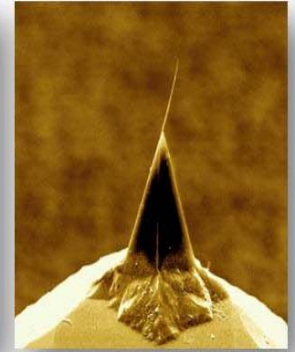
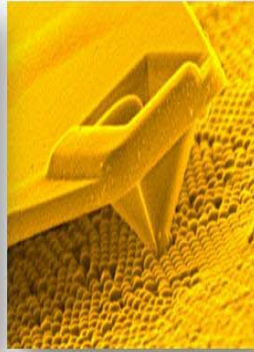




# Nanotechnology In Upstream E&P: Nano-Scale Revolutions To Mega-Scale Challenges?

>>Registration deadline:  
4 January 2008

>>Register by fax, email or  
online at [www.spe.org/atws](http://www.spe.org/atws)



## Workshop Description

To date, there seems to be a mutual lack of awareness between the Exploration and Production (E&P) sector in the Oil and Gas industry and the Nanotechnology community. While the E&P sector may be uninformed of the full and hidden potentials of nanotechnology, there is a corresponding under-appreciation of the E&P challenges among nanotechnologists. This Applied Technology Workshop will provide a golden opportunity for participants from both fields to share their expert knowledge and promote means for future collaboration.

## Workshop Objectives

This ATW aims to:

- Provide an overview and increase the general awareness about nanotechnology in upstream E&P
- Lay out key challenges in the E&P upstream sector and illustrate capabilities of nanotechnology in addressing these challenges
- Examine how to leverage the billions of dollars of investments in nanotechnology for use in upstream E&P
- Promote networking between nanotechnologists and E&P technology professionals
- Determine the extent to which the oil & gas industry can draw upon lessons learned from nanotechnology developments in other industries
- Create a high-level nanotechnology roadmap for upstream E&P

## Who Should Attend

Professionals from industry, academia and government who are interested in nanotechnology and its applications in the oil and gas industry.

### Steering Committee

**Mazen Kanj** (Chairman)  
Saudi Aramco

**Younane Abousleiman**  
U. of Oklahoma

**Wade Adams**  
Rice U.

**Zahid Bhatti**  
ADCO

**Mario Chiaramonte**  
Eni S.p.A.

**Pascal Dauboin**  
Total S.A.

**Roger Ghanem**  
U. of Southern California

**Nasser Hamdan**  
American U. of Sharjah

**Wenhai Han**  
Agilent Technologies

**Odd Inderhaug**  
StatoilHydro

**Rami Kamal**  
Saudi Aramco

**Ray Lesoon**  
Shell

**Yousuf Al-Mehairi**  
ADCO

**Atef Onaisi**  
Total S.A.

**Buc Slay**  
Halliburton Energy Services

**Nouar Tabet**  
King Fahd U. of Petroleum  
& Minerals

**John Uilo**  
Schlumberger

**Franz Ulm**  
Massachusetts Institute of  
Technology

**Darrin Willauer**  
Baker Hughes

**Koji Yamamoto**  
JOGMEC

## General Information

### Format:

Welcome Reception & Dinner followed by two and a half days of informal discussions prompted by selected keynote presentations and discussions. Attendees will be assigned to discussion groups on a random basis for the breakout session on the second day to maximise the opportunity to interact with other participants.

### Poster Sessions:

The Steering Committee encourages registrations from professionals who are able to prepare and present a poster on a relevant project. Details of the poster size and facilities will be provided in the joining instructions.

### Attendance:

Registrations will be accepted on a first-come first-served basis. The Steering Committee encourages attendance from those who can contribute to the workshop most effectively either in discussions or with posters. A mix of attendees in terms of geographic origin, companies and discipline will be encouraged.

### Documentation:

- Proceedings will not be published; therefore, formal papers and handouts are not expected from speakers.
- Work in progress, new ideas, and interesting projects are sought.
- Professionally-prepared visual aids are not required; handwritten view graphs are entirely acceptable.
- Note-taking by participants is encouraged. However, to ensure free and open discussions, no formal records will be kept.

