

Society of Petroleum Engineers
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'Square Sail' – [Petrotech](#) gets our 'cutest booth' prize

Introduction

The message from the keynote addresses was fairly consistent. We need oil and will do for a few decades to come. Oil supply is OK for the next decade. In fact production may not yet have peaked. Historical data is unreliable as today's enhanced reserves are 'counted back' to the year of discovery. An aging workforce is a concern and gas supplies to North America are a critical issue. Environmental issues were practically absent from the debate – surprising since CO2 sequestration was a popular topic in the paper session.

We noted a lot of buzz around coupling surface facilities and reservoir models. This can be just at the design phase – or taken a step further to veritable simulation and optimization 'Sim/Opt'. Here real-time data feeds from a 'digital oilfield' are used to control production. Techniques borrowed from the refinery are being suggested as having widespread application to the oilfield. Today, the techniques are not quite ready for prime time. Downhole controls equip a minute fraction of the world's reservoirs. Interestingly though, it is the older fields with high gas or water content and gas lift issues which are most likely to benefit from application of Sim/Opt. But there is reticence to putting sophisticated and potentially delicate equipment down hole.

Highlights

- [Keynotes – Oil & Gas Future](#)
- [Simulation moves inside the reservoir model](#)
- [Simulation and Optimization \(Sim/Opt\)](#)
- [Spill control system](#)
- [Onshore drilling center](#)
- [Self-learning reservoir management](#)
- [Gas lift real-time optimization](#)
- [UN Reserves classification schema](#)

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