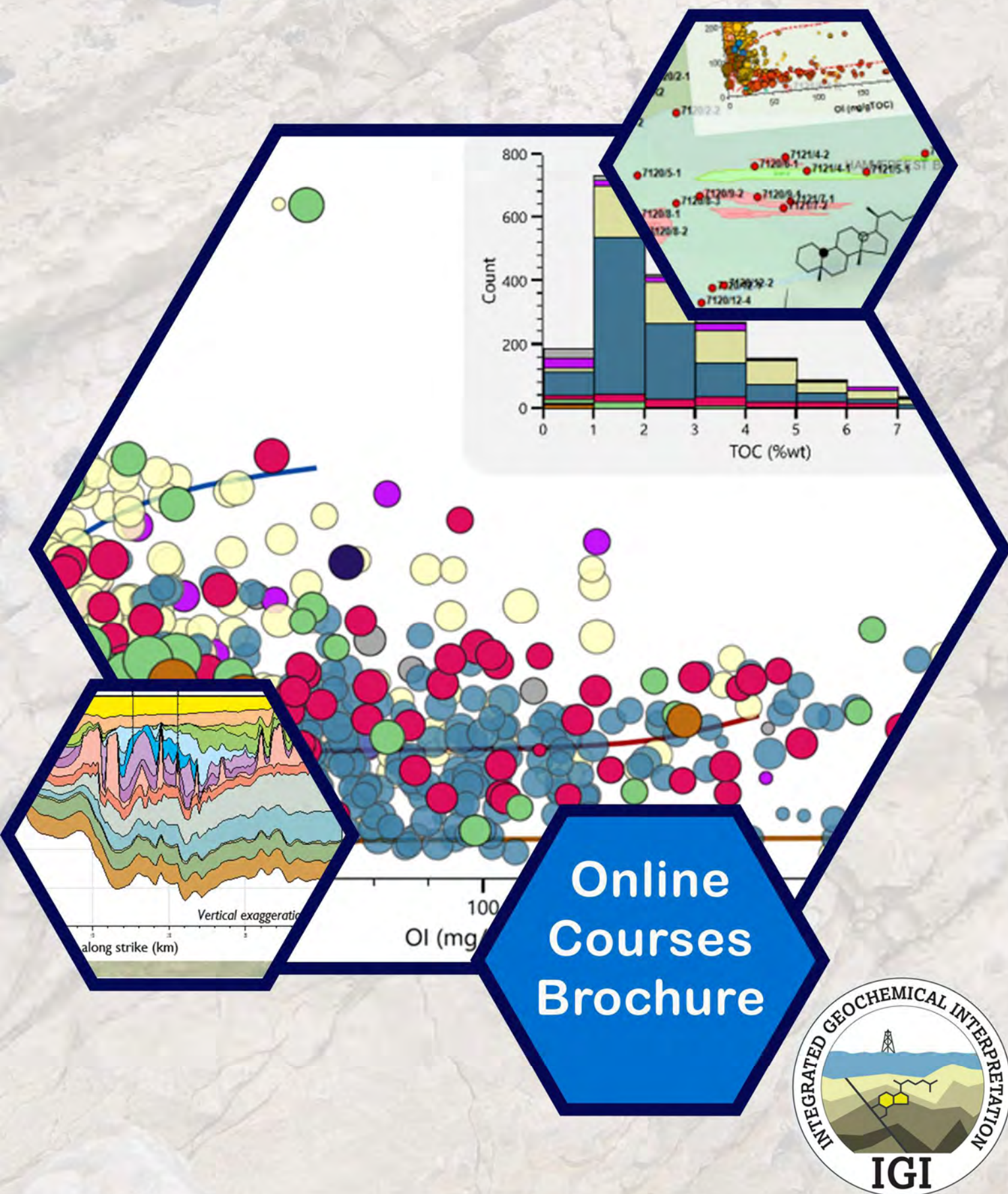
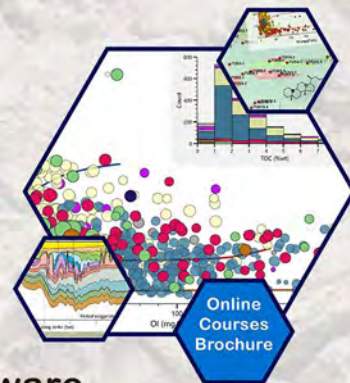


Geochemistry & Petroleum Systems Analysis Online Training Courses with IGI Ltd



Online Training Courses

IGI offers a range of online training courses in petroleum geochemistry and basin and petroleum systems modelling, as well as training for our software.



