<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker</th>
<th>Affiliation</th>
<th>Country</th>
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<tbody>
<tr>
<td>09:30</td>
<td>Coffee</td>
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<tr>
<td>10:00</td>
<td>Opening</td>
<td>Welcome</td>
<td>Conference Chairs: Jeroen Schuppers, Marcelo Masera</td>
<td>EC (DG RTD &amp; JRC)</td>
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<td>10:15</td>
<td>Key Note</td>
<td>Community Impacts of Shale Gas Developments: Myths and Realities</td>
<td>Alan Krupnick</td>
<td>RFF (Resources for the future)</td>
<td>US</td>
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<tr>
<td>10:15</td>
<td>SESSION 1: Induced seismicity resulting from hydraulic fracturing and water waste management: when and where and how to avoid it?</td>
<td>Session Chair: Bill Ellsworth</td>
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<td>10:15</td>
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<td>Advances in microseismic monitoring and understanding of hydraulic fracturing: the contribution of the SHEER EU project</td>
<td>Torsten Dahm</td>
<td>H2020 Sheer</td>
<td>EU</td>
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<tr>
<td>10:30</td>
<td>Session 1</td>
<td>Dynamics of Fault Activation by Hydraulic Fracturing in western Canada</td>
<td>Megan Zecevic</td>
<td>University of Caglary</td>
<td>CAN</td>
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<tr>
<td>10:45</td>
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<td>Key controlling factors of induced seismicity caused by shale gas operations</td>
<td>Brecht Wassing</td>
<td>TNO</td>
<td>NL</td>
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<tr>
<td>11:00</td>
<td></td>
<td>Evaluating Cross-Disciplinary Science for Induced Seismicity Risk Management</td>
<td>Kris Ngaard</td>
<td>ExxonMobil</td>
<td>US</td>
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<tr>
<td>11:15</td>
<td></td>
<td>2017 One-Year Seismic Hazard Forecast for the Central and Eastern United States from Induced and Natural Earthquakes</td>
<td>Mark Petersen</td>
<td>USGS</td>
<td>US</td>
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<td>11:30</td>
<td>Lunch Break</td>
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<tr>
<td>13:15</td>
<td>SESSION 2: Risk assessment and environmental impact assessment</td>
<td>Session Chair: Gregory Pienkowski</td>
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<td>13:15</td>
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<td>Soil hazards related to shale gas activities</td>
<td>Olga Lipinska</td>
<td>PGI</td>
<td>PL</td>
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<td>13:30</td>
<td></td>
<td>Organic Compounds Concentration Change in Flowback Water and Environmental Risks Associated</td>
<td>Ma Lanting</td>
<td>UPM/Ciemat</td>
<td>SP</td>
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<tr>
<td>13:45</td>
<td>Session 2</td>
<td>FracRisk, assessing and reducing the subsurface environmental footprint of shale gas development</td>
<td>Christopher McDermott</td>
<td>H2020 FrackRisk</td>
<td>EU</td>
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<tr>
<td>14:00</td>
<td></td>
<td>The SHEER approach to the evaluation of risks connected to shale gas exploration and exploitation</td>
<td>Paolo Capuano</td>
<td>H2020 SHEER</td>
<td>EU</td>
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<td>14:15</td>
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<td>Comparison of current practices for measuring, monitoring, mitigating and managing the environmental impact of shale gas in the US and conventional gas in the Netherlands</td>
<td>Jan ter Heege</td>
<td>TNO</td>
<td>NL</td>
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<td>14:30</td>
<td>Coffee Break</td>
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<tr>
<td>15:15</td>
<td>Session 2</td>
<td>Chemical and biological assessment of unconventional tight sand gas related waters</td>
<td>Ann-Helene Faber</td>
<td>University of Utrecht</td>
<td>NL</td>
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<td>15:30</td>
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<td>Faults do not provide a realistic pathway for fracking to pollute freshwater aquifers</td>
<td>Yannick Kremer</td>
<td>University of Strathclyde</td>
<td>UK</td>
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<td>15:45</td>
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<td>Carbon footprints of potential future shale gas exploitation and use in Europe</td>
<td>Mara Hauck</td>
<td>TNO</td>
<td>NL</td>
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<td>16:00</td>
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<td>Baseline concentration and raw gas composition. Relevance for Shale Gas operations</td>
<td>Paula Costa</td>
<td>LNEG</td>
<td>PT</td>
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<td>16:15</td>
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<td>The cumulative effect of unconventional exploitation on water stress and demand on local water resources</td>
<td>Zoe Shipton</td>
<td>University of Strathclyde</td>
<td>UK</td>
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<td>16:30</td>
<td>Q&amp;A</td>
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<td>16:45</td>
<td>Lunch Break</td>
<td>Key results from the European Unconventional Oil and Gas Assessment project (EUOGA)</td>
<td>Peter Britze</td>
<td>GEUS for EUOGA</td>
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</table>
### Transatlantic Knowledge Sharing Conference on Unconventional Hydrocarbons: Resources, Risks, Impact and Research Needs

