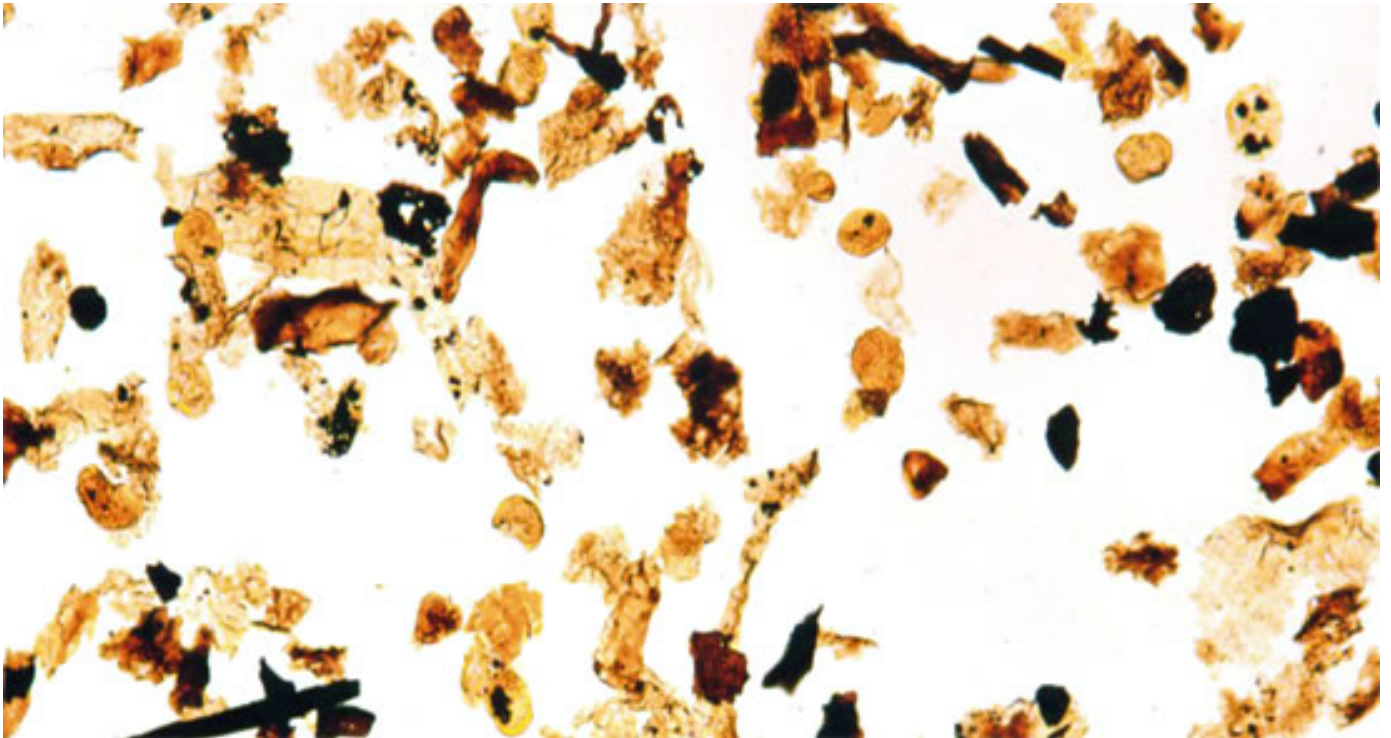


Sedimentary Organic Matter - Principles and Applications to Hydrocarbon Geology



Lecturer

Dr. Hartmut Jäger, GeoResources

Who should attend

Introductory to intermediate course in palynofacies and organofacies for geologists, geophysicists and engineers. General principles of palynology, facies analysis, sequence stratigraphy and hydrocarbon generation are briefly introduced and repeated in the course. No prior experience in palynology, sedimentology, sequence stratigraphy and organic maturation is required. Basic knowledge in palaeontology, facies analysis and hydrocarbon generation is useful. This 3 days course includes practical microscope exercises in palynofacies and organofacies analysis. The course language is English or German.

What you will learn (course outline)

1 Principles of sedimentary organic matter

- Production of sedimentary organic matter
- Distribution of sedimentary organic matter
- Preservation of sedimentary organic matter
- Thermal degradation of sedimentary organic matter

2 Groups of organic matter (Palynomorphs)

- Groups of marine organic matter
- Groups of terrestrial organic matter

3 Microscopic exercise: Study of palynological groups and preservational features

4 Application of quantitative sedimentary organic matter for event stratigraphy and sequence stratigraphic interpretation (palynofacies analysis)

- General processes of facies development and sequence stratigraphy
- Classification schemes of sedimentary organic matter in palynofacies analysis
- Composition and preservation of sedimentary organic matter related to facies
- Quantitative analysis and interpretational models of sedimentary organic matter
- Palynofacies analysis applied to sequence stratigraphy

5 Microscopic exercise: palynofacies analysis case study

6 Application of sedimentary organic matter for hydrocarbon generation (organofacies analysis)

- General processes of hydrocarbon generation
- Classification of organic matter in HC systems - kerogen types
- Application of kerogen types to sedimentary organic matter
- Quantification and interpretational models of kerogen composition
- HC source rock potential based on kerogen classification and organic maturation

7 Microscopic exercise: HC source rock analysis based on organofacies

Location

Inhouse-course at GeoResources, Heidelberg or at location requested by client. Professional microscope facilities are required for exercises.

Participants

Minimum 5 - maximum 15 (depending on microscope facilities)

Fees

Depending on course location and number of participants. Please contact mail@georesources.de for a specific offer.