



This two-day course offered by Intrepid Geophysics (co-hosted by DHI-WASY) will cover introductory concepts of 3D geology model-building and forward geophysical modelling, plus GeoModeller V4.0 new features, including meshing exports for flow simulation modellers using FEFLOW software

### Day One – 19<sup>th</sup> February (model building & geophysics focus)

- PowerPoint-1: Overview of core software capability GeoModeller
- Demonstration (Mansfield #1): Rapid construction of a geo-located geology model of the 'Mansfield Syncline' constrained by drilling and surface mapping
- PowerPoint-2: Building faults in GeoModeller
- Exercise (Mansfield #2): Adding finite and infinite faults in the western limb of the syncline
- Exercise (Mansfield #3): Improve the model by geo-locating a regional cross-section image [Section-CDE] and digitizing additional geology/dip data, & Re-compute.
- Demonstration: Integrate your 2.5D airborne EM inversion results (from MOKSHATM) for model-building in GeoModeller
- PowerPoint-3: Introduction to forward gravity/magnetics modelling in GeoModeller
- Exercise (Tutorial C): Geophysical forward modelling directly from 3D geology. And Focus on gravity/magnetics results-visualization in GeoModeller.
- Demonstration: Integrate your 2.5D airborne EM inversion results (from MOKSHA™) for model-building in GeoModeller

### Day Two – 20<sup>th</sup> February (mesh export & flow simulation focus)

- PowerPoint-4: What else is New in GeoModeller v4.0 ?
- Demonstration: New Navigation panel and downloading resources from GitHub
- What PowerPoint-5: Tunisia Case Study: groundwater modelling
- PowerPoint-6 Focus on meshing
- Meshing exercise #1: Fill FEFLOW centroids with geological attributes from a GeoModeller model. Two ways: for layered or fully unstructured meshes
- Meshing exercise #2: Prism a FEFLOW triangulation for creating a layered mesh
- Meshing exercise #3: Direct export of a prised triangulation of topography from GeoModeller
- Meshing exercise #4: Direct export of a 3D geology model fully unstructured mesh

#### Afternoon: FEFLOW software coupling exercises

- Focus on meshing exercises, moving into the FEFLOW environment, and including set-up of simple simulation exercises.
- GeoModeller extension Demo – Optimizing construction of thin bodies & lenses in 3D
- 4.45 to 5pm Discussion and close of training



#### DATE AND TIME

Mon-Tues: 19-20<sup>th</sup> February 2018  
Start time: 9:00am (arrive 8.45am)  
End time: 5:00 pm

#### LOCATION AND VENUE

BRGM Headquarters, Orléans France  
**Room R02 at building M2 (see plan page 2)**

#### FEEES (Students at 50% DISCOUNT)

One day (either day): € 320  
Two days: AUD € 450

#### INCLUDED AND REQUIRED

30-day software licences, handouts, example datasets and models.  
Bring your own PC Laptop

#### LANGUAGE : English

#### REGISTRATIONS

All registrations via Elise Wade, Intrepid:  
[sales@Intrepid-geophysics.com](mailto:sales@Intrepid-geophysics.com)

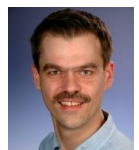
#### INSTRUCTORS (Orléans)



Helen Gibson [CV link](#)  
*Geologist and Technical Sales Manager,  
Intrepid Geophysics*



Gabriel Courrioux [CV link](#)  
*Senior Researcher, Georesources, BRGM*



Björn Kaiser [CV link](#)  
*FEFLOW Consultant, DHI WASY Berlin*

#### FURTHER GEOMODELLER TRAINING

(repeat agenda) See [Training Calendar](#)

#### Next training venue in 2018:

- **Perth Australia** (details to be confirmed)

Enquiries [sales@Intrepid-geophysics.com](mailto:sales@Intrepid-geophysics.com)



### LOCATION AND VENUE PLAN:

For Monday & Tuesday 19<sup>th</sup> and 20<sup>th</sup> February

- start 9 am (arrive 8.45 am)
- Bring Laptops: PC (Mac is not preferred or needs to run in a PC state)

BRGM Headquarters, Orléans, Cedex France

1. Come to the BRGM entrance at 3 Avenue Claude Guillemin, Orléans
2. Register at “I” information
3. Proceed to Room R02 at building M2

