

The Geological Society

servicing science & profession

Corporate Supporters:



Convenors:

Richard Sech
Chevron ETC

Richard Steele
Tullow

Mark Bentley
AGR TRACS

Gwilym Lynn
Shell

Dave Cox
BP

Conference Sponsor:

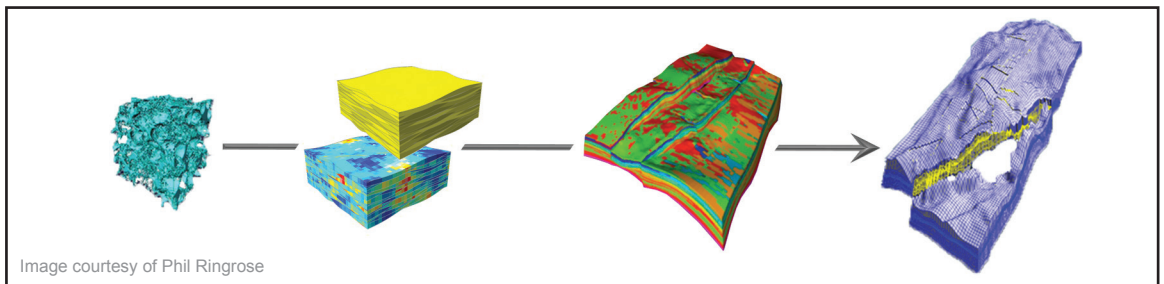


Call for Abstracts – 31 October 2014

Recognising the Limits of Reservoir Modelling

4-5 March 2015

Elphinstone Hall, University of Aberdeen



Nearly 20 years ago a paper describing some then best-practice reservoir modelling included this statement in the concluding section: "The parameters that we used to fine-tune this match were the well connection factors, the well skin factors and the relative permeability curves".

Can we honestly claim to have made progress from that situation?

Geoscientists and petrophysicists labour hard at reservoir characterisation. We are seduced by precision and enticed by the sophistication now offered by software. Meanwhile, we have become habituated to permeability multipliers, pore-volume multipliers, adjustments to the relative permeability curves and to modifying fault properties (up to and including their existence), and use the resulting models to support major capital investment decisions.

So what have we actually learned in the 20 years since geocellular modelling arrived on our desktops? Can we turn all that hindsight around into useful foresight? In situations where we cannot learn from the history-match, what can we learn from history? What are the most frequent failings of our geomodels?

Now that geomodelling is a mainstream activity, our attention moves to finding effective approaches to support investment decisions; multi-scenario, multi-scale modelling with multi-phase upscaling represents an ideal but requires smart and nimble application to be practical and efficient.

This conference seeks warts-and-all tales of reservoir models that eventually became accurate; descriptions of iteration between reservoir characterisation and reservoir performance; stories of managing small-scale heterogeneity in large scale models. The conference seeks to recognise the limits of our current workflows and chart a way forward to more accurate, useful and efficient reservoir modelling practices.

Contributions are invited on current reservoir modelling cases and techniques, dealing with:

- Handling incomplete or imperfect data – *modelling data or concepts?*
- Reconciling and integrating multi-scale data in models – *dealing with gaps*
- Multi-scale modelling – *rather than single detailed models*
- Impact of heterogeneity on fluid flow behaviour – *what matters to flow?*
- Conditioning to production data in mature fields – *how to iterate effectively*
- Advanced gridding and simulation techniques – *breakthrough technologies*
- Linking reservoir models to commercial decisions – *adding value through modelling*

Call for Abstracts:

Please email paper and poster contributions to laura.griffiths@geolsoc.org.uk and Richard.Sech@chevron.com by 31 October 2014

For further information please contact:

Laura Griffiths, The Geological Society, Burlington House, Piccadilly, London W1J 0BG. T: 020 7434 9944

At the forefront of petroleum geoscience

www.geolsoc.org.uk/petroleum

