ANNUAL TECHNOLOGY SUMMIT



PANEL 1: THE FUTURE 'ENERGY MIX' AND THE ROLE OF TECHNOLOGY IN A DIGITAL WORLD

PANELISTS









ANDIAPPAN



SAVENKOVA









ROUX



PANEL 2: THE EVOLUTION OF UNCERTAINTY MANAGEMENT AND ASSET OPTIMISATION

PANELISTS



BENTLEY



DUFOUR

RIEKE







ARNOLD





VAUGHAN



PANEL 1: THE FUTURE 'ENERGY MIX' AND THE ROLE OF TECHNOLOGY IN A DIGITAL WORLD



VASILII SHELKOV

CEO - ROCK FLOW DYNAMICS



HOUSTON



ANITHA ANDIAPPAN

RESERVOIR ENGINEER & SENIOR RESEARCHER - RAG AUSTRIA AG



VIENNA



OLGA SAVENKOVA

ANALYST - RYSTAD ENERGY



OSLO

Vasilii Shelkov is the co-founder and CEO of Rock Flow
Dynamics. After completing his PhD in High Energy Physics in
1998, Vasilii worked as a Senior Fellow at Lawrence Berkeley
National Laboratory for a number of years, before moving to
work at YUKOS in 2004. It was here that he met Kirill
Bogachev and they went onto found Rock Flow Dynamics in
2005, with a vision to provide engineers with state-of-the-art
dynamic reservoir simulation technology that met the
modern-day expectations for performance and usability. The
result of their vision was tNavigator, and 18 successful years'
later, Vasilii remains CEO alongside Kirill (CTO), leading and
inspiring a global team of over 300 employees

Anitha Andiappan studied Chemical Engineering at the National University of Singapore (NUS) and ETH Zürich. In 2010, Anitha started working with WorleyParsons as a process engineer in the hydrocarbons team, tackling various Downstream & Upstream Projects. She then completed her Masters in Petroleum Engineering (specialization Reservoir Engineering). In 2014, Anitha joined RAG Austria AG as a Reservoir Engineer. Her work includes the management of gas reservoirs in Upper Austria as well as developing and managing underground gas storages. Furthermore, she engages in renewable energy projects with her subsurface expertise such as hydrogen storage in natural gas reservoirs. In addition, she is a visiting lecturer at the Montan University of Leoben.

Olga Savenkova is a Senior Analyst in the Sustainability team at Rystad Energy, where she is responsible for the analysis of global oil and gas energy transition trends. Her focus areas are portfolio investments, corporate sustainability, resilience and strategy analysis of oil and gas players. Olga has more than 8 years of experience within the oil and gas market.

Predominantly she is working on strategic development and risk management for oil and gas companies and is directly involved in the strategy-making and risk identification and evaluation processes.

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GILLIAN KING

DIRECTOR OF BUSINESS DEVELOPMENT - NZTC



ABERDEEN



JEAN-FRANCOIS ROUX

CHIEF RESERVOIR ENGINEER - NEPTUNE ENERGY



ABERDEEN



HEINRICH JUNKER

GEOTHERMAL RESERVOIR SIMULATION EXPERT



Gillian King is the Director of Business Development (Growth) at the Net Zero Technology Centre (NZTC). She has responsibility for delivery of technology services: supporting organisations decarbonisation and diversification goals. Previously on the Board of NZTC, Gillian has worked in global oilfield services for over 20 years in the completions & interventions space, always with a focus on technology development. Gillian is passionate about the role new technologies will play in the energy transition. A biochemistry graduate from Aberdeen University, she also has a Masters in Oil and Gas (Offshore) Engineering from Robert Gordon University and completed a Business Sustainability Management course at the Cambridge Institute of Sustainability Leadership.

Jean-Francois Roux joined Neptune in October 2018 as Chief Reservoir Engineer and has more than 26 years' experience in international exploration, appraisal and development operations. Previously he worked at Apache on Northern North Sea assets. Jean-Francois began his career In Elf and Total working on different assets around the world (North Sea, Cameroon, Athabasca). Heinrich Junker is owner and managing director of GeoTRS GmbH (GeoThermal Reservoir Simulation). He has more than 30 years of experience in reservoir engineering and management, holding a diploma in geophysics from TU Clausthal. After some years of research at the university he joined RWE Dea (now Wintershall Dea). He has been conducting and managing several integrated reservoir studies with uncertainty evaluations, has supported and managed internal and external reserves audits, field development projects, and took responsibility as reservoir and production manager by leading multidisciplinary, international teams. With a long history of experience with several software applications, still his key aspects are the integration of data, knowledge and teams, as well as the understanding and visualization of phenomena, results, and uncertainty.

