

Registration

BHR Group

EXPERTS IN FLUID ENGINEERING

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Multiphase](http://www.bhrconferences.com/Multiphase)

7th North American Conference on

MULTIPHASE TECHNOLOGY



**Banff, Canada
2–4 June 2010**

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Introduction

Multiphase Technology is the future of oil & gas production and a landmark technology in the race to conserve the world's resources by enabling extraction at minimum energy cost.

This industry changes constantly and the pressure to extract oil and gas more cheaply from difficult locations increases. How will you respond?

The 12th Multiphase Technology Conference will give you the latest proven field techniques plus novel approaches currently being tested.

For Multiphase Technology to be a success, solutions are needed for the solids encountered whether its removal before transmission in the case of sand, or containment, without the need for chemical treatment, in the case of hydrates. As our production systems become more complex, we need answers. Now we must seek not only the practical answers to the wide range of climates, topographical environments and ecological challenges but also the vision to see where this technology must go in the future.

You will have the opportunity to discuss new research and developments, to consider innovative solutions and to explore technology transfer between industries at a technically high level.

Who Should Attend?

Anyone engaged in the application, development and research of Multiphase Technology for the oil and gas industry as well as designers, facility and operations engineers, consultants and researchers from operating, contracting, consultancy and technology companies.

Language

The Conference and the published proceedings will be English.

Venue, Timing and Registration

The Conference will be held at:

Banff Park Lodge Hotel,
222 Lynx St., PO Box 2200
Banff, Alberta, T1L 1K5, Canada.

A registration drinks reception will be held on the evening of Tuesday 1 June from 5–6:30pm. Registration will take place on Wednesday 2 June from 8–9am before the Conference begins.



Travel

The major airport is Calgary International. Coaches and vans operate directly to Banff Park Lodge (see www.banffairporter.com or www.calgaryairport.com for details). All major rental car companies are available.

Accommodation

Delegates are responsible for booking their own accommodation in Banff.

An allocation of rooms has been reserved at a special discounted rate at:

Bow view lodge:	\$119.00
Bow View Lodge river view room:	\$159.00
Superior Room:	\$210.00
Deluxe Jacuzzi room:	\$270.00
Executive, Parlour or Lodge Suite:	\$330.00

Delegates can book (and change) their reservations online directly with the hotel at www.banffparklodge.com and selecting Reservations / Make a Conference Reservation and entering Group ID # 11402 Password 559. Please note that anyone extending their stay pre or post, must call Banff Park Lodge Reservations Office at 800-661-9266. Book before **Saturday 17th April 2010** to achieve the discounted rate. All hotel bookings must be guaranteed by a credit card.

Exhibition

Exhibitors are advised to contact the Conference Organiser to register.

Exhibition cost £1250 and includes:

- 1 delegate registration – full access to technical sessions and social programme
- space with one table (5x2.5ft) and a chair (all additional equipment must be provided by the exhibitor)
- lunch and refreshments daily
- attendance to the registrations and gala dinner
- 5 minute presentation slot from stage during the conference
- contact details of delegates attending the conference (post conference)



Would you like your company brochure in the delegate bags?

There is an opportunity for companies to insert promotional literature in the delegate information packs at a cost of £325. Material for insertion must be sent to the conference hotel before 26th May 2010. A sample of literature must be sent to the BHR Group Limited when making your booking for this service.

Want to advertise your company in the proceedings?

A full page of advertising space in the book and CD version of the proceedings. The cost of each page is £381.88 including VAT. The book is a soft bound volume, produced in Royal Octavo size. As well as being distributed to all attendees of the Conference, the proceedings and CD are sold worldwide after the event. Copy must reach the Conference Organiser by 30th April 2010 to meet the publishing deadline.

Conference Proceedings

All delegates receive a book plus CD of the conference proceedings within the fee. To obtain further copies, please email Debbie Carrington: confx3@bhrgroup.co.uk.

Technical Advisory Committee

Mr S Smith (Chairman)	Neotechnology Consultants, Canada
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Senior Consultants

Professor J Brill
Dr G Gregory

Enquiries

Enquiries should be addressed to:

Ally Davies

Senior Conference Organiser

BHR Group Limited

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Bedfordshire MK43 0AJ, UK

Tel: +44 (0)1234 756522

Fax: +44 (0)1234 750074

E-mail: confx2@bhrgroup.co.uk

Web: www.bhrconferences.com

PROVISIONAL PROGRAMME

For guidance only and may be subject to change

Case Studies

Simulating liquid loading in gas wells

W Schiferli, S Belfroid, TNO Science Industry, The Netherlands; B Hu, SPT Group, Norway; C Veeken, Shell E&P Europe, The Netherlands

