversion World**

Dr Anthony Fogg (Arun Geoscience)



CPD Points: 5

#### **Course Description**

AVO (Amplitude Versus Offset) analysis has been a key technology for de-risking drill targets as it can potentially distinguish different fluids and litho-types. Over time the application of the AVO technique has evolved and merged with seismic inversion methods so that today the traditional AVO analysis has been superseded by the analysis of rock property volumes on the interpreter's work station. However, in order to derive these rock properties, we still rely on the fundamental principles of AVO. This course covers the basics of AVO theory and how it is used to create attributes or inversion volumes from seismic reflection data that reveal the rock and fluid characteristics of the subsurface. The course is not mathematical but does review some simple equations that help participants understand how AVO is applied to create quantitative measurements from surface seismic data and interpret those results in terms of rock physics.

#### **Participants' Profile**

Interpreters, geologists, geophysicists and other specialists in geoscience disciplines who have an interest in understanding how AVO, rock physics and seismic inversion are applied in real world studies. Participants should have some knowledge of what seismic data is (pre-stack and post-stack) and what well log data is.

#### 17-18 SEPTEMBER 2019

### Seismic Depth Imaging and Anisotropic Velocity Model Building

Mr Etienne Robein (ERT, Pau, France)



CPD Points: 10

#### **Course Description**

As the search for new resources forces to maximize the production of discovered reservoirs and explore new ones in domains that are increasingly complex, seismic imaging is becoming more and more important. This course will provide the audience with a unified overview of today's most popular seismic depth imaging techniques used in the oil and gas industry. These requires an estimate of how fast the seismic waves travel at any given point in the Earth and at any direction (anisotropy): the velocity model. Recent advances in seismic acquisition, imaging technology and high-performance computing allow us to correctly assess a much greater complexity of subsurface models and consequently, improve the accuracy of seismic images and detect structures that were previously invisible. The course will present in simple terms (cartoons rather than equations!) the principle of different techniques in each class of methods (Kirchhoff, Beam Migrations, WEM, RTM), while pointing out their respective merits and limitations. Special emphasis will be on methods used to build the necessary anisotropic velocity models. Both raybased techniques (linear and non-linear tomography) and wavefield extrapolation-based ones, including full-waveform inversion, will be addressed.

#### **Participants' Profile**

The course can be understood by geoscientists with a moderate mathematical background. Physical concepts are presented without equations but with a maximum of simple schemes and animated graphic illustrations. However, some basic knowledge of wave propagation theory may help.

