

# Separation Technology Oil and Gas

- Compact Liquid – Liquid Separation
- Sand Separation
- Gas liquid separation
- Excellent networking opportunities

30. September – 1. October 2010, Stavanger

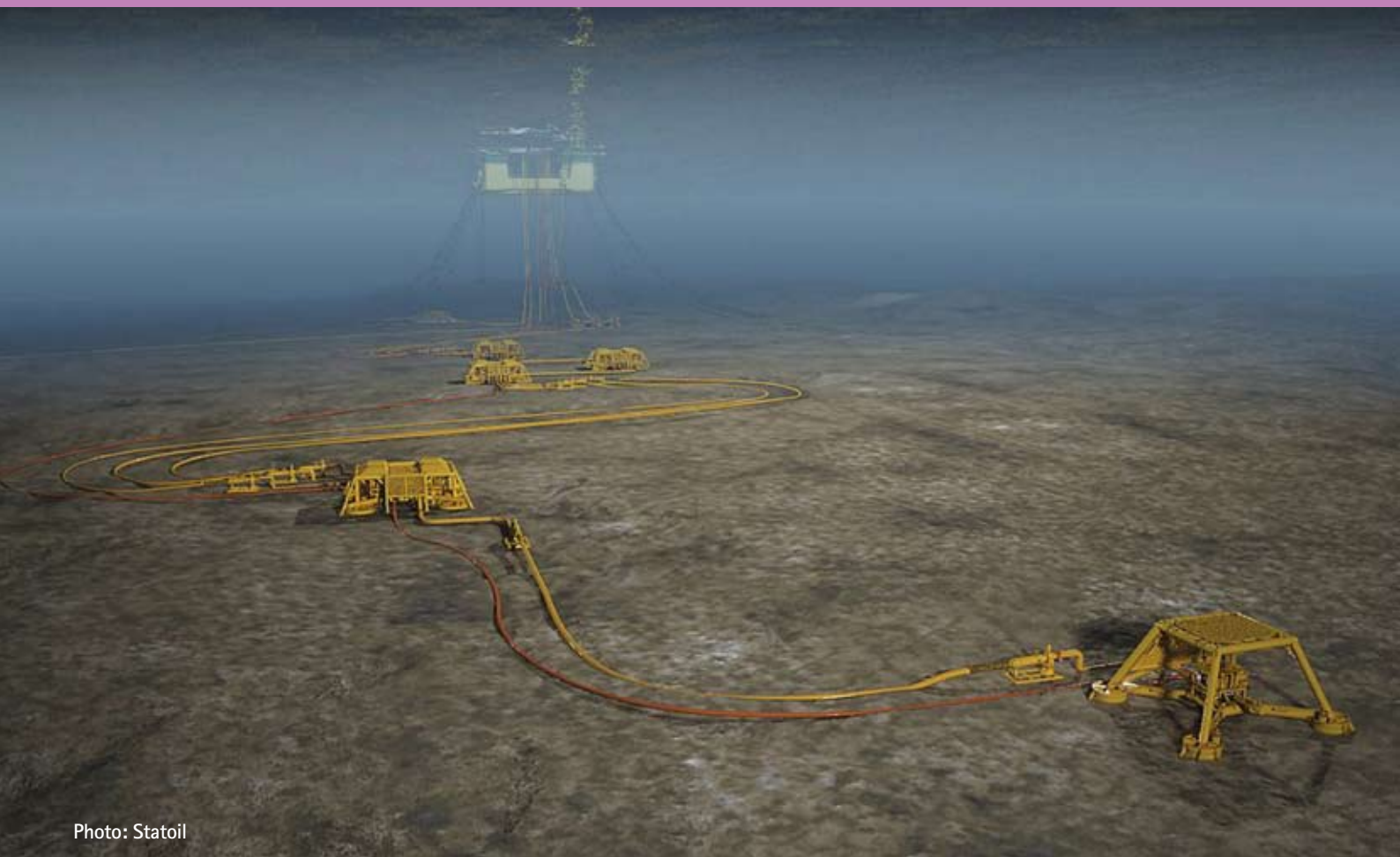


Photo: Statoil

# Separation Technology Oil and Gas

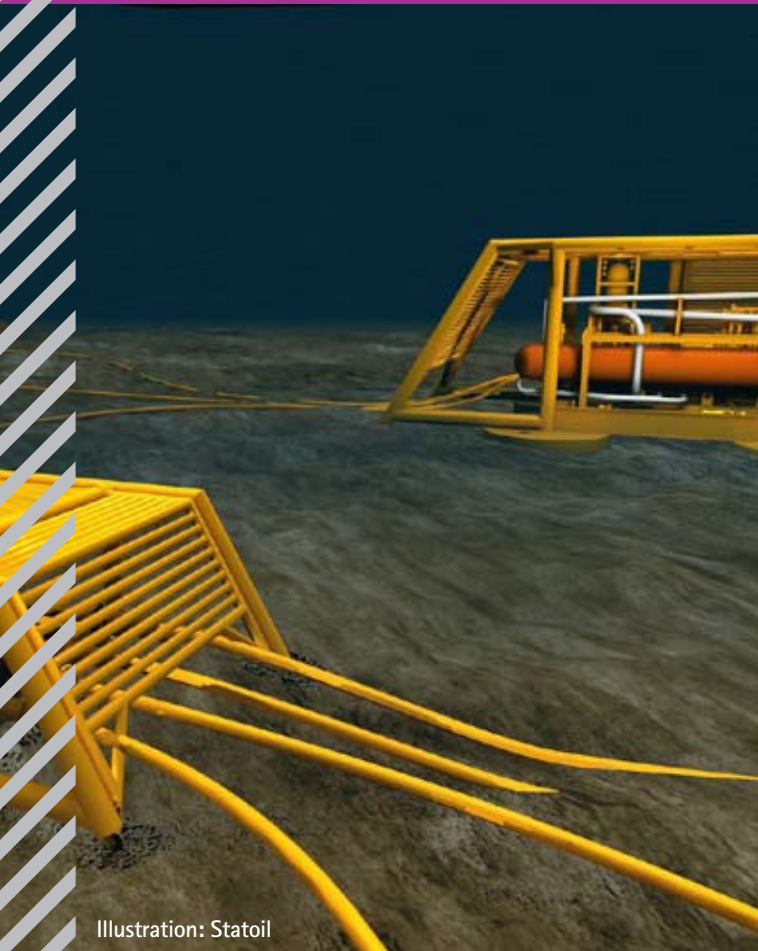


Illustration: Statoil

Welcome to Tekna's International conference focusing on fundamental and practical separation technology in the oil and gas industry.

#### Established forum

The conference has been arranged in Norwegian language since 2001 and is a well-established event for knowledge sharing and valuable networking. We are now happy to welcome also English speaking delegates.

#### Conference focus

The conference will emphasize on the challenges related to design, engineering, operation and upstream oil and gas processing.

#### Program outline

The program is under construction and the main sessions will be on Compact liquid-liquid Separation, Sand Management, Gas/Liquid separation

#### The lecturers

Hear the latest news and be updated by the most prominent professionals in their field. Meet colleagues working with separation issues in the oil and gas industry and join interesting discussions.

#### Who should attend

The conference is for personnel working with process and separation in the oil and gas industry.

Personnel working with operators, contractors, vendors or research institutions will benefit from attending.

Tekna and the program committee look forward to welcome you in Stavanger and to Tekna's first international conference on Separation Technology. We look forward to exiting presentations and valuable and informal discussions.

## KEY INFORMATION

#### TIME AND VENUE:

30. September and 1. October 2010,  
Clarion Hotel Stavanger, Norway

#### TECHNICAL COMMITTEE:

Jon Berntsen, Mator  
Hans Christian Hamre, Shell Technology Norway  
Morten Hana, Aker Solutions  
Magnar Ottøy, Statoil ASA  
Erik Bjørklund, Hamworthy  
Michael Power, BP, UK  
Hugo Poldermann, Shell Global Solutions, The Netherlands  
Stig Helland, Total Norge  
Lise Olaussen, Tekna

#### DELEGATE FEES:

Member of Tekna: NOK 8000,-  
Non members: NOK 9000,-  
Includes web based documentation, luncheons and refreshments during the conference.

