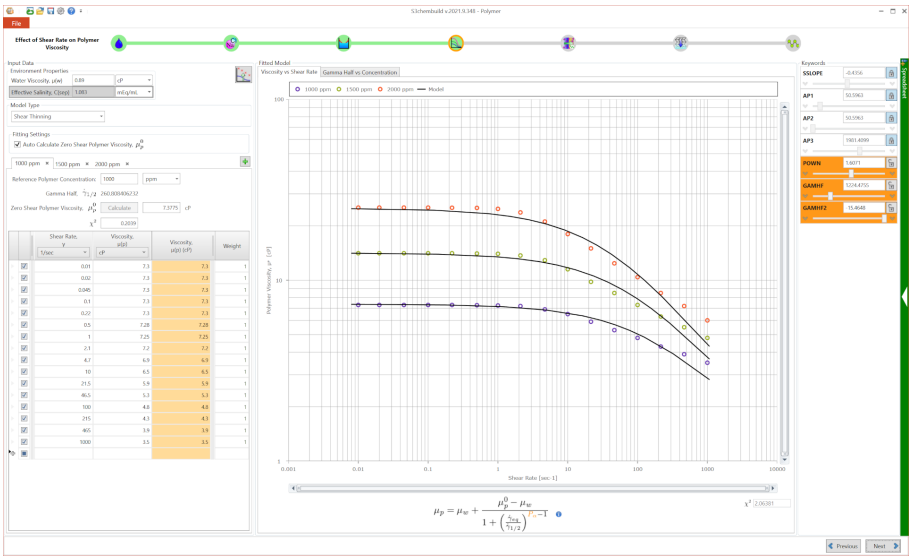
RESERVOIR SIMULATION SUITE

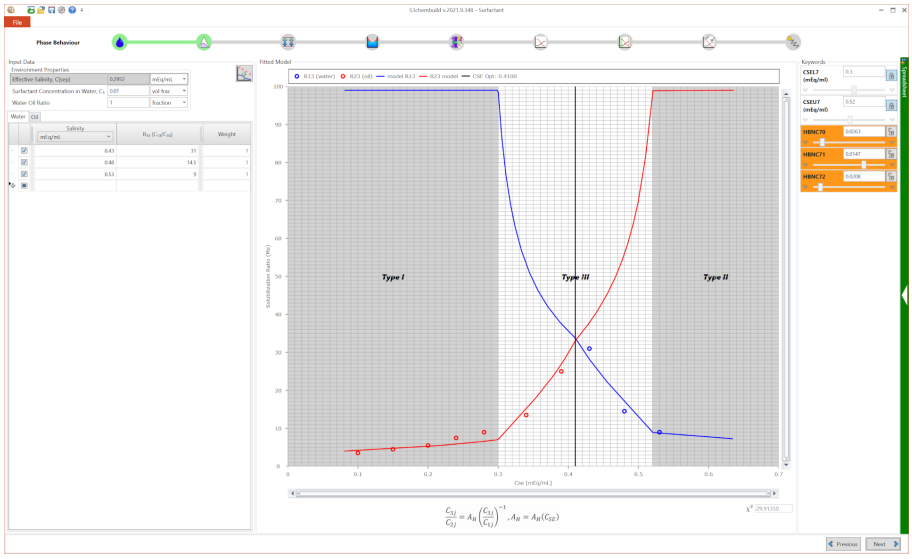
S3chembuild

Faster Formulation Fitting

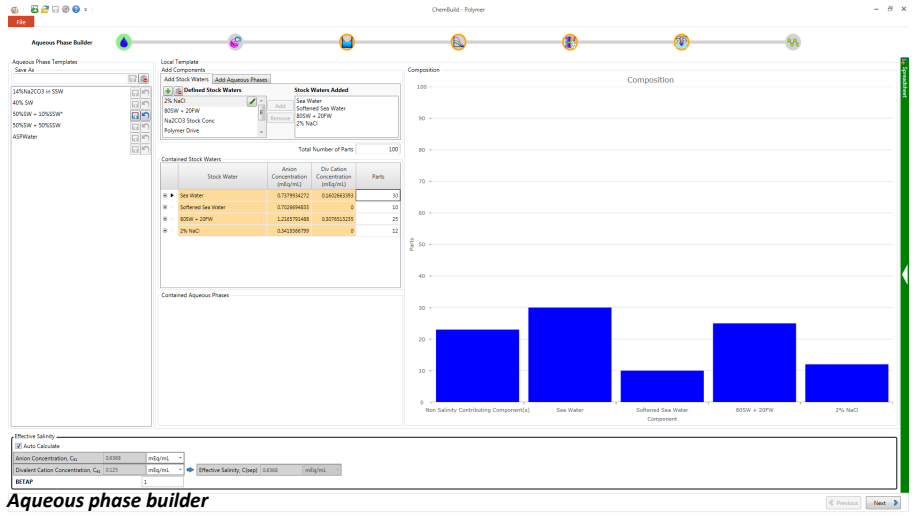
S3chembuild is a state-of-the-art tool for loading, processing and fitting data from chemical EOR lab experiments and moving that data straight into UTCHEM and Meteor simulation decks.



