



DGMK/DMG/SGA Short Course

# From Concept to Oil - The E&P Lifecycle

Exploration and Production Division

26. - 28. May 2020 in Würzburg



## ABOUT THE LECTURERS

After studying geology in Würzburg and Aachen, **Harald Karg** completed his PhD in petroleum geology and basin modelling at Research Centre Jülich and RWTH Aachen. Since 1999 Harald has worked in the E&P industry for Wintershall, Woodside Energy and Schlumberger. During his assignments in Germany, Argentina, Australia and Mexico he gained extensive experience in all subsurface disciplines, and has worked in Exploration and Development projects of both conventional and unconventional resources. Currently, Harald is Vice President Subsurface Technology at Wintershall Dea in Kassel.

**Martin Nagel** holds a B.Sc. in Geology from the Free University of Berlin, and a M.Sc. in Geoscience from Greifswald University. Previously he worked for Woodside Energy in Perth, Australia, in various positions across Exploration and Development departments. Martin has extensive experience in play-based exploration with a proven track record in mature and frontier basin settings. Special technical interest in Seismic Attribute Analysis and Seismic Geomorphology. Further expertise in exploration well planning including Data Acquisition Planning, Shallow Hazard Analysis, plus Drilling & Logging Operations. Martin is currently working for CNOOC International in London, UK, as a Senior Geologist within the International Exploration Europe & Africa department.

## ABOUT THIS COURSE

The course aims to provide an overview of the full workcycle from early exploration to development and production of hydrocarbons. The course modules are:

- Geodynamics and Basin Formation
- Structural Geology
- Source Rocks and Geochemistry
- Generation of Oil and Gas
- Sedimentology and Characteristics of Petroleum Reservoirs
- Fundamentals of Petroleum Systems Analysis and Basin Modeling
- Play-based Exploration

- The Exploration-Appraisal-Development Workflow
- Introduction to Engineering Disciplines and Technologies in Exploration and Production

The course is aimed for students, PhD students, young professionals and employees of the E&P industry with a geoscientific or petroleum engineering background who wish to learn about the fundamentals of the formation of sedimentary basins and petroleum deposits and also acquire a solid understanding of all components of the exploration-production value chain and work cycle and the interfaces of the various E&P disciplines.

## MAIN TOPICS

- Classification of sedimentary basins and basin forming processes
- Structural mapping on maps and seismic data
- Source rock formation processes and different source rock types
- Prediction of oil and gas properties at basin and reservoir scale
- Identification and mapping of source kitchen areas
- Using geochemical parameters to quantify the amount of generated oil and gas
- Reservoir quality prediction
- Different basin modeling techniques and their application depending on the geological setting
- Basin modeling workflows
- Learn about the prospect maturation workflow
- Fundamentals of subsurface technologies from an engineering perspective
- The E&P value chain, workcycle, product, markets, stakeholders and interrelationships with the E&P industry.

## VENUE

Congress Centrum Würzburg  
Pleichertorstraße, 97070 Würzburg

## HOW TO REGISTER

Visit <https://dgmk.de/veranstaltungen/fcto-2020/>  
Personal members of DGMK, DMG and SGA receive a reduced fee. Qualified student members of DMG will receive a subsidy for travel expenses of € 50,-.