Reservoir Simulation Suite

Build
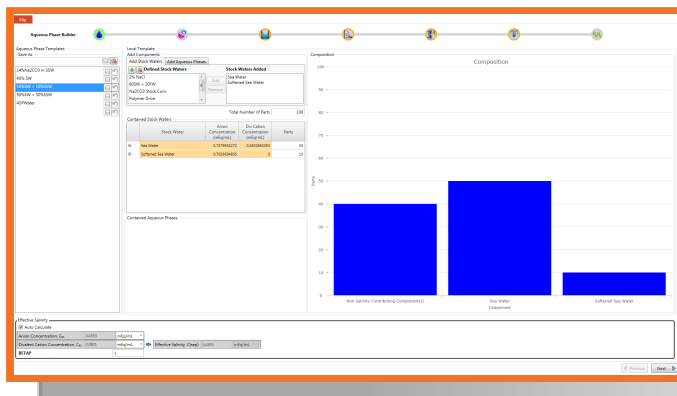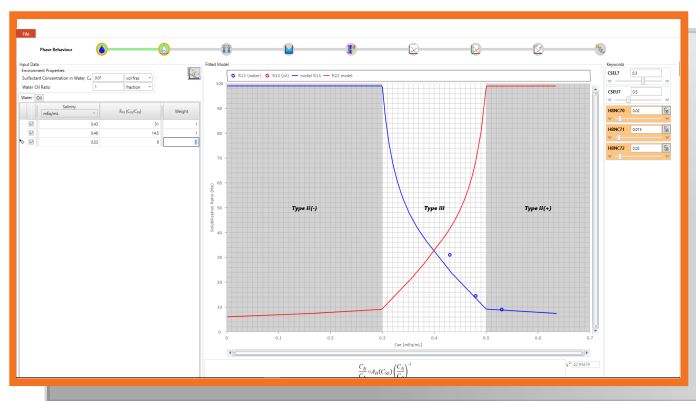Analyse
S3
Control
Sim

S3
Sciencesoft

S3chembuild

Faster Formulation Fitting

- **Simple loading & fitting of chemical EOR lab data**

- **Aqueous Phase Builder**

- **Supports Polymer, Surfactant and SASP workflows**

- **Consistent and repeatable workflow for all processes**

BUILD

Faster Formulation Fitting

S3chembuild

S3chembuild is a state-of-the-art tool for loading, processing and fitting data from chemical EOR lab experiments and moving that data straight into UTCHEM and MetEOR simulation decks.

BENEFITS

- Simple loading and accurate, automatic fitting of chemical EOR lab data
- Huge productivity boost compared to spreadsheet-based analyses of lab data
- Automatic generation of UTCHEM and MetEOR input parameters from lab data
- Weight or ignore data points to quality control the fit
- Consistent and repeatable CEOR workflows
- Combine salts and ions to model in situ water with dedicated Aqueous Phase Builder
- Viscoelastic modelling for polymers is supported