**21-Jun**

**09:00**
**SESSION 3: Modelling benchmarking using experimental data**
- **Modelling, benchmarking and validation**
  - Hans Custers
  - DOE Alberta
  - CAN
- **Storage capacity and transport properties assessment of unconventional reservoir rocks using nanotechnology imaging**
  - Jop Klaver
  - MaP GmbH Aachen
  - DE
- **Fugitive and vented emissions from energy developments in Alberta, Canada: Lessons from extensive measurement campaigns**
  - Dave Risk
  - St Francis Xavier University
  - CAN

**09:45**
**Q&A**

**10:00**
**Coffee break**

**10:30**
**SESSION 4: Multi-actor and public engagement in research and innovation**
- **Public Understanding of the Environmental and Social Impacts of Shale Gas Development**
  - Michael Bradshaw
  - University of Warwick
  - UK
- **Seven questions about fracking in Scotland**
  - Karen Turner
  - University of Strathclyde
  - UK
- **Talking to the public about (their) public sector research on onshore oil and gas**
  - Alwyn Hart
  - Environment Agency
  - UK
- **Enriching geoscience research with participatory modelling approaches: A case study on brine migration due to CO2 injection**
  - Dirk Scheer
  - ITAS KIT
  - DE

**11:15**
**Q&A**

**11:30**
**Knowledge, uncertainty and the future: negotiating shale gas exploration locally in Poland**
- Aleksandra Lis
- Adam Mickiewicz University
- PL

**12:00**
**Protecting landowners in sustainable shale gas production**
- Meri-Katriina Pyhäranta
- UEF Law School
- FI

**12:15**
**Pilot training course Practice of Informing Policy Through Evidence - Shale Gas Practices and Imaginations of Energy Justice in Transition**
- Patricia Faasse
- Rathenau Instituut
- NL
- Michiel Köhne
- Wageningen University Research
- NL

**12:45**
**Q&A**

**13:00**
**Lunch Break**

**14:30**
**SESSION 5: Innovative measurement methods for environmental parameters**
- **Cutting Edge Measurements to Assess the Environmental Implications of Shale Gas – The ShaleXenvironMeNT Approach**
  - Alberto Striolo
  - ShaleXEnvironment
  - EU
- **Development and evaluation of methods to assess air pollution exposure at unconventional natural gas extraction sites**
  - Samuel Grainger
  - University of Strathclyde
  - UK
- **Quality Assurance and Control Procedures to Improve Soil-Gas Sampling Methods in Stray Gas Investigations**
  - Dominic DiGiulio
  - Stanford University
  - US
- **Monitoring Fugitive Methane from Large Scale Shale Gas Operations in Europe**
  - Antoon Visschedijk
  - TNO
  - NL

**15:45**
**KeyNote**
- **Community Impacts of Shale Gas Developments: Myths and Realities**
  - Alan Krupnick
  - Resources for the Future
  - US

**16:15**
**Closure**
- **Closing remarks**
  - Marcelo Masera
  - EC (DG JRC)
  - EU