To meet the increasing demand for online provision and remote learning, IGI have developed a range of introductory to advanced level online courses,

These new online courses are developed from our well-established and popular traditional (class-room) courses, the modules have been updated, modified and presented specifically for online learning.

Our training options include:

Introduction to Petroleum Geochemistry	Page 3
Petroleum Geochemistry	Page 4
Hydrocarbon Gas Geochemistry for Exploration Geologists	Page 5
Basin and Petroleum Systems Modelling	Page 6
IGI Software	Page 7
Presenters profiles	Pages 8 - 10

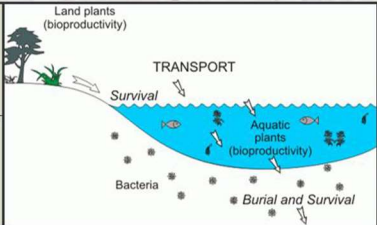
How to book a training course

Please contact helendavis@igiltd.com to book your choice of training

Please see individual course information pages for prices



Introduction to Petroleum Geochemistry Course

Competence Level: Introductory	
Course Coordinators: Laura Milne & Mischa Gehlen	

Please see our website for the next available course

Course Summary

The introductory petroleum geochemistry aims to provide participants with an understanding of the basics of source rock and oil evaluation, and the importance of petroleum geochemistry as a tool for reducing risk in hydrocarbon exploration and production.

Course Content

The course is divided into the following topics:

- Basics of source rock deposition and hydrocarbon generation.
- Source rock sampling methods and description of key analytical techniques.
- Analysis and basic interpretation of oils and rock extracts.
- An introduction to IGI's interpretation software (p:IGI+), including creation of graphs and basic interpretations in workshops.

Delivery Method

The course can be provided in-person at either IGI's office in North Devon, or at a client's office over a period of 2 days.

In addition, we now provide this course through our new online Moodle platform spread over a period of 5 days. Each topic is made up of a series of short lectures (~20 minutes) and other activities that may include a data workshop, field video, quiz or live discussion session, supported by some additional materials such as reference files and access to IGI's ig.NET information resource.

Fees and Booking

In-person course

Course duration: 2 days

Fees £1,200.00 per person at IGI offices
£2,000.00 per day at client offices

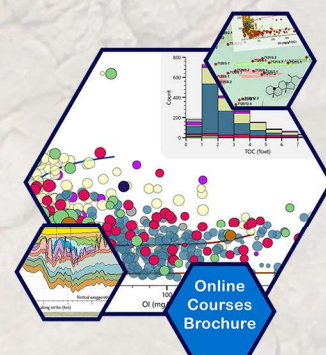
This price includes tuition, course notes, temporary access to p:IGI+ and ig.NET and lunches (if at IGI offices)

Online course

Course duration: 5 days

Fees: £900 + VAT per person

This price includes access to our Moodle learning platform, live sessions, course notes and temporary access to p:IGI+ and ig.NET



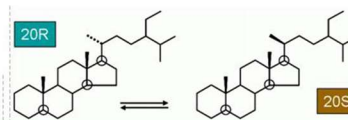
Discounts available for multiple courses/participants

Petroleum Geochemistry Course

Next online course: please see website

Competence Level:
Moderate-Advanced

Course Coordinator:
Marianne Nuzzo &
Laura Milne



Course Summary

This course has been developed to provide participants with knowledge and methods to better understand petroleum geochemical data and reports. Participants will be able to make better-informed decisions relating to the sampling for, and commissioning of, geochemical analyses, with improved understanding of how petroleum geochemistry can be used in exploration and beyond.

The course has been designed for mid to senior level explorationists who would benefit from increased knowledge and use of petroleum geochemistry in their work. Some basic knowledge of petroleum geochemistry would be useful but not essential, whilst geochemists with moderate experience would also benefit from the course.

Course Content

The course is divided into the following six topics:

- Introduction to molecular geochemistry
- Interpreting biomarkers in oils & source rocks
- Molecular indicators of maturity
- Alteration of oils
- Oil-oil & oil-source correlations
- Reservoir geochemistry

Delivery Method

The course can be provided in-person at either IGI's office in North Devon, or at a client's office over a period of 4 days.