### Workshop Deliverables:

- The Steering Committee will appoint a "scribe" to record the discussions and to produce the full Workshop Report for SPE.
- This report will be circulated to all attendees as the Workshop deliverable within 4-6 weeks following the Workshop. The copyright of the report is with SPE.
- PowerPoint presentation materials will be posted on a specific SPE URL address after the Workshop. Provision of the materials by the discussion leaders will signify their permission for SPE to do so.

### Commercialism:

In keeping with ATW objectives and the SPE mission, excessive commercialism in posters or presentations will not be permitted. Company logos must be limited to the title slide and used only to indicate the affiliation of the presenter and others involved in the work.

### Attendance Certificate:

All attendees will receive an attendance certificate attesting to their participation in the workshop. This certificate will be provided in exchange for a completed Workshop Questionnaire.

### Continuing Education Units:

This workshop qualifies for SPE Continuing Education Units (CEU) at the rate of 0.1 CEU per hour of the Workshop.

### Registration Information:

This is a residential workshop. The registration fee is **USD 2,100** for **SPE members** and **USD 2,200** for **non-members**.

The fees includes the following:

- All workshop sessions
- 3 nights accommodation based on single occupancy, with check-in on Sunday, 3 February 2008 and check-out on Wednesday, 6 February 2008
- Welcome reception followed by dinner on Sunday, 3 February 2008
- Group dinner on Tuesday, 5 February 2008
- Daily coffee breaks and luncheons
- Workshop Workbook and Certificate of Continuing Education Units (CEU)

**Note:** Registration fee does not include hotel accommodation and meal costs for additional family member(s)

### Registration Policy:

- Registration fee **MUST** be paid in advance for attending the Applied Technology Workshop.
- Full fixed fee is charged regardless of the length of time that the registrant attends the Workshop.
- Fixed fee cannot be prorated or reduced for anyone (Workshop chairpersons, committee members, speakers, discussion leaders, students and registrants).
- Workshop is designed to be fully residential. Attendees are expected to attend all workshop sessions and are not permitted to attend on a partial basis.

### Cancellation and Refund Policy:

- A processing fee of **USD 100** will be charged for cancellations received before the registration deadline **4 January 2008**.
- For cancellations received after the registration deadline, **4 January 2008**, 25% refund will be made to the registrant.
- No refund on cancellations received within seven (7) days prior to the Workshop date, i.e. on or after **27 January 2008**.
- No refund will be issued if a registrant fails to attend the Workshop.

### Workshop Venue:

**Hilton Dubai Jumeirah**

PO Box 2431

Dubai, United Arab Emirates

Telephone number: +971.4.399.1111

Fax number: + 971.4.399.1112

Website: [www.hilton.com](http://www.hilton.com)

### Attendees' Information:

General and detailed accommodation information will be forwarded to registrants with the attendee package prior to the scheduled Workshop in February 2008.

**ATTENTION NON-MEMBERS JOIN SPE DURING THIS WORKSHOP AND RECEIVE YOUR FIRST YEAR'S MEMBERSHIP FREE!  
SUBMIT YOUR MEMBERSHIP APPLICATION ONSITE!**

## Tentative Technical Agenda

### Sunday, 3 February

**1600 - 1800 hours**

Workshop Registration

**1900 hours**

Welcome Reception and Dinner

### Monday, 4 February

#### **Session 1: Current Reality: Uncovering the Strengths. Identifying the Needs**

**0830 - 1130 hours**

- What is Nanotechnology (NT)?
- What are the resources of NT?
- What are the challenges of NT?
- What is the status of NT in upstream E&P?
- What are some of the current NT-based applications in upstream E&P?

#### **Session 2: Practices and Challenges: Learning From Mistakes. Capitalising on Successes**

**1300 - 1600 hours**

- What are the key upstream E&P challenges?
- Why should the upstream E&P be interested in NT?
- Is there a Nanotech revolution within E&P?
- What are some of the other industries' relevant challenges? How did these industries address their challenges with NT?
- Can the E&P industry utilise or adapt for its own use nano-technologies developed for other industries?