Steady state and interrupted production through a deep water black oil system

T Hill, T Johnson, V Hacala-Nicol, BP Exploration, Angola

Modeling the clean-up operation of a producer well in the Gulf of Mexico

S Duplat, H Dong, B Hu, R Shear, SPT Group; R Hanssen, H Yoo, Total, USA

Thermal management system: an efficient way of mitigating flow assurance challenges in deep water fields

M Myo Thant, M Mohd Saleehud-Din, PETRONAS; G Hewitt, C Hale, Imperial College; G Quarini, University of Bristol, UK

Uncertainty analysis of multiphase flow modeling; a case study for vertical flows

D Poluszny, K Klavetter, S Cremaschi, C Sarica, The University of Tulsa; H Subramani, Chevron Energy Technology Company, USA

Case study in displacement modeling techniques from a deepwater field in the Gulf of Mexico

H Shi, BP, L Norris, SPT Group, R Berger, Manatee, USA

Equipment

Forces on bends and T-joints due to multiphase flow

S Belfroid, W Schiferli, M Carnelutti, TNO Science & Industry, The Netherlands

Investigation of sorption phenomena in multiphase conveying processes

F Hatesuer, T Groth, M Reichwage, Leibniz University of Hanover; D Mewes, J H Bornemann GmbH, A Luke, Leibniz University of Hanover, Germany

Effect of pipe diameter and high oil viscosity on drift velocity for horizontal pipes

R Ben-Mansour, King Fahd University of Petroleum & Minerals, Saudi Arabia; A Sharma, B Jeyachandra, The University of Tulsa, Tulsa, USA; B Gokcal, Technip, Houston, USA; A Al-sarkhi, King Fahd University of Petroleum & Minerals, Saudi Arabia; C Sarica, The University of Tulsa, Tulsa, USA

Neural network based performance control of a compact axial flow cyclonic separator

N Qazi, H Yeung, Y Cao, Cranfield University, UK

A New Wireless Sensor-based Tomographic Device to Determine the Liquid Saturation in a Multiphase Flow

M Meribout, Petroleum Institute, Abu Dhabi, UAE

Experimental

Liquid entrainment in gas at high pressure

F Viana, Southwest Research Institute, San Antonio; I Mantilla, G Kouba, R Roberts, Chevron Energy Technology Company, Houston, USA

A Taylor-Couette rotational plate turbulent flow apparatus for assessing aging of paraffin deposited during offshore waxy crude transportation

K Mustaqim, H Zeinali, University of Alberta; P Toma, PRT Consultant Limited, Canada

Selective extraction of fine solids particulate matter – effect of turbulent sublayer burst activity – experimental and theoretical investigations

H Zeinali, P Toma, E Kuru, School of Mining and Petroleum Engineering, University of Alberta, Canada

Experimental investigation of the horizontal slug flow of air-water mixtures using the ultrasonic technique and high-speed filming

F Grangeiro, Universidade Estadual de Campinas (UNICAMP); E Tanahashi, R Carvalho, Universidade Federal de Itajuba (UNIFEI); V Bizotto, Universidade Estadual de Campinas (UNICAMP), Brazil

Experimental study of the head transfer in the intermittent horizontal two-phase flow pattern

I Lima, Petrobras, A Bannwart, Unicamp, Brazil

A method for reducing the negative effects of long slugs

U Kadri, R Henkes, R Mudde, R Oliemans, Delft University of Technology, The Netherlands

Experimental investigation of the horizontal slug flow of air-water mixtures using the ultrasonic technique and high-speed filming

F Grangeiro, Universidade Estadual de Campinas (UNICAMP); E Tanahashi, R Carvalho, Universidade Federal de Itajuba (UNIFEI); V Bizotto, Universidade Estadual de Campinas (UNICAMP), Brazil

Flows

FlowManager TM Dynamic: A new transient multiphase flow simulator for online surveillance, optimization and prediction of subsea oil and gas production

K Holmas, A Lovli, RMC Technologies, Asker, Norway

Dynamic multiphase flow models for control

C Martins da Silva, Chemtech; O Nydal, NTNU, Norway

A comparison of OLGA with two- and three-phase high pressure pipe flow experiments: flow regime prediction and hydrodynamic slug statistics analysis

B Helgeland Sannaes, G Johnson, StatoilHydro Research Centre, Norway

Heavy Oils

The effect of fluid dynamic forcing and gravity on the stability of W/O surfactant stabilised emulsions

D Harbottle, J Rane, S Banerjee, The Energy Institute, Grove School of Engineering, City University of New York, USA

Offshore heavy oil production using ESPs – achievements and difficulties when using OLGA modeling

C Nascimento, R Mendes, Petrobras, Brazil

Modelling

Evaluation of measurement uncertainty in multiphase flow by Monte Carlo simulation

T Arubi, H Yeung, Cranfield University, UK

A model for wetted wall fraction and gravity center of liquid film in gas-liquid pipe flow

H Zhang, C Sarica, University of Tulsa, USA

A comparison of mechanistic and empirical models for non-boiling heat transfer in gas-liquid flow in pipes

