Client List

Infochem has a wide range of customers, some of whom we deal with directly and others who are supported through links with other suppliers of software or hardware. Typical clients shown below give an idea of the industries we serve.

Oil and Gas

AGIP
Baker Petrolite
BG Technology/Advantica
BP
ChevronTexaco
ConocoPhillips
ExxonMobil
JOGMEC/INPEX
Mult-Chem Group
Nalco
Repsol
Shell
Statoil
Talisman
Technip
Total

Equipment Suppliers

Compressor Controls
GEC Alstom
Howden Compressors
Howden Process
Krohne
MAFI Trench
Rodir

Software Vendors

Aspen Technology
FEESA
Honeywell
PSE
Schlumberger
Weatherford

Chemical/ Other

BASF
Borealis
Cryostar
Hydrogas
Nippon Sanso
IAV
IHI
Johnson Controls
Maruzen
Matheson Tri-Gas
Mitsubishi Chemical Co.
Nippon Sanso
Toshiba Fuel Cells
UTC Power
Wacker

Contractors/ Service Co.

Aker Kvaerner
AMEC
AWT
Axis Well Technology
BakerRDS
Clariant
Fluor
Foster Wheeler
Genesis Oil & Gas
Halliburton
IFP
INTEC
Kongsberg
Lummus Technology
MI-SWACO
Oil Plus
Senergy
SWRI
Xodus

Supported by a series of alliances and co-operative ventures, Infochem can call on complementary skills to offer complete and practical engineering solutions to your problems.

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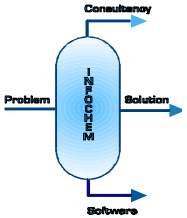
INFOCHEM

physical properties group of KBC



Infochem Computer Services is the leading independent supplier of thermodynamic software and consultancy services to the oil, gas and

Petroleum Engineering

Flow Assurance

Intelligent Instrumentation

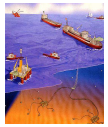
Infochem's expertise in physical properties can offer clients cost savings and increased profits through:

- Early assessment of potential problems such as solid formation which may lead to formation damage or pipeline blockage
- Choice of the best remediation strategy or most efficient maintenance schedule
- Optimisation of production
- Avoidance of hazards to personnel or equipment due to fluid properties
- High fidelity modelling of processes for design, simulation or operator training
- Efficient implementation of thermodynamic software in a range of applications.

Process Modelling

Operator Training

Optimisation & Control



Typical projects

- Potential hydrate formation and inhibition strategies for well start-up
- Effect of halide scale formation on hydrate inhibition
- Modelling of thermodynamic properties of gas hydrates and hydrate inhibitors in heavier fluids and deeper waters
- Flow assurance studies for asphaltene and wax precipitation, including the effects of co-mingled production and gas injection
- Prediction of wax deposition and pigging schedules for subsea pipelines
- Phase behaviour of oil, gas and water mixtures and its influence on multi-phase flow in pipelines
- Dew point control for gases and condensates
- Studies of mercury partitioning and drop-out in natural gases and condensates
- Modelling solid naphthenate precipitation from crude oils by saline waters
- Thermodynamic properties of unusual components or mixtures, such as new refrigerants, for manufacturers and end users
- Developing a new high-accuracy model for air to improve efficiency and reduce tolerances in cryogenic separation processes
- Setting up specific process models, including parameterisation, for petrochemical and organic mixtures
- Investigation of a new hydrate kinetics model
- Development of fast approximations of thermodynamic models for use in real-time simulation
- Well control studies on gas and condensate kick
- Support for software interoperability

Services

Software
State of the art phase and chemical equilibrium software, including formation of hydrates, waxes and asphaltenes.

Consultancy
Analysis of the thermodynamics of engineering problems; causes and solutions.

Training
Provision of courses on PVT Analysis and thermodynamic modelling including solids formation.

Software

Infochem supplies the multiphase equilibrium package, Multiflash. It is available as an interactive Windows program, as a DLL for linking to other Windows software or packages written in C++, Visual Basic or Java. Optional modules allow the software to be configured for different industry sectors or customised for individual client needs.

Multiflash
The standard Multiflash package includes equation of state, activity coefficient and transport property models, a full range of flashes, a phase boundary tracer, a pure component databank, petroleum fraction correlations and a PVT Analysis facility.

Optional modules:
Hydrates/Hydrate Inhibition; Waxes; Asphaltenes; high-accuracy equations of state; DIPPR databank.

Interfaces:
CAPE-OPEN; Excel; Matlab; PIPESIM; gPROMS; HYSYS Upstream; UNISIM; Maximus; ReO; Wellflo; Predici. PVT tables for OLGA, PIPESIM and Prosper.

FloWax
A program for modelling wax deposition in multiphase pipelines. The thickness of the wax deposit and other properties are calculated as a function of time and position and pigging schedules are estimated.

Multiflash applications

Multiflash can be used as a stand-alone program or with third party software applications for:

- Initial assessments of potential operational problems arising from precipitation of solids such as hydrates, waxes and asphaltenes or for more detailed studies of possible formation damage, precipitation in the wellbore and effects of gas injection
- Prediction of inhibitor injection rates for drilling and/or production
- Providing fluid properties to pipeline simulators, taking advantage of the Multiflash characterisation to handle multilateral wells and commingled production
- Linking solid precipitation models to flow assurance models to predict deposition in the pipeline, establishing remediation strategies such as inhibitor injection, control of pressure or temperature, pigging schedules or placement of intervention points (CAPEX,OPEX costs)
- Software for intelligent instrumentation, for example to predict dew points in flow meters to avoid or warn of liquid condensation
- Input into operator training simulators
- Optimisation, in conjunction with third party simulators
- Control systems
- Design and monitoring of topside and production facilities, including the distribution of trace components such as mercury
- Studies of polymer and co-polymer systems including polymer solvent partitioning
- Leak detection and custody transfer using high accuracy equations of state
- Modelling PVT experiments