Polymer Rheology



Surfactant phase behaviour



Aqueous phase builder

KEY FEATURES

- Simple loading & fitting of chemical EOR lab data
- Aqueous Phase Builder
- Supports Polymer, Surfactant and SASP workflows
- Consistent and repeatable workflow for all processes
- Fits are visualised and a X^2 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 S3quickbuild to place S3chembuild output directly into INPUT files

BENEFITS

- Huge productivity boost compared to spreadsheet-based analyses of lab data
- Automatic generation of UTCHEM and Meteor input parameters from lab data

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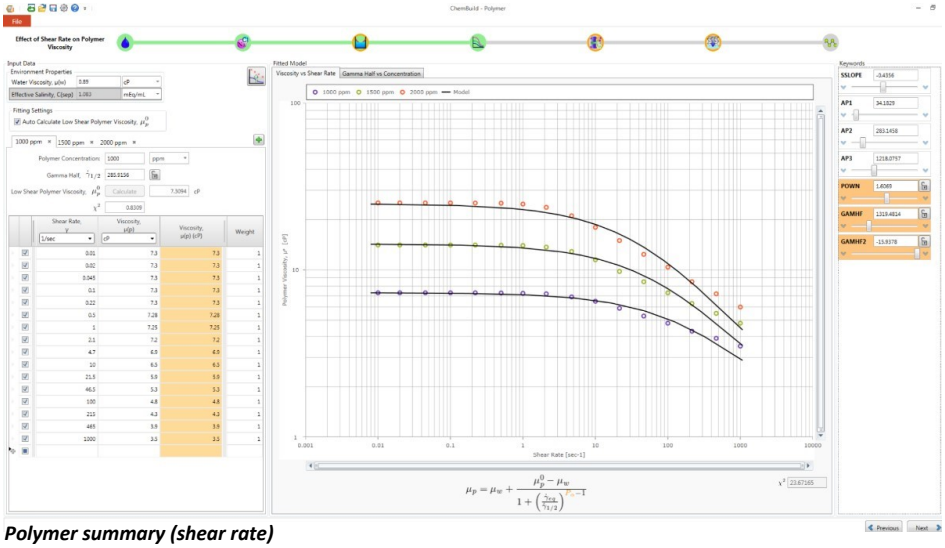
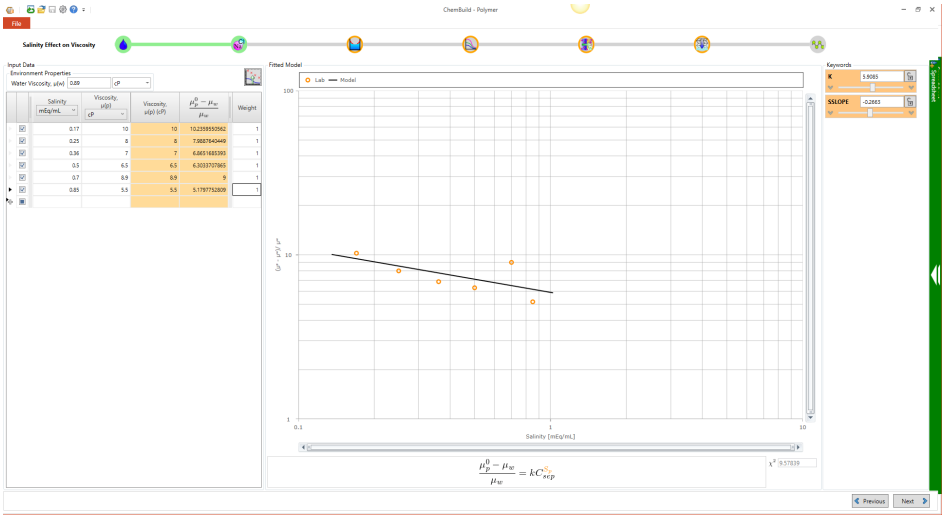
Other benefits

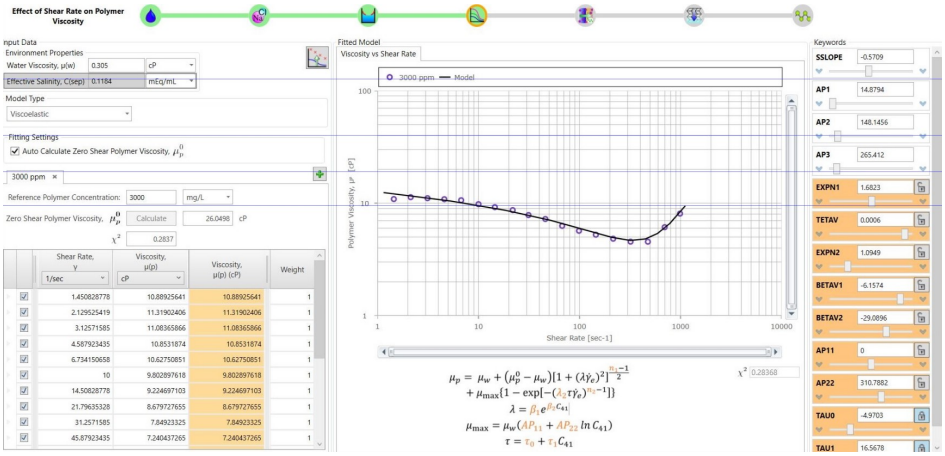
- Combine salts and ions to model in situ water with dedicated Aqueous Phase Builder
- Viscoelastic modelling for polymers is supported
- Weight or ignore data points to quality control the fit



Polymer summary (shear rate)



Salinity effect on polymer viscosity



Salinity effect on polymer viscosity

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