

## This Changes Everything.



12-14 AUGUST 2013 / COLORADO CONVENTION CENTER / DENVER

### CALL FOR PAPERS







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## CALL FOR PAPERS

# Share your knowledge of integrated solutions, technologies and advances for unconventional resources

Dear Colleague,

On behalf of the Unconventional Resources Technology Conference (URTeC), its sponsoring organizations and Technical Program Committee, we encourage you to submit a paper presenting your integrated solutions for — and advancements in — unconventional resources.

URTeC was developed based on input from oil company professionals who expressed the importance of geologists, geophysicists, engineers and business managers working together to help asset teams hit the sweet spot.

By combining the global reach of the Society of Petroleum Engineers (SPE), the American Association of Petroleum Geologists (AAPG) and the Society of Exploration Geophysicists (SEG), URTeC will deliver unmatched opportunities; leveraging expertise from all technical backgrounds while focusing on the collective learning and success of the asset team approach to oil and gas resource development.

The combined power of these three leading scientific organizations means URTeC has the potential to be the most substantial inter-society collaboration since the Offshore Technology Conference began in the 1960s.

We're looking for papers that will show real-world, integrated approaches for the rapidly changing world of unconventional resources. Please submit your paper online at www.urtec.org by 15 November 2012.

Sincerely, Technical Program Co-Chairs

Luis Baez, BG Group Ken Beeney, Devon Energy Corp Steve Sonnenberg, Colorado School of Mines







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#### TECHNICAL PROGRAM COMMITTEE

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Ken Beeney, Devon Energy Corp

Steve Sonnenberg, Colorado School of Mines

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Bruce Alastair Tocher, Statoil Doug Valleau, Hess Corporation

#### **URTEC STAFF**

#### Operations

Alan Wegener, Project Director

Tel: +1 918 560 9401

E-mail: awegener@urtec.org

Randa Reeder-Briggs, Event Operations Manager

Tel: +1 918 560 2660 E-mail: rrbriggs@urtec.org

#### **Technical Program**

Alicia Foresee, Technical Programs Coordinator

Tel: +1 918 560 2616 E-mail: aforesee@urtec.org

#### Media Inquiries

Larry Nation, Communications Director

Tel: +1 918 560 2648 E-mail: Ination@urtec.org

#### Exhibition Sales, Sponsorship and Marketing

Mike Taylor, Exhibition Sales Manager

Tel: +1 281 773 8836 E-mail: mtaylor@urtec.org

Pam Murphy, Exhibition Sales Representative

Tel: +1 713 305 1039 E-mail: pmurphy@urtec.org

Julie Simmons, Marketing Manager

Tel: +1 918 560 2618 E-mail: jsimmons@urtec.org

Teresa Davis, Sales Coordinator

Tel: +1 918 560 2696 E-mail: tdavis@urtec.org

## Submit your paper for URTeC by 15 November

#### CALL FOR PAPERS

Be a part of the multi-disciplinary conference on unconventional resources for engineers and geoscientists. This is a great professional opportunity to share your innovations, best practices and experience in integrated approaches for North American unconventional resource plays.

If selected: (1) You will be presenting at a conference supported by three of the world's largest scientific associations, (2) Your paper will be included in the conference proceedings, (3) Your paper may be published in leading online libraries such as OnePetro, Search & Discovery and the SEG Digital Library

Abstract submission deadline: 15 November 2012 Submit your abstract online at www.URTeC.org



#### **Theme 1: Unconventional Project Development**

- Developing an Exploration Model
- Designing an Exploration Program
- From Exploration to Exploitation When Do You Decide You Have an Economic Program?
- Critical Data Requirements Necessity vs. Over Indulgence
- Seismic Acquisition Program Critical Data Requirements
- With Limited Data How Do You Predict Performance?
- Risk Assessment
- Reserve Bookings

#### Theme 2: Unconventional Reservoir Characterization

- Core Evaluation and Importance of Descriptions
- Depositional Environment
- Mineralogy
- Petrophysics
- Resource Concentration
- Frac Barriers
- Pressure Prediction
- Basin Modeling
- Fracture vs. Matrix Contribution to Production
- Reservoir Modeling
- Play and Sweet Spot Identification
- Geophysics

#### Theme 3: Unconventional Shale Plays

- Past and Present
- Assessing Source Rocks
- Matrix and Fracture Permeability
- Shale Gas from Geologic Interpretation to Production
- Oil Flowable Shale from Geologic Interpretation to Production
- Application, Analysis and Interpretation of Multivariant Analysis
- Primary Migration

