

# EAGE

EUROPEAN  
ASSOCIATION OF  
GEOSCIENTISTS &  
ENGINEERS

# EDUCATION DAYS AMSTERDAM 2018

15-16 NOVEMBER 2018 | AMSTERDAM, THE NETHERLANDS



**EAGE**   
**EDUCATION**

[www.LearningGeoscience.org](http://www.LearningGeoscience.org)

## Short Course Programme

**15-16 NOVEMBER 2018**

### Sedimentological Characterization of Carbonate Rocks

Dr Aurélie Bonin

**15-16 NOVEMBER 2018**

### Value of Information in the Earth Sciences

Prof. Jo Eidsvik

**15-16 NOVEMBER 2018**

### Microseismic Monitoring in Oil and Gas Reservoirs

Dr Leo Eisner

## Venue

### NH Amsterdam Centre

Stadhouderskade 7  
1054 ES Amsterdam  
The Netherlands



## Sponsorship

Education Days Amsterdam 2018 offers excellent sponsorship opportunities to create high visibility. For more information, please refer to the EAGE Corporate Relations webpage or contact us at [corporaterelations@eage.org](mailto:corporaterelations@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 Amsterdam for a discounted course fee equal to 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 please visit the event website at [events.eage.org](http://events.eage.org).

## Registration fees

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

### Two-day Course:

Registered and paid	Until 15 September	16 September - on-site
EAGE member	€ 705	€ 760
Non-member*	€ 810	€ 865
Student EAGE member	€ 353	€ 380
Student non-member*	€ 405	€ 433

\*Non-member fee includes EAGE Membership for the remaining of 2018 and 2019. For online registration and group bookings, please refer to the event website at [events.eage.org](http://events.eage.org).

## DISCIPLINES



Geophysics



Geology



Reservoir  
Characterization




Near Surface



Engineering



Training and  
Development



“The courses are carefully selected to ensure a consistent programme with appeal to a broad geoscience and engineering audience”

15-16 NOVEMBER 2018

### Sedimentological Characterization of Carbonate Rocks

Dr Aurélie Bonin (Badley Ashton)



CPD Points: 10

#### Course Description

More than 60% of the world's oil and 40% of the world's gas reserves are held within carbonate rocks. An understanding of these will ultimately help improve sedimentological facies and reservoir quality prediction while reducing uncertainties with respect to reserve estimates and potential oil/gas recovery.

The first part of this course provides an understanding of the fundamentals of carbonate sedimentology, together with the skills required to characterize and interpret carbonate rocks, in order to establish an understanding of their depositional environment and implications for reservoir geometry and extents. In detail, the course offers an insight into the environmental, biological, physical, chemical and climatic controls on the carbonate factory, enabling facies analysis. In addition, sequence stratigraphical methods and their application will be covered in the second part of the course to provide all the tools needed to reconstruct the sedimentological architecture at the field scale. These factors help reduce uncertainties associated with the prediction of geometries and lateral heterogeneity within carbonate reservoirs.

#### Participants' Profile

This course is designed for petroleum geologists, geoscientists, petrophysicists and engineers involved in exploration and production of carbonate plays.

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### Value of Information in the Earth Sciences

Prof. Jo Eidsvik (Norwegian University of Science and Technology)



CPD Points: 10

#### Course Description

We constantly use information to make decisions about utilizing and managing natural resources. How can we quantitatively analyze and evaluate different information sources in the Earth sciences? What is the value of data and how much data is enough? In this course multidisciplinary concepts related to geomodeling and decision analysis will be covered, enabling participants to conduct value of information analysis in different Earth science applications. The course will outline statistical machine learning techniques useful for this purpose, such as Bayesian networks, Markov processes and Gaussian processes, as well as decision analysis tools. Examples from petroleum exploration and development are studied, including the value of exploration drilling, seismic or electromagnetic data. Other applications can also be presented if there is interest among participants. Running through each example, is a workflow for framing decision situations and consistent data integration.

#### Participants' Profile

The course is designed for researchers, industry professionals and students in the Earth and environmental sciences who have interest in applied statistics and/or decision analysis techniques. It is interesting in particular to those working in petroleum, mining or environmental geoscience applications.

Participants should have knowledge of basic probability and statistics, and mathematical calculus. Although it is not essential, it helps to know basic multivariate analysis and decision analysis or optimization. The participant must be willing to learn statistical topics and earth science applications and appreciate the multidisciplinary approach to solving quantitative challenges.

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## Microseismic Monitoring in Oil and Gas Reservoirs

Dr Leo Eisner (Seismik Ltd.)



CPD Points: 10

### Course Description

This is a newly revised class on principles of microseismic monitoring ranging from downhole to surface and induced seismicity to microseismicity. This class focuses on understanding the measurements made in passive seismic, their practical and theoretical application and their uncertainties. Attendees will be able to select the right type of microseismic monitoring, design it, and know what kind of processing is needed to achieve their goals. They will be able to avoid interpretation of uncertain observations and interpret the data to achieve the goals.

The course is suitable for professionals in the field, students as well as government officials. No requirement on prior class is needed, although knowledge of seismology helps. The course will also discuss the latest developments in microseismicity from source mechanisms, through tomography and anisotropy to reservoir simulations, including pore pressure analysis. This specific course will discuss also social and scientific aspects of (induced) seismicity related to oil and gas reservoir with the particular attention to the North Holland induced seismicity. Throughout the course the monitoring networks applied in Groningen and the information they can provide on induced seismicity will be reviewed.

### Participants' Profile

The course is designed for users and practitioners in microseismic monitoring.



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