PANEL 2: THE EVOLUTION OF UNCERTAINTY MANAGEMENT AND ASSET OPTIMISATION



MARK BENTLEY

PRINCIPLE PRODUCTION GEOLOGIST - TRACS



TENB



DAN ARNOLD

RESEARCH SCIENTIST, UNCERTAINTY QUANTIFICATION



EDINBURGH



HOLGER RIEKE

CHIEF DEVELOPMENT GEOLOGIST - WINTERSHALL DEA



HAMBURG

Mark Bentley has been in the oil and gas industry since 1986, initially as a production geologist with Shell, subsequently training and consulting with TRACS and now working independently as Langdale Geoscience, based in Wales. His specialist technical fields of expertise are 3D reservoir modelling and scenario-based approaches to handling subsurface uncertainty and risk, including the associated behavioural heuristics. He is co-author of the reference text 'Reservoir Model Design'. Since 2018 he has also held the position of Associate Professor at Heriot-Watt University in Edinburgh. Mark has delivered training courses on every continent except Antarctica.

Dan Arnold, an Associate Professor at Heriot-Watt University, specializes in reservoir characterization and uncertainty quantification. Dan's research covers a broad range of technical fields, including reservoir geoscience, geostatistics, reservoir simulation and modelling, uncertainty quantification and statistics, and machine learning. In 2009, he was a Royal Society of Edinburgh fellow before accepting his full-time position at Heriot-Watt University in the Institute of Geoenergy Engineering. Currently, he leads the GMUQ joint industry project that utilizes physics-based machine learning to better estimate uncertainty in stress-sensitive reservoirs. Additionally, he leads the Heriot-Watt part of the GWatt project, which explores geothermal energy from Cornish Granites. When he can, Dan gets out into the field to remind himself that real rocks are much more complicated and fascinating than anything captured in a model.

Holger Rieke has over 20 years of experience as a geologist in the energy industry, including previous roles in Statoil (now Equinor) and DEA Deutsche Erdoel AG before they merged with Wintershall to become Wintershall Dea, where he is now Chief Production Geologist.

In his current role, Holger is responsible for maintenance and continual improvement of companywide subsurface workflows, processes, standards, guidelines, best practices, and the software application portfolio. A central element of his work is the assessment of subsurface risk and uncertainty in production and development projects, using a preferred deterministic approach over traditional stochastic methods.

PANEL 2: THE EVOLUTION OF UNCERTAINTY MANAGEMENT AND ASSET OPTIMISATION





SEBASTIEN DUFOUR

CHIEF RESERVOIR ENGINEER - WINTERSHALL DEA



TIBOR TOTH

RESERVOIR ENGINEER & FRACTURE SIMULATION ADVISER



OWEN VAUGHAN

CHIEF RESERVOIR ENGINEER - APACHE



ABERDEEN

ADVANCED RESERVOIR ENGINEER - AKER BP



OSLO

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HAMBURG

RG HAMBURG

Jens-Petter Nørgård graduated from NTNU with a M.Sc. in petroleum technology. He has 25 years' experience in the oil and gas industry. His passion for improving workflows through innovation and software development has been a driver through his career. He was part of the Petrel product management team before pursuing a more technical career in operating companies like DNO lraq, Lundin Norway and currently AkerBP where he is actively involved in integrated asset modelling, advanced well modelling, digitalization, and simulation infrastructure.

Sebastien Dufour has gained international experience as a reservoir engineer, with hands-on practice of assessing risks and uncertainties in Norway, Germany, Qatar, UK, and The Netherlands. He has worked on a variety of assets from exploration to development, redevelopment, production optimization, and has been involved in several M&A activities and license unitization. He holds a MSc in Petroleum Engineering from Heriot Watt University and a MEng from Ecole Centrale de Lyon.

Tibor Toth is a Reservoir Engineer specialising in Fracture Simulation, with a technical background in Reservoir Engineering and Reservoir Geomechanics.

Tibor has 25 years if industry experience in Engineering and Technical Management roles including Wintershall Dea, SLB and MOL Group. Tibor also worked as the Engineer in charge in field operation/management/surveillance onshore clastics and naturally fractured reservoirs Including well hydraulics and production network modelling hydraulic fracturing design.

Owen Vaughan has been with Apache for 20 years, working on North Sea assets, and before that was with BP. He started out as a geologist and then moved to reservoir engineering. He has worked on projects from exploration prospects to very late-life assets and found a consistent feature of all these is uncertainty.