KEY FEATURES

- Supports Polymer, Surfactant and SASP workflows
- Fits are visualised and a chi2 fit parameter is calculated
- Fits can be manually adjusted by the user using sliders
- Data quality can be checked and corrected for where necessary
- Keyword parameter limits can be set to flag the expected parameter range
- Aqueous Phase Builder provides full control of salinity modelling
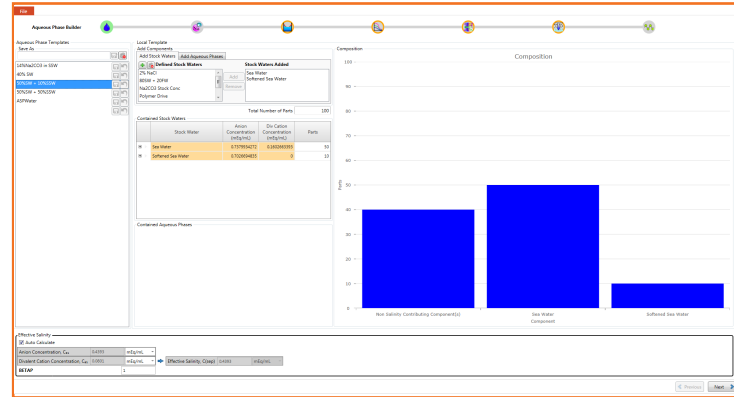- Works with Nexus Sector to place **S3chembuild** output directly into INPUT files
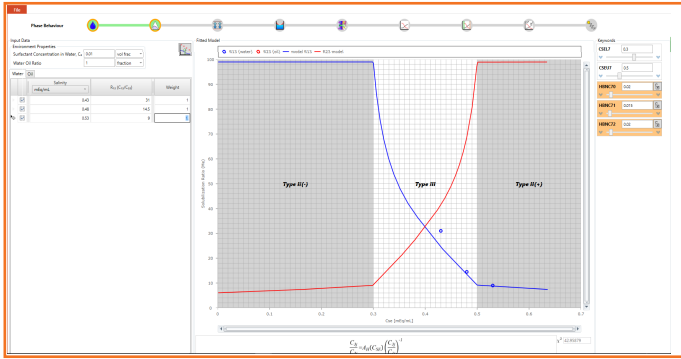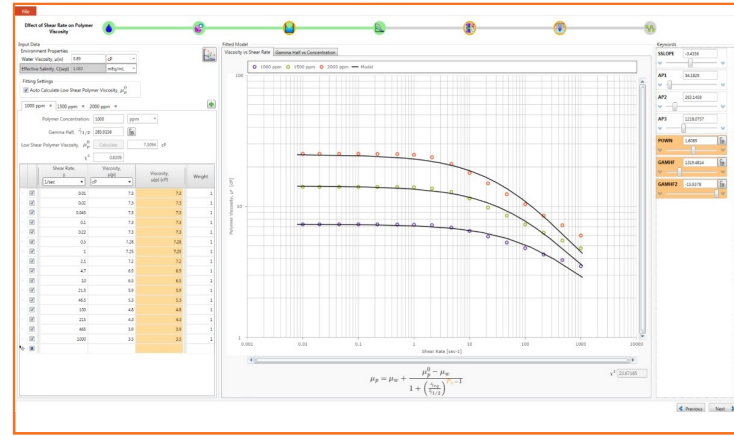

Surfactant Phase Behaviour Fit
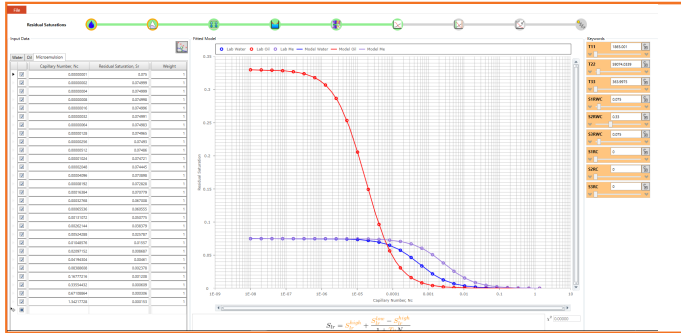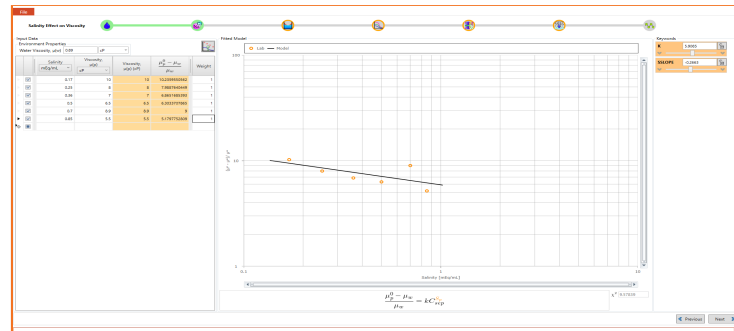

Residual Saturations (Surfactant)
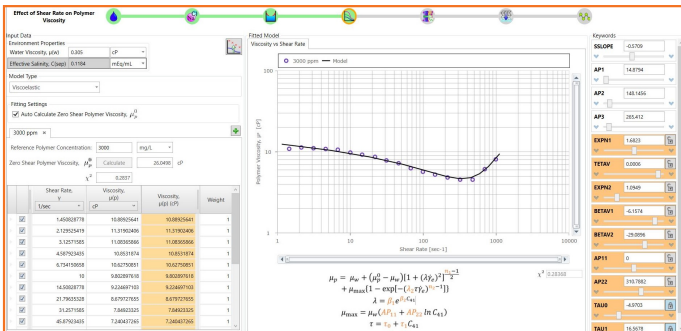
Effect of Shear Rate on Polymer Viscosity

Aqueous Phase Builder

Polymer Summary (Shear Rate)

Salinity Effect on Polymer Viscosity

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