#### Theme 4: Unconventional Tight Oil and Tight Gas

- New Plays
- Sandstone Reservoirs
- Carbonate Reservoirs

#### Theme 5: Unconventional Coal Seam/Bed Methane

- New Plays and Discoveries
- Enhanced CBM Recoveries
- Reserves in CBM

#### Theme 6: Other Unconventional Reservoirs

- Shallow Gas
- Hydrates
- Abnormally Pressured Reservoirs
- Heavy Oil/Tar Sands
- Oil Shale
- Halo Reservoirs and New Horizontal Drilling Opportunities

#### Theme 7: Formation Evaluation of Unconventional Reservoirs

- Petrophysics
- New Logs and Technologies

#### **Theme 8: Fracture Characterization**

- Evaluating Fractures in Thin Section and SEM
- Importance of Natural Fractures in Tight Reservoirs
- Anisotropy of Fractured and Layered Systems
- Hydraulic Fracture Modeling and Prediction
- Stimulated Rock Volume

#### **Theme 9: Lateral Well Characterization**

- Biostratigraphy & Chemostratigraphy
- Horizontal Well Logging and Interpretation
- Fracture Monitoring
- Importance of Well Orientation
- Lateral Well Placement

#### Theme 10: Flow Mechanics in Tight Reservoirs

- Characterization
- Reservoir Drive Mechanisms
- Latest Advances
- Reservoir Modeling
- Flow Assurance and Multiphase Flow

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#### Theme 11: Laboratory Methodologies

- Petrography (Fracture and Cementation Timing)
- Relative Permeability Measurements
- CT Scans
- Oil Wet vs. Water Wet vs. Completion Fluids
- Pore-Scale Imaging and Computation
- Wettability Imaging
- Shale Core Analysis

#### Theme 12: Reservoir Monitoring

- Passive Seismic Monitoring, Applications, Analysis and Interpretation
- Microseismic (Surface and Downhole)
- Tracers
- DFITS and PLT
- Production Logs
- Monitoring Vertical/Horizontal Wells

#### **Theme 13: Organic Geochemistry**

- Prediction of Fluid and Gas Composition
- The Role of Bitumen
- Comparative Methods for Determining Maturity
- Screening Criteria for New Source Rock Plays
- Optimum Pyrolysis Ratios for Producible Source Rocks
- Hydrocarbon Cracking
- Clay Mineralogy and Organic Petrology

#### Theme 14: Well Performance Prediction

- RTA
- Reservoir Heteregeneity
- Geomodels and Reservoir Models
- · Performance Expectation of Shale Gas vs. Shale Oil
- Reservoir Pressure Prediction
- Permeability Prediction

#### Theme 15: Fluid Behaviors

- Phase Behavior
- What to Expect When Changing from a Shale Gas to an Oil Shale System
- · Artificial Lift and Liquid Loading
- Enhanced Oil Recoveries
- GOR and Fluid Gravity Impact on Tight Oil Reservoir Performance

#### Theme 16: Drilling Optimization

- Landing Zone Selection Criteria for Horizontal Laterals
- Pad Drilling, Design and Optimization
- Geosteering Methods and Challenges
- Extended Reach Lateral Well Design Considerations
- Optimum Drilling Fluid Selection
- Multiple Lateral Technologies
- · Integration of Seismic Data to Optimize Drilling

#### **Theme 17: Completion Optimization**

- Fracking, Fluids and Monitoring
- Refracs
- Improved Recovery in Unconventional Reservoirs
- Recompletions
- SRV Prediction
- Optimum Stage Spacing
- Frac Design Consideration for Tight Oil and Tight Gas Reservoirs
- Open Hole Packer Systems vs. Cemented Perf and Plug Methods
- Integration of Seismic Data to Optimize Completions

#### Theme 18: Rock Mechanics

- Mechanical Stratigraphy
- Laboratory Methods
- Logging Methods
- New Developments
- Geophysical Methods

#### Theme 19: 3-D Seismic Applications

- Multi Component 3-D Seismic
- 3-D Seismic Processing
- Seismic Attributes for Sweet Spot Detection
- 3-D Seismic Interpretation
- New Structural and Stratigraphic Interpretations
- Cross-Discipline Integration of Seismic Data

