Challenges in Seismic Rock Physics

Summer workshop
June 25-29, Beijing

Registration: www.rpl.uh.edu/CSRPB

The Preparatory Committee
Mar. 12. 2007
Challenges in Seismic Rock Physics · Beijing 2007

1. Meeting background
2. Meeting goal
3. Meeting format
4. Meeting place*
5. Technical program*
6. Cost
7. Sponsorship*
8. Project Schedule
9. Other matters
10. Registration
1. Meeting Background

- This Summer Workshop was initiated by Dr. De-hua Han (UH), Dr. Michael Batzle (CSM) and Dr. Hong Cao (RIPED, PetroChina) and later authorized by SEG and EAGE. Dr. De-hua Han was appointed as a representative to organize the meeting.

- Meeting is organized by volunteers to promote research activities.

- The workshop has obtained quick responses and keen support from SEG, EAGE, SPG and many oil companies, service companies and academic institutes.
2. Meeting Goal

- Promote the research, development and application in seismic rock physics
- Present current technology available on the market.
- Promote technical improvement and stimulate the local economy.
- Promote SEG and EAGE in the far east.
Welcome to Beijing, China

- Fast growing economy, huge demand for hydrocarbon, and mega-scale industry & research, market for cooperation and new technology.
- 5,000 year cultural history, the ‘new face’ of China, Olympic city in 2008.
- Chinese hospitality is famous for welcoming guests from around the world.
3. Meeting Format

- In consideration of the climate conditions in Beijing, and also to avoid overlapping with other international meetings, this meeting is scheduled from June 25 to 29, 2007.

- Five formats for the meeting:
  - Talk
  - Poster
  - Exhibition
  - Short Course
  - Group Meetings in the evening (organized by individual companies or groups)
Challenges in Seismic Rock Physics · Beijing 2007

3. Meeting Schedule

<table>
<thead>
<tr>
<th>23</th>
<th>24</th>
<th>25</th>
<th>26</th>
<th>27</th>
<th>28</th>
<th>29</th>
</tr>
</thead>
</table>

2-day Short Courses,

- Contents: Seismic Rock Physics
- Seismic Inversion

- Additional fee

Tour
3. Meeting Format

- Talk & Poster
  - Every half day
  - 08:00 ~ 11:30am
  - 13:30 ~ 17:00pm
  - Keynote speaker (50 min.), oral presentation (25 min.):
  - Four Poster (Five minute introduction each)
  - Language: English
Challenges in Seismic Rock Physics • Beijing 2007

3. Meeting Format

- Exhibitions: Ready on Sunday

- Additional fee: $1,000 to 1,200 per unit (>15 m²)

- Function: place to show profile, products, demonstration and business

- Schedule: Open at noon and evening, closed when the meeting is in session

- Total 10 to 12 units (few left)
4. Meeting Venue

- Jiuhua Spa Resort & Convention Center
  Located in the North of Beijing,
  For more information (English): www.jiuhua.com.cn

- Luxury facility for meeting, recreation, health club (hot spring), entertainment, featured restaurants, ….

- Standard room cost for meeting delegate:
  Less than $60 per day include breakfast.
5. Technical program

Short Course

- Introduction of Fluid and Rock Properties for Seismic Interpretation
  - Instructors: Dr. Micheal Batzle (CSM) & Dr. De-hua Han (UH)
  - Date: 8:00 am to 5:00 pm, June 23

- Seismic Inversion Related to Rock Physics (SEG course)
  - Instructor: Dr. Brian Russell (Hampson Russell, CGG Varitas)
  - Date: 8:00 am to 5:00 pm, June 24
5. Technical program

Keynote Presentation:

We have invite keynote speakers for different sessions (50 min.)

For Example, we have invited a SEG/AAPG distinguish lecture

Uses, abuses, and examples of seismic-derived acoustic impedance data: What does the interpreter need to know?

to be presented by Ms. Rebecca Latimer, Chevron Energy Technology Company, Houston TX 77002 (Thanks for Chevron China office to sponsor the lecture)
5. Technical program

Technical Sessions

- **Rock and Fluid Properties & Geology**: Fluid and rock properties correlated to geological (sedimentary compaction) environment, measurements and road ahead...

- **Models, Trends, Templates**: Theoretical models, empirical trends, cross plots, and their applications and limitations in seismic interpretation

- **How to Build Rock Physics Models for a Reservoir?**: Systematic and practical ways to build rock physics models for a reservoir based on multi-scale data (core, log, VSP, seismic) and multi-aspect data (geophysics, geology, engineering...)

5. Technical program

Technical Sessions

- **DHI, AVO and Beyond**: Optimized attributes for DHI, AVO analysis. Spectrum decomposition, dispersion and attenuation analysis to develop quantitative hydrocarbon indicators.

- **Challenges in Seismic Interpretation**: Difficult areas of rock physics application in seismic interpretation such as: Identifying False DHI, fizz gas, tight gas, thin layers, carbonate reservoirs, anisotropy (VTI & HTI), fractured reservoirs, overpressure (compaction trend and shale).