In addition, we now provide this course through our new online Moodle platform spread over a period of 10 days. Each topic is made up of a series of short lectures (~20 minutes) and other activities that may include a data workshop, field video, quiz or live discussion

session, supported by some additional materials such as reference files and access to IGI's ig.NET information resource.

Fees and Booking

In-person course

Course duration: 4 days

Fees £2,200.00 per person at IGI offices
£2,000.00 per day at client offices

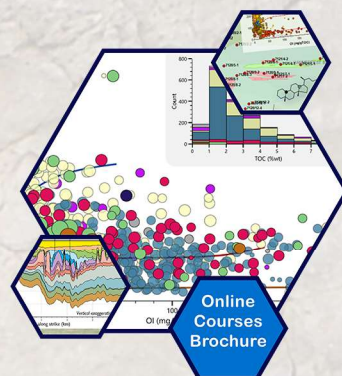
This price includes tuition, course notes, temporary access to p:IGI+ and ig.NET and lunches (if at IGI offices)

Online course

Course duration: 10 days

Fees: £1,500 + VAT per person

This price includes access to our Moodle learning platform, live sessions, course notes and temporary access to p:IGI+ and ig.NET



Discounts available for multiple courses/participants

Hydrocarbon Gas Geochemistry for Exploration Geologists

Next Online course: please see website for details

Course Summary

This course provides an overview of fundamental hydrocarbon gas geochemistry to explain how the interpretation of the molecular and stable isotope composition of natural gas can be used in exploration geology.

Course Content

The course is divided into the following topics:

- Introduction to gas geochemistry
- How are hydrocarbon gases generated?
- Alteration of hydrocarbon gas compositions in the subsurface
- Using p:IGI+ for gas geochemistry interpretation

Delivery Method

This course can be provided as a 1-day course, in-person at either IGI's office in North Devon, or at a client's office, or in addition, we now provide this course through our new online Moodle platform spread over a period of 5 days. Each topic is made up of a series of short lectures (~20 minutes) and other activities that may include a data workshop, field video, quiz or live discussion session, supported by some additional materials such as reference files and access to IGI's ig.NET information resource.

Fees and Booking

In-person course

Course duration: 1 day

Fees £1,000.00 per person at IGI offices
£2,000.00 per day at client offices

This price includes tuition, course notes, temporary access to p:IGI+ and ig.NET and lunches (if at IGI offices)

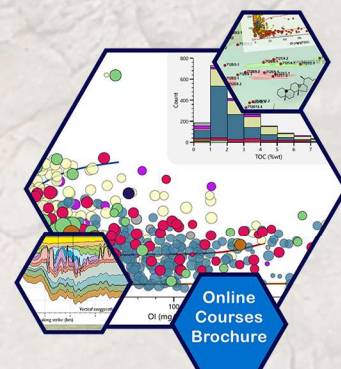
Online course

Course duration: 5 days

Fees: £600 + VAT per person

This price includes access to our Moodle learning platform, live sessions, course notes and temporary access to p:IGI+ and ig.NET

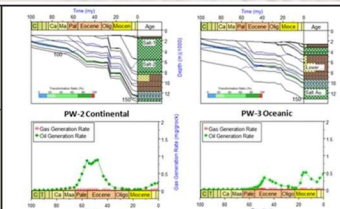
Discounts available for multiple courses/participants



Basin & Petroleum Systems Modelling Course

Competence Level:
Introductory-Advanced

Course Coordinators:
Tiago Cunha & David Gardiner



Next online course: please see website for details

Course Summary

The Basin & Petroleum Systems Modelling (BPSM) course is a balanced combination of background theory and hands-on exercises that will equip attendees with the ability to build and critically evaluate BPSMs, from model parameterization and workflows (1D, 2D and 3D), to petroleum systems analysis and basin/prospect de-risking.

This training program is designed for explorationists involved in the development and/or assessment of petroleum systems models. A basic understanding of the geology of sedimentary basins is the only requirement to fully benefit from this course.

Course Content

The course is divided into the following topics:

- Introduction to BPSM
- Thermal-burial model inputs, constraints and calibration (e.g. temperature and maturity data)
- Overview of sedimentary basin tectonics and geothermics
- Source rock deposition, kerogen organofacies and kinetics
- Introduction to 3-D basin modelling software
- Hydrocarbon generation, expulsion and migration
- Principles and methodologies of risk analysis in BPSM
- Concepts, flowcharts and best practices for 1D, 2D and 3D modelling (theory and hands-on)

Delivery Method

The course can be provided in-person at either IGI's office in North Devon, or at a client's office over a period of 5 days.