#### Theme 20: Health, Safety and Environmental Issues

- Water From Protecting the Ground Water to Clean Frac Fluids
- Well Design Uphole Issues
- Footprint
- Induced Seismicity
- Above Ground Issues
- · Recycling Frac Water
- Fluid Remediation (Drilling and Produced Fluids)
- Carbon Capture and Storage
- Source Water and Waste Water Management



#### **Guidelines for Preparing Abstracts**

Oral Presentations for the Conference will be selected from abstracts submitted to the Conference Program Committee. The Program Committee will consider all abstracts submitted by the deadline of 15 November 2012. Early submission is particularly important to ensure that the Committee has ample time to review the abstracts. Submit your abstract online **www.URTeC.org**.

#### Abstract Content

A proper review of your abstract requires that it contain adequate information on which to make a judgment. Abstracts should be no more than 2,500 characters in length including spaces and punctuations. The title, authors, and authors' affiliations are not included in the character limit. Abstracts should be written in English and include the following:

- DESCRIPTION: Summarize the scope and nature of the work upon which an accepted paper will be based (e.g., field data, lab data, original
  analysis, technology solutions or advancements, or computer work). If the paper is a review paper, carefully state the extent of the coverage.
- APPLICATIONS: Describe the possible applications of the information provided in the paper.
- RESULTS AND CONCLUSIONS: Summarize the results and major conclusions to be presented in the paper and state specific conclusions of the work and how these differ from previous work on the same subject. State whether new information will be revealed and whether data from field, lab, case studies, or computer work will be included.
- TECHNICAL CONTRIBUTIONS: Describe the significance of the subject matter in the abstract by listing up to three technical contributions or additions to the technical knowledge base of the petroleum industry.

#### **Technical Categories**

Select the technical categories included in this leaflet that best describe your abstract. A primary choice is required along with a sub-category selection. Please be careful when selecting the appropriate theme and sub-category for your abstract. Abstracts are evaluated on the basis of the information supplied on the abstract submission website in accordance with the following criteria:

- 1. The proposed paper must contribute to the body of technology and science applied to the E&P (development) of unconventional resources with broad industry interest and an emphasis on integrated approaches. It should be of immediate interest to professionals working in the unconventional oil and gas industry, and should contain significant new knowledge or experience about cross-functional collaboration.
- 2. Data in the abstract must be technically correct.
- The proposed paper may present information about the technology, equipment and tools required for successful resource recovery. Such
  abstracts must show the definite applications and limitations of such equipment and should avoid undue commercialism and extensive use of
  trade names.
- 4. The substance of the proposed paper must not have been published previously in trade journals or in other professional or technical journals.
- 5. Prior to abstract submission, clearance must be obtained. Problems concerning clearance should be outlined when the abstract is submitted.
- 6. Student submissions are encouraged to all themes.

#### Abstract submission deadline: 15 November 2012. Submit your abstract online at www.URTeC.org

#### **Guidelines for Accepted Abstracts**

- 1. Authors of abstracts selected for the Conference Program will be notified in February 2013.
- 2. Authors whose abstracts are accepted will be required to provide either a full manuscript or an extended abstract by 15 May 2013 for inclusion in the Conference Proceedings as follows:

Manuscript: To be no more than 10 pages in length, including figures, charts and tables.

Extended Abstract: To be no more than 10 pages in length, including figures, charts and tables.

- 3. Detailed instructions on the preparation of Manuscripts/Extended Abstracts and Oral Presentations will be sent to the corresponding author of each accepted paper.
- 4. Please note that if accepted, your paper may be published, as submitted, in conference information media, including the Conference CD-ROM Proceedings and on the website and the websites of the sponsoring societies.
- 5. URTeC follows the "no paper, no podium" policy. Therefore, if the author of an accepted abstract fails to provide a full manuscript or an extended abstract and the associated forms by the deadline of 15 May 2013, the organizers will remove the presentation from the program.
- 6. URTeC assumes no obligation for expenses by authors for travel, lodging, registration, food or other incidental expenses.

#### A Word about Commercialism

URTeC has a stated policy against use of commercial trade names, company names, or language that is commercial in tone in the paper title, text or slides. Use of such terms will result in careful scrutiny by the Program Committee in evaluating abstracts, and the presence of commercialism in the paper may result in it being withdrawn from the conference program.

#### Copyright

All authors of papers presented at the conference will be required to complete and submit a copyright form to URTeC.



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