- **Time Lapse**: What do we actually observe with time-lapse seismic monitoring? Fluid effects, Pressure effects or…
5. Technical program

Workshops (June 28): Supported by industry sponsors

- **Log, VSP & Seismic (Morning, June 28):**
  DHI in log and VSP, log and seismic tie, Anisotropy effect and more.
  Chair: Xiaoming Tang (Baker Hughes), & Vivian Pistre (Schlumberger)

- **How We Invert Reservoir Properties (Afternoon, June 28):**
  Seismic inversion and imaging of thin-bedded reservoirs. What we gain from the modeling and inversion efforts? How we handle and estimate uncertainties? …
  Chair: Brian Russell (Hampson Russell) & Jeff Baldwin (Fugro-Jason)
5. Technical program

- **Abstract**
  - Extend abstract same as the SEG format
  - Official language: English
  - Abstract will be collected and distributed on CD-Rom

- **Submit:** [www.rpl.uh.edu/CSRPB](http://www.rpl.uh.edu/CSRPB)
  - Deadline: Apr. 15

- **Meeting agenda:**
  - Due date: May 15 or early
6. Cost

- **Registration fee (5 days)** (a great deal):
  - Delegate: $400 (or ¥ 3,200)/person, spouse: $200 (or ¥ 1,600)/person
  - Short Course: $150 (or ¥ 1,200) /person/day
  - Exhibition booth: (not finalized)

*Registration fee will cover meeting meals (include a banquet), coffee breaks, ice breaker, a show, and pick up service from airport and possible a day tour

- **Hotel: Jiuhua Spa Resort & Convention Center**
  - Standard room: Less than $60 per day (meeting price)
  - Facility for meeting, recreation, health club, restaurant….

For foreign guests: Send email to request an invitation letter for applying a VISA to China
6. Cost

- Exhibition booth (24-28, June)

We have rent 200 m² space for exhibition. It is designed for illustrate company profile, products and a place for demonstration and business. The booth will open at noon and evening but closed when the meeting is in session. Exhibition will open to public.

- We have 10-12 exhibition unit for renting. Currently, 6 units has been reserved. Contact us if you want reserve one.

  - Cost: $1,000 to 1,200 per unit (email: dhan@uh.edu)

- If company want to hold an evening meeting to show their product, we can help to make arrangement.
7. Sponsorship

- **Financial Sponsors of oil companies and service companies**

<table>
<thead>
<tr>
<th>Class</th>
<th>Amount</th>
<th>Rights and Interests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium</td>
<td>&gt; $ 20,000</td>
<td>host unit, one free booth, a technical committee member</td>
</tr>
<tr>
<td>Gold</td>
<td>&gt; $ 10,000</td>
<td>host unit, one free booth</td>
</tr>
<tr>
<td>Silver</td>
<td>&gt; $ 5,000</td>
<td>acknowledged as a sponsor of the meeting</td>
</tr>
<tr>
<td>Copper</td>
<td>&gt; $ 2,000</td>
<td>acknowledged as a sponsor of the meeting</td>
</tr>
</tbody>
</table>

- We need more financial sponsors
- We will update our sponsor list regularly
7. Current Sponsors

(Welcome new sponsors)

- **Society**
  - SEG, EAGE, SPG,

- **Industry**
  - PetroChina (Titanium), Schlumberger (Titanium)
  - Fugro-jason (Golden), Paradigm (Golden)
  - Hampson Russell (CGG-Varitas) (Silver)
  - Apex (Copper)

- **Universities**
  - CUP, RPL of UH, CRA of CSM
Challenges in Seismic Rock Physics · Beijing 2007

7. Current Sponsors

- SEG
- EAGE
- Schlumberger
- Fugro Jason
- Paradigm
- Hampson Russell
- CUP
- ORPL
- FORRock
8. Project Schedule

- Dec. 2006, First preparatory meeting
- Jan. 2007, Set up organizing committee, technical committee,
- Feb. 2007, TLE advertisement and call for paper,
- Feb. 2007, Set up online website, online registration
- Apr. 15, 2007, Due date for submitting abstracts
- May 15, 2007, Complete meeting agenda,
- May 15, 2007, Notices to attendees and payment for pre-registration (before May 31)
- June, 2007, Meeting activity
- July 2007, Meeting summary, financial report
9. Other matters

- Meeting scale
  - Optimum scale: 150 delegates; but not exceed 200 delegates;
  - Delegates of sponsor and those with technical papers given priority to attend the meeting.

- Financial aid possible
  - Application letter (email) required (Deadline: May 1, 2007)
  - Award (May 15): a. waive registration fee. b. a + Hotel cost (5 days)
  - Qualification: Students and Academia
10. Registration

- Registration fee (5 days)** (a great deal) before May 31.
  - Delegate: $400 (or ¥ 3,200)/person, spouse: $200 (or ¥ 1,600)/person

  ** Registration fee will cover following cost
  1. ice breaker on the evening of June 24
  2. meeting meals: Launch, dinner on June 25, 26, 27, 28, 29*.
  3. coffee breaks (twice a day)
  4. an evening show during the meeting
  5. pick up service from airport (On June 22-24. appointment required)
  6. A souvenir gift
  7. A tour (Great wall, Beijing…) on June 29* (may be an option with additional cost, but not finalized).

- Additional $50/person charged after May 31

- Registration fee due after notice (May 1). No cancellation after May 31.
10. Registration

- **Short Course**
  - Short Course agenda: due on the March 1.
  - **Cost:** Delegate: $150 (or ¥1,200)/person/day
    - Student: $30 (or ¥240)/person/day
  - Limited seats available. Delegates have priority for registration
  - No refund after May 31.

**Course fee will cover course material (Cd-Rom), a lunch, coffee breaks, ...**
Thanks

Any questions: please contact

Dr. De-hua Han: dhan@uh.edu
Or
Dr. Feng-chang Yao: fyao@petrochina.com.cn