P Adames, Neotechnology Consultants, Canada

Recent progress in CFD modelling of multiphase flow in horizontal pipes

A Tomasello, S Lo, CD-adapco, UK

Adjustments of velocity profile coefficients for one-dimensional multiphase flow code

S Kalogerakos, M Gourma, C Thompson, Cranfield University, UK

Slugs and Slurries

Severe slugging in oil-well simulations using a drift flux code

S P C Belfroid, R van der Linden, G Alberts, TNO Science & Industry Delft, The Netherlands; R Aasheim, StatoilHydro, Porsgrunn, Norway

CFD modelling of severe slugging in pipeline-riser system

L Xing, H Yeung, Cranfield University, UK

A simplified approach for hydrate plugging risk evaluation in gas-condensate line

A Terenzi, E Bonato, Saipem S.p.a, Italy

Hydrodynamic slug flow modeling

T Danielson, ConocoPhillips, USA

Determining rheology for settling suspensions

A Amiri, Norwegian University of Science & Technology; S Nuland, Institute for Energy Technology; G Oye, J Sjoblom, Norwegian University of Science & Technology, Norway

Entrainment of gas and its subsequent transport in the slug in two-phase flow

B Hu, S Nuland, J Nossen, M Langshoft, C Lawrence, Institutt for Energiteknikk, Norway

REGISTRATION

Book online at www.bhrconferences.com/Multiphase

The registration fee includes entrance to all technical sessions from 2–4 June 2010, proceedings, lunch and refreshments daily, and entrance to the both the receptions and gala dinner.

Bringing more than 2 colleagues?...contact the organisers for group discounts!

Book by 4 May to receive your early booking discount

Early Bird Rate ends 4 May

Presenting author £648.00

Delegate £864.00

Students and
Graduates £480.00

Full registration from 5 May

Presenting author £720.00

Delegate £960.00

**IMPORTANT: Delegates wishing to make payment in Canadian Dollars must add 5% GST to their fee and should contact Vanessa Richmond at Neotechnology Consultants (vanessa.richmond@neotec.com).*

Early bird rate – applicable to all bookings received with payment on or before 4 May 2010.

Presenting authors – each presenting author (maximum of 2) is entitled to a 25% discount off the conference fee.

Students and Graduates accompanied by a full paying delegate are entitled to 50% discount of the full Conference fee. Please contact the Conference Organiser directly to register.

REGISTRATION

How do I register?

- ◆ **BOOK ON-LINE** at www.bhrconferences.com/Multiphase
- ◆ **Email** – credit card payment details should be entered on the registration form by completing the appropriate boxes and sending to Debbie Carrington at confx3@bhrgroup.co.uk
- ◆ **Telephone** – Call Debbie Carrington on +44 (0) 1234 756561

How do I pay?

- ◆ **Cheque** – please make payable to BHR Group Limited
- ◆ **Sterling Bank Drafts** – delegates attending from countries with currency restrictions may wish to use sterling bank drafts
- ◆ **Bank Transfers** – payable to: National Westminster Bank Plc,
Cranfield University Branch,
Wharley End, Cranfield,
Bedford MK43 0SR, UK

Sterling payments

Account No: 36565466 IBAN: GB40 NWBK 6006 5636 5654 66
Sort Code 60-06-56 BIC: NWBK GB 2L

US Dollar payments

Account No: 140/00/39509273 IBAN: GB43 NWBK 6073 0139 5092 73
Sort Code: 60-06-56 BIC: NWBK GB 2L

Cancellations

A full refund (minus a £50 admin fee) will be made for cancellations received on or before 19th May 2010. No refunds will be made for cancellations after 19th May 2010, however substitutions can be made at anytime.

BHR Group Slurry Handling Course – Calgary 7-8 June 2010

If you design and specify plant and systems to handle solids in liquids, this course is for you.

The course will cover:

- measurement of physical properties of different slurry types and its application to the design of pipelines for both “non-settling” and settling slurry flows
- on-line slurry instrumentation for flowrate and solids concentration
- pipe cleaning methods
- valves
- wear and slurry pump selection and sizing.

To be held at Neotec, Calgary. For further information and a booking form please visit the BHR Group website: www.bhrgroup.com or contact Dr Nigel Heywood: Nheywood@bhrgroup.co.uk. Direct dial: + 44 124 756509

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Account No: 36565466 IBAN: GB40 NWBK 6006 5636 5654 66
Sort Code 60-06-56 BIC: NWBK GB 2L

US Dollar payments

Account No: 140/00/39509273 IBAN: GB43 NWBK 6073 0139 5092 73
Sort Code: 60-06-56 BIC: NWBK GB 2L

INVOICE AND REGISTRATION FORM

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Banff, Canada: 2–4 June 2010

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Your details

Please complete in block letters ticking appropriate boxes

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