

Geocellular Modelling

A One Day Tailored Seminar

Gaffney, Cline & Associates (GCA) offers a focused one-day seminar on industry best practice and common pitfalls associated with geocellular modelling. The course will present the importance of understanding the geological concept and data uncertainty prior to model building; avoiding reliance on the specific software capabilities.

Appropriate model workflows for alternate model scenarios will be considered, along with the importance of data integration. This course is not focused on software, and will deliver understanding and key principles that should be considered before and during the geocellular modelling process.

Seminar Objectives

- What are we Modelling and why?
- Geological Modelling Concepts
- Deterministic versus Stochastic Methods

Seminar Outline

Modelling Requirements

- Definition of Purpose, Goals and Challenges
- Data, Quality Control: Rubbish in, Rubbish out
- Conceptual Geological Models
- Choosing the Modelling Approach - Simple versus Complex - what is appropriate?
- Depositional Architecture and Hierarchies
- Incorporating Reservoir Engineering Data
- Resolution: Core/Log/Geological Model/Reservoir Model
- Modelling through the Cycle: Appraisal to Brown Field
- What is Spatial Correlation?
- What are Data Biases?

Modelling Methods

- Generic Modelling Workflows
- Reservoir Gridding and Layering
- Facies Modelling
- Using Trends
- Net/Gross
- Porosity, Permeability and Water Saturation Modelling

Applications of Model

- Critical QC and Checks
- Dynamic Validation
- Field Development Planning vs Reserves and Resource Audit
- Predictive Applications
- Uncertainty Analysis

Geocellular Modelling

A One Day Tailored Seminar

Seminar Arrangements

The seminar is designed to add value and understanding to all experience levels across the subsurface disciplines who are involved in reservoir characterisation or those who would benefit from a practical understanding of geological modelling workflows and associated uncertainty.

GCA is flexible in the provision of the seminar in terms of location, number of attendees and tailoring to specific focus areas. The seminar would typically be held in a client's office to permit for bespoke discussion topics. GCA also provides public, group seminars, for which we would arrange location following on from level of interest and geographical preference. Even at a public seminar, GCA can provide some tailoring of topic to suit the attendees.

Given the range of alternative options, please contact GCA to discuss specific requirements. We will always attempt to meet the requirements of our clients.

Course Leaders

GCA's course leaders have extensive experience in Geological and Geophysical interpretation, Geocellular Modelling and Seismic to Simulation workflows, in both carbonate and clastic reservoirs. They have expert knowledge of application and algorithm design for mapping and Geocellular Modelling.

Additional Information

For more information about GCA's integrated services, please contact your local GCA office.

Europe, Africa & Russia Caspian

United Kingdom
Bentley Hall, Blacknest,
Alton, Hampshire
GU34 4PU, United Kingdom
Tel: +44 (0)1420 525366
+44 (0)1420 526700
GCA.BD.London@gaffney-cline.com

1 Heathcock Court
415 Strand
London, WC2R 0NT
United Kingdom
Tel: +44 (0)1420 525366
GCA.BD.London@gaffney-cline.com

Americas

Houston
5555 San Felipe Street
Suite 550
Houston, TX 77056
USA
Tel: +1 713 850 9955
GCA.BD.Houston@gaffney-cline.com

Argentina
Edificio Puerto León
Juana Manso 205, piso 3
Dique 4, Puerto Madero
C1007CBE
Buenos Aires,
Argentina
Tel: +54 11 4378 6497
GCA.BD.BuenosAires@gaffney-cline.com

Asia Pacific

Singapore
80 Anson Road, #31-01C
Fuji Xerox Towers
Singapore 079907
Tel: +65 6225 6951
GCA.BD.Singapore@gaffney-cline.com

Australia
Level 16, 275 Alfred Street
North Sydney, NSW 2060
Australia
Tel: +61 2 9955 6157
GCA.BD.Singapore@gaffney-cline.com

**Gaffney,
Cline &
Associates**
www.gaffney-cline.com

Terms and conditions of use: by accepting this document, the recipient agrees that the document together with all information included therein is the confidential and proprietary property of Gaffney, Cline & Associates and includes valuable trade secrets and/or proprietary information of Gaffney, Cline & Associates (collectively "information"). Gaffney, Cline & Associates retains all rights under copyright laws and trade secret laws of the United States of America and other countries. The recipient further agrees that the document may not be distributed, transmitted, copied or reproduced in whole or in part by any means, electronic, mechanical, or otherwise, without the express prior written consent of Gaffney, Cline & Associates, and may not be used directly or indirectly in any way detrimental to Gaffney, Cline & Associates' interest.