In addition, we now provide this course through our new online Moodle platform spread over a period of 10 days. Each topic is made up of a series of short lectures (~20 minutes) and other activities that may include a data workshop, field video, quiz or live discussion session, supported by some additional materials such as reference files and access to IGI's ig.NET information resource.

Fees and Booking

In-person course

Course duration: 5 days

Fees £2,600.00 per person at IGI offices
£2,000.00 per day at client offices

This price includes tuition, course notes, temporary access to p:IGI+ and ig.NET and lunches (if at IGI offices)

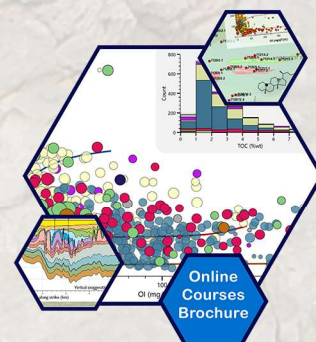
Online course

Course duration: 10 days

Fees: £1,700 + VAT per person

Minimum of 2 attendees per course

This price includes access to our Moodle learning platform, live sessions, course notes and temporary access to p:IGI+ and ig.NET

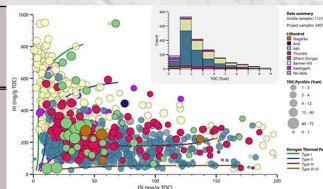


Discounts available for multiple courses/participants

Software Training Courses

Competence Level:
Entry - Moderate

Course Coordinator:
Andrew Green &
Dan Cornford



Course Summary and learning objectives

The IGI software training course aims to provide attendees with the knowledge, skills and confidence required to use our geochemical interpretation application p:IGI+.

p:IGI+ is IGI's geochemical project interpretation environment. The course will demonstrate how to:

- Populate a project with sample and site data
- Sort and harmonise data entries ahead of filtering data based on interpretation aims
- Visualise project data across a range of interactive plots and maps
- Interrogate data using statistical techniques such as PCA

The course, delivered over five days using the latest version of the software, provides a balanced mix of presented material learning, practical hands-on exercises and open forum discussions.

Who needs this program?

The p:IGI+ multi-client training course is suitable for users that are:

- Familiar with p:IGI-3 and who wish to learn about p:IGI+ and its new functionality in order to transition over to using p:IGI+
- New users of p:IGI+ who want to gain formal instructor-led training in the software
- Current users of p:IGI+ looking to undertake periodic training to keep abreast of the enhancements and additional features included in the software

Course Content

Using both our online learning platform Moodle and Microsoft Teams Meetings course material is broken into a series of Topics which firstly introduce p:IGI+, its core components and the underlying geochemical property model. Then following this significant software features are delivered according to a representative geochemical project workflow.

Acknowledging that different companies will each introduce p:IGI+ differently into their geochemical working practice, the following figure lays out the course Topics in response to two commonly experienced working scenarios:

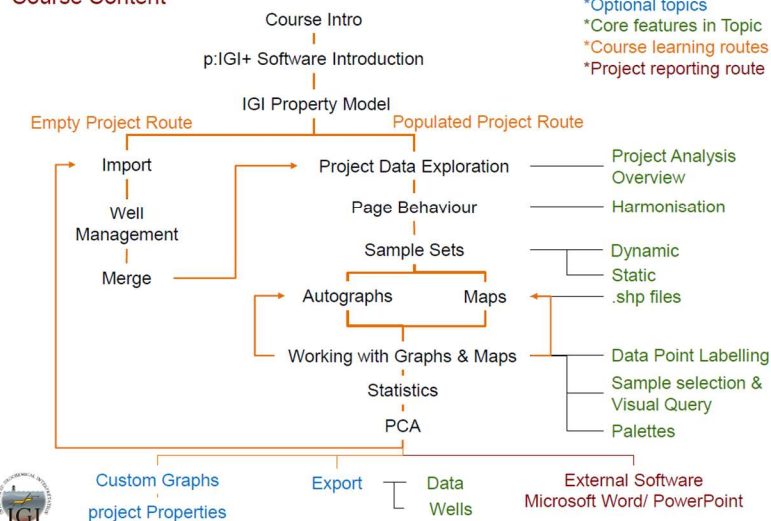
1: A user is given or inherits a p:IGI+ project already populated with data. The user conducts interpretation with the data that this present. Periodically the user may need to import and merge new data to the active project.