### Tuesday, 5 February

#### **Session 3: Overcoming the Hurdles: Addressing the Concerns**

**0830 - 1130 hours**

- Where and how can NT be used in upstream E&P? What nanotech applications can benefit the E&P industry the most?
- What types of E&P challenges are most suitable for NT-based solutions?
- How can we generate a nanotech revolution within the E&P industry?
- Is the nanotech community aware of the E&P technical challenges?
- How to optimise collaboration between the two communities?

#### **Session 4 : Nanotech Roadmap for Upstream E&P: Clarifying the Outlooks**

**1300 - 1700 hours**

- How to structure a successful NT roadmap?
- How to map relationships, timelines, and compatibilities between technologies and markets?
- What are the NT roadmap models that exist in other relevant industries?
- What are the risks, obstacles, and opportunities of NT-based solutions in E&P?
- NT in upstream E&P: What is practical today? What is feasible in 5 years? What is possible in 10 years? What is probable in 15 years?

### Wednesday, 6 February

#### **Session 5: Bridging the Valley-of-Death: Identifying the Paths**

**0830 - 1130 hours**

- How to make the jump from prototyping to implementation?
- What is the optimal NT business model for use in upstream E&P? How to optimize collaboration within the E&P industry?
- Are the commercial models of the E&P Industry and the numerous nanotech start-ups compatible?
- What is lacking in the current NT R&D directions in upstream E&P? Are we investing enough in NT for O&G use?
- What position should the E&P industry take on the potential HSE (Health, Safety, and Environmental) effects of nanomaterial?

### About the Venue

Dubai is city of contrasts; where a stimulating blend of old and new, harmoniously offers travelers a unique experience. The warmest welcome to the leisure and business capital of the Middle East awaits you at the Hilton Dubai Jumeirah. Situated on the exclusive Jumeirah Beach, the Hilton Dubai Jumeirah provides a picturesque location for corporate events. The possibilities for leisure are seemingly endless with its exotic gardens and pool, a full complement of water sports and a luxurious health club to choose from.



## Nanotechnology In Upstream E&amp;P: Nano-Scale Revolutions To Mega-Scale Challenges?

## Registration Form

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Job Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Town/City: \_\_\_\_\_ Postcode: \_\_\_\_\_ Country: \_\_\_\_\_

Email: \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

SPE Member:  Yes  No If Yes, SPE Membership Number: \_\_\_\_\_Details of relevant experience: \_\_\_\_\_  
\_\_\_\_\_Do you wish to present a poster? (subject to selection)  Yes  NoDo you wish to be considered a Discussion Leader? (subject to selection)  Yes  NoIf yes, please indicate which subject you would like to present on:  
\_\_\_\_\_List your expectation for the Workshop, so that the committee can tailor a portion of the Workshop to answering attendees' concerns. (Use additional paper if required)  
\_\_\_\_\_Registration Fees :  USD 2,100 for SPE Members  USD 2,200 for Non-members**Payment by Credit Card:**Credit Card (Check one)  American Express  MasterCard  Visa

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Card Number (will be billed through Society of Petroleum Engineers)

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Expiry Date (mm/yy)

Name of Credit Card Holder (printed): \_\_\_\_\_

Billing Address including Zip Code/Postal Code of Card: \_\_\_\_\_

Signature (required): \_\_\_\_\_ Date: \_\_\_\_\_

**Payment by Bank Transfer: IMPORTANT - For reference: Please Quote "08ADBI" and name of Delegate**

Make Payment to: HSBC Bank Middle East, Jebel Ali Branch, PO Box 66, Dubai, UAE

Account Name: SPE Middle East FZ-LLC

Account Number: 035-129709-100

Swift Code: BBMEAEAD

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To submit your registration online, please visit the  
SPE Web Site at: [www.spe.org](http://www.spe.org)  
or email this form to : [formsdubai@spe.org](mailto:formsdubai@spe.org).  
or fax this form to: +971 4 366 4648