#### EXHIBITION:

The conference opens up for companies to display their products and services. Tekna provides floor space and the exhibitors should bring their own display materials such as roll-ups etc.  
Max available floor-space for each company is 2 meters. Price NOK 7000,-

## WEDNESDAY 29. SEPTEMBER 2010

2000 **Get together and Tapas at the event hotel**  
Clarion Hotel, Stavanger

## THURSDAY 30. SEPTEMBER 2010

0900 **Welcome**

### SESSION 1: COMPACT LIQUID-LIQUID SEPARATION

0910 **The Scope for Compact Separation. Design and Operating Experience in Shell**  
Hugo Polderman, Shell Global Solutions International B.V., The Netherlands

0950 **An in-depth description of the Case and why Tekna challenged the industry**  
An in-depth description of the Case and why Tekna challenged the industry  
Jon Berntsen, Mator

**CASE STUDY - Design of compact liquid-liquid separation – will it work?**

The following presentations will answer to the given Case. Each of the presenting companies will present their solution.  
See case info here

1010 **Compact and Efficient Liquid/Liquid/Solids Separation with Centrifugal Technology**  
Key words: Automated self-cleaning, Flexible, Robust, Turndown  
Thomas Fislage or Jarle Richter Flaata, Gea Westfalia Separator

1045 **Inline oil water separation technologies – potential applications for surface and subsea operations**  
Key words: Compact, Inline, Separation, oil-water  
Carl Wordsworth, Caltec Ltd, UK

1115 **Break**

1150 **Compact separation by combining electro-coalescence and degassing in the same vessel**  
Erik Bjørklund, Hamworthy, Norway

1230 **Lunch**

1330 **Compact separation solutions for the Y field Development Project using Aker Processing Technologies**  
William Finch or Ian Bedwell, Aker Solutions

1410 **Enabling ultra-compact processing by use of InLine Separation Technology**  
Key words: Inline Separation Technology, Cyclonic Separation, Electrostatic Coalescence, Compact Water Treatment  
Rune Fantoft, FMC Technology, Norway

1445 **Break**

1515 **Compact Liquid /Liquid Separation Using the State of the Art Electrostatic Treaters**  
Mauritz Talseth, Fredric Carlson, Cameron, Norway

1550 **Panel Discussions**  
Chair: Jon Berntsen, Mator

1630 **Vendor Session**  
Visiting the vendors at their stands / beverages and Snacks

1730 **End of technical program**

1830 **Visit at the Stavanger Oil Museum**

2000 **Conference Dinner at Bølgen & Moi – Stavanger Oil Museum**

## FRIDAY 1. OCTOBER 2010

### SESSION 2: SAND

0830 **Introduction to session**  
**Challenges involved with Sand Production - from Reservoir to Process Facilities**  
Key words: accuracy of sand prediction, input to design basis, competence, multidiscipline work processes  
Kjell Lejon, Statoil, Norway

0900 **Compact sand separation in well stream**  
– Experiences from Gullfaks  
Leif Kjetil Hinna Gausel, Statoil

0930 **How to maximize Production without Compromising on Safety in a Sand Producing Regime**  
Key words: Acceptable Sand Rate (ASR) strategy, sand production and erosion monitoring, erosion modelling, CFD analysis  
Oddmund Kvernfold, DNV, Norway

1000 **Break**

1030 **Testing of Sand Monitoring Systems under controlled Conditions**  
Background data from Statoil experiences, test loop capabilities and layout, vendor involvement, demonstration day, main results  
Chiara Emiliani, Statoil, Norway

1100 **Sand production - Minimum standard**  
– How to live with sand  
Shell, U.K

1130 **Lunch**

### SESSION 3: GAS LIQUID SEPARATION

1230 **Gas/liquid separation – design & operating experience with inlet scrubbers for gas dehydration plants and acid gas removal plants**  
Hans Nooijen, Shell Global Solutions International B.V., The Netherlands

1300 **Gas/liquid Separation - HIPGLS**  
– Practical use  
Richard Arntzen, Shell Technology Norway

1330 **Inline gas-liquid separation technology – CompactSep JIP, Statoil/Chevron/Petrobras**  
Olav Kristiansen, Statoil, Norway

1400 **Break**

1430 **Subsea separation- Marlim Project**  
FMC Technology or Petrobras

1500 **Dalia - Polymer Flooding: Impact of polymer injection on water-oil separation. Tests carried out in the IFP loop in Solaize**  
Thierry Palermo, Total E&P, France

1530 **Summary**

There has been a drive to develop more compact and efficient liquid-liquid separation technology.

TEKNA has challenges the vendors to present their ideas of how to find the best technical solution to a given CASE based Development of the "Y" Field that has concluded that the selected Design cannot accommodate a "traditional" liquid-liquid separation design. It becomes too big and too heavy!