2: A user starts with a blank project. The user populates need to populate it with data before conducting an interpretation and reporting their finding in external software. Periodically the user may need to import and merge new data to the active project.

The multi-client course material will be ordered with respect to working scenario 1.

Online Software Training

Course Content



Fees and Booking

In-person course

Course duration: 2 days

Fees £1,200.00 per person at IGI offices
£2,000 per day at client offices

This price includes tuition, course notes, temporary access to p:IGI+ and ig.NET and lunches (if at IGI offices)

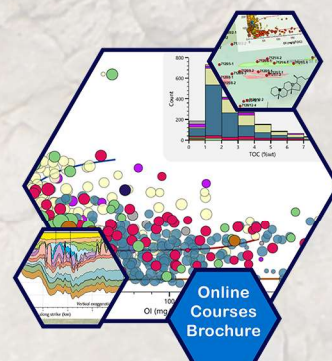
Online course

Course duration: 5 days

Fees: £900.00 + VAT per person

Min of 4 attendees with a max 10

This price includes access to our Moodle learning platform, live sessions, course notes and temporary access to p:IGI+ and ig.NET



Discounts available for multiple courses/participants

IGI's Experienced Instructors



Dr Marianne Nuzzo
Senior Petroleum
Geochemist
(gas specialism)

Marianne Nuzzo - Practical & Consulting

Dr Nuzzo has a particular expertise in gas and light hydrocarbon geochemistry, with experience in microseep surveys and cold seeps, reservoir geochemistry and petroleum geochemistry applied to exploration. Prior to joining IGI in 2014, Dr Nuzzo held Postdoctoral Research Fellowships in organic geochemistry at Geomar Institute for Marine Studies in Kiel (Germany) and at the Geological Survey of Portugal investigating the geochemistry of oil and gas seeps in Eastern Mediterranean, NE Atlantic and Pacific Ocean margins.

Training Experience

Dr Nuzzo has taught at universities and EU training programmes on organic geochemistry and gas in marine sediments. Since joining IGI she has developed a series of hydrocarbon gas lectures and workshops for this training course, focussing on practical interpretation and application of gas geochemical data.



Dr Tiago Cunha
Senior Petroleum
Basin Modeller/Geochemist

Tiago Cunha - Practical & Consulting

Dr Tiago Cunha has a particular expertise in basin dynamics and petroleum systems modelling. Prior to joining IGI, he did a PhD in Marine Geophysics at Oxford University, followed by a Post-doc at the Portuguese institute for the Sea and Atmosphere (IPMA). In the last 4 years he has conducted geochemistry and petroleum systems modelling consultancy projects for exploration companies in Europe, West Africa, North and Central America.

Training Experience

Between 2010 and 2012 Dr Tiago Cunha lectured Basin Dynamics at the Lisbon University MSc in Geophysics. Since 2014 he has developed and presented the IGI Basin and Petroleum Systems Modelling training courses, both on a multi-client basis and for individual companies.



IGI's Experienced Instructors



Laura Milne
Senior Petroleum
Geochemist & Basin Modeller

Laura Milne - Practical & Consulting

Laura joined IGI in 2014 as a petroleum geochemist following completion of her MSc at Newcastle University and placement with the French Institute of Petroleum. She has since conducted a large number of integrated petroleum geochemistry and basin modelling projects, with extensive experience working on the Norwegian Continental Shelf.

Training Experience

Laura has delivered numerous internal technical seminars within IGI, with recent focus on the area of Decommissioning. She has also been responsible for the development of IGI's new online courses.



Andrew Green
Senior Petroleum
Basin Modeller/Geochemist

Andrew Green - Practical & Consulting

Andrew is a petroleum geochemist who since joining IGI in 2010, has developed a keen understanding of geochemical screening parameters associated with pyrolysis equipment and their use in conventional and unconventional applications. Since 2014, Andrew has worked closely with the IGI software development team to produce geochemical interpretation software tools used inhouse and provided to the petroleum industry.

Training Experience

Since joining IGI, Andrew has contributed to and delivered several of the companies offered geochemical training courses. Over the past six years, he has focused on developing and presenting IGI's software training course for p:IGI+ and leading company designed field trips along both the north Devon and south Dorset coastlines. Alongside training for IGI, Andrew enjoys working with and presenting to local amateur geology groups.