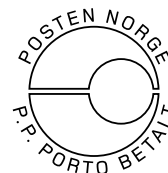
The vendors have been introduced to a technical description containing all relevant information (fluid properties, production rates, simulation and more) and information on the current design, weight and size, not suitable for the FPSO. No restrictions on design as long as the specifications are met, deliver oil on spec.

**Key elements to be rated**

- Storage oil quality < 0,5 % BS&W
- The liquid turn down and product quality
- Description of how to operate during start up and handling of turn down
- Identify how the proposal influence CAPEX with respect to "typical" design
- Identify how the proposal influence OPEX with respect to "typical" design
- Special needs
- CO<sub>2</sub> footprint. Possible reduction addressed if feasible. RVP achieved at 70 °C

Program might be subject to change due to circumstances beyond the control of the organiser

# A



Returadresse:  
Tekna  
Postboks 2312 Solli, N-0201 Oslo

## REGISTRATION

- [www.tekna.no/intconf](http://www.tekna.no/intconf) or [teknakurs.no](http://teknakurs.no)
- [registrering@tekna.no](mailto:registrering@tekna.no)
- telephone: + 47 22 94 75 60/61

## KEY INFORMATION

**Project no**  
1002505

**Time**  
30. September and 1. October 2010

**Venue**  
Clarion Hotel Stavanger, Norway

**Technical Committee**  
Jon Berntsen, Mator  
Hans Christian Hamre, Shell Technology Norway  
Morten Hana, Aker Solutions  
Magnar Ottøy, Statoil ASA  
Erik Bjørklund, Hamworthy  
Michael Power, BP, UK  
Hugo Poldermann, Shell Global Solutions, The Netherlands  
Stig Helland, Total Norge  
Lise Olaussen, Tekna

**Accommodation**  
Clarion Hotel Stavanger  
Single room pr night, including breakfast, pr night NOK 1495,- .  
Accommodation is to be paid directly to the hotel upon departure.  
The price above is negotiated by Tekna and will only be valid when booked through Tekna upon registration to the conference  
Registration requests can be pointed to [kurs@tekna.no](mailto:kurs@tekna.no)

**Delegate fees**  
Member of Tekna: NOK 8000,-  
Non members: NOK 9000,-  
Includes web based documentation, luncheons and refreshments during the conference.

**Exhibition**  
The conference opens up for companies to display their products and services. Tekna provides floor space and the exhibitors should bring their own display materials such as roll-ups etc.  
Max available floor-space for each company is 2 meters. Price NOK 7000,-  
Potential exhibitors can register interest upon registration to the conference or if questions contact [lio@tekna.no](mailto:lio@tekna.no)

**Conference dinner - The Norwegian Petroleum Museum**  
The Norwegian Petroleum Museum is a museum for everyone. Its exhibits explain how oil and gas are created, discovered and produced, and what they are used for. The museum also provides information about technological advances and the way petroleum influences Norwegian society. Original objects, models, films and interactive exhibits illustrate everything from everyday life offshore to technology and dramatic incidents. There will be a guided tour through the museum prior to the conference dinner.  
Guided Museum tour and conference dinner NOK 750,-

**Cancellation policy**  
Cancellations made later than 17. September 2010 will be subject of a service charge of NOK 1200,-.  
There will be no refunds for cancellations after the 23 September 2010  
NB! Written cancellation is only!

**Payment options:**  
1. Online Visa Payment Service at [www.tekna.no/intconf](http://www.tekna.no/intconf) upon registration  
2. Bank transfer  
3. Credit card (Diner, Eurocard, Master Card, AMex etc)  
3. On-site payment with credit card

**Bank details**  
Bank name: DnBNOR  
Bank account : 1644 2555 803  
Swift: DNBANOKKXXX  
IBAN NR: NO8016442555803  
NB! Ref code 1002505 and delegates name

**Project manager:**  
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## UPCOMING CONFERENCES

### PRODUCED WATER MANAGEMENT

18-20 January 2011, Stavanger

### OIL FIELD CHEMISTRY SYMPOSIUM

27-30 March 2011, Geilo

Abstract submission deadline:  
10 October 2010

### HEAVY OIL TECHNOLOGY

12-14 April 2011, Stavanger

Abstract submission date:  
10. October 2010

## MEDIA SPONSORS

**upstream**  
The International Oil & Gas Newspaper

 **Tekna**

Tekna – Teknisk-naturvitenskaplig forening