

SHEER Annual Meeting 2017



5th- 8th June 2017

Blackpool, UK

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 640896



Annual SHEER meeting for partners and stakeholders

5th to 8th June 2017

Location: Blackpool, UK

Agenda

Monday 5th June

SHEER – Review of the last year and the forward plan – Reports from WP leaders

Attendees: SHEER Consortium

Tuesday 6th June

SHEER – Review of the last year and the forward plan – Reports from WP leaders

Attendees: SHEER Consortium

Wednesday 7th June

Conference on SHEER: Shale Oil & Gas - Risk Management and Mitigation

Attendees: SHEER Consortium plus external guests from industry, academia, regulators and government

Thursday 8th June

Attendees: SHEER Consortium (limited numbers)

9 am - 2 pm Field trip

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Agenda**

Monday 5th June

SHEER – Review of the last year – Reports from WP leaders

Attendees: SHEER Consortium

10:15 – 11:00 Registration & Coffee

11:00 – 11:15 Welcome by Paolo Capuano, AMRA, Project Co-ordinator

- Introductions and objectives of the meeting
- Tribute to Paolo Gasparini
- The SHEER Project after Year 2

Reports from Work Package Leaders

Discussion includes:

- Lessons so far - What have we learnt
- Where now?
- What's left to do?
- Next steps
- What are we going to recommend? – Recommendations for best practice

11:15 – 11:45 WP2 – The SHEER Database (Beata Orlecka-Sikora, IGF-PAS)

11:45 – 12:15 WP3 – On Site Monitoring (Stanisław Lasocki, IGF-PAS)

12:15 – 13:00 WP6 – Assessment of Air Quality Impact (Janusz Jarosławski, IGF-PAS)

13:00 – 14:00 Lunch

14:00 – 15:15 WP5 – Assessment of Groundwater Chemistry (Andrew Gunning, RSKW)

14:00 – 14:15 *A Summary of WP5* – Andrew Gunning

14:15 – 14:35 *Baseline and post frac data* – Nelly Montcoudiol

14:35 – 14:50 *The Geological and Hydrogeological Model* – Catherine Isherwood

14:50 – 15:10 *Next steps and inputs to WP5.3* – Neil Burnside

15:10 – 15:15 *Discussion* – Andrew Gunning

15:15 – 15:45 Coffee

15:45 – 17:15 WP7 – Multi-Hazard and Multi-Risk Analysis. (Alexander Garcia, AMRA)

15:45 – 15:55 *Introduction – Overview of WP7 Activities* – Alexander Garcia

15:55 – 16:15 *Multi-hazard risk assessment of shale gas operations* – Alexander Garcia

16:15 – 16:35 *Assessing socio-economic impact for unconventional hydrocarbons exploitation* - Raffaella Russo

16:35 – 16:55 *Assessing risk pathway scenarios for groundwater pollution: the case of abandoned wellbores* – Andrew Gunning

16:55 – 17:15 *Towards the development of a “virtual site” for testing MR modelling capacities* – Paolo Capuano

17:15 – 17:45 Concluding remarks by Paolo Capuano, Project Co-ordinator

Tuesday 6th June

SHEER – Review of the last year – Reports from WP leaders

Attendees: SHEER Consortia

9:00 - 9:15 Welcome and outline of Day 2 (Paolo Capuano, AMRA, Project Co-ordinator)

Continuation of Reports from Work Package Leaders

9:15 - 10:45 WP4 – Assessment of Induced Seismicity (Part 1) (Simone Cesca, GFZ)

09:15 - 09:30 *Assessment of the detection performance of the SHEER seismic monitoring network at the Wysin site, NE Poland.* - Jose Angel Lopez Comino

09:45 – 10:00 *Network optimization for monitoring induced seismicity in noisy sedimentary basins.* - Elmer Ruigrok

10:00 – 10:15 *Detection, location and migration of AEs induced by hydraulic fracturing: the Aspö mine (Sweden) experiment.* - Simone Cesca

10:15 – 10:30 *Estimation of seismic source parameters of induced seismicity: application to The Geysers geothermal area, California.* - Matteo Picozzi

10:30 – 10:45 *Investigation for correlation patterns among seismic and operational parameters in the North-western The Geysers Geothermal Field.* - Kostas Leptokaropoulos

10:45 – 11:15 Coffee

11:15 – 12:45 WP4 – Assessment of Induced Seismicity (Part 2) (Simone Cesca, GFZ)

11:15 – 11:30 *Temporal static stress drop variations in relation to technological activity at The Geysers geothermal field, California.* - Monika Staszek

11:30 – 11:45 *Probabilistic properties of seismicity from Oklahoma and The Geysers geothermal field and their implications for the seismic hazard analysis.* - Stan Lasocki

11:45 – 12:00 *Seismic hazard assessment considering fluid-induced seismicity.* - Alexander Garcia

12:00 – 12:15 *Using interferometry method for velocity changes Assessment, in Wysin Site, NE Poland.* - Henryk Marcak

12:15 – 12:30 *Parametric Modelling of Hydraulic Fracturing for Shale Gas.* - Sam Toon

12:30 – 12:45 Discussion

12:45 – 13:45 Lunch

13:45 - 15:15 WP8 – Guidelines for Best Practice and Dissemination (Glenda Jones, Keele)

13:45 – 14:15 WP3 & WP8 Co-operation - Raffaella Russo

14:15 – 14:45 Do we need environmental monitoring? A cost-benefit analysis of the Wysin site. - Tom Kelly

14:45 – 15:00 Community Building, Stakeholder Engagement & Dissemination. - Glenda Jones

15:00 – 15:30 Coffee

15:30 – 16:00 Reports from other Horizon 2020 projects (Chair: Paolo Capuano, AMRA)

- M4ShaleGas (Ed Hough, BGS)
- FracRisk (Chris McDermott, University of Edinburgh)

16:00 – 16:15 Final remarks (Paolo Capuano, AMRA)

16:15 – 17:30 Advisory Board meeting & PMT meeting

17:30 – 18:00 Advisory Board report and discussion

8 pm Conference dinner

Wednesday 7th June

Conference on SHEER: Shale Oil & Gas - Risk Management and Mitigation

Attendees: SHEER Consortium plus external guests from industry, academia, regulators and government

- 8:30 – 9:30** Registration for stakeholder delegates
- 9:30 – 9:40** Welcome Address – Rob Green (Blackpool, Fylde and Wyre Economic Development Company, SHEER Advisory Board)
- 9:40 – 10:00** Opening Remarks and an Overview of the SHEER Project – CHAIR Prof Paolo Capuano (AMRA, SHEER Project Coordinator)
- 10:00 – 10:30** Risk management in the development of shale oil and gas (Ruth Allen, RSKW Ltd)

10:30 – 11:00 Coffee

Theme 1 Water

- 11:00 – 11:30** Review of shale impacts for the water industry (Jim Marshall, Policy and Business Adviser, Water UK)
- 11:30 – 12:00** Risk assessment and environmental monitoring related to shale oil and gas with particular reference to groundwater (Andrew Gunning, RSKW Ltd)

Theme 2 Induced Seismicity

- 12:00 – 12:30** Science for Managing the Hazard of Induced Earthquakes: Lessons from Oklahoma (Prof Bill Ellsworth, Stanford University)
- 12:30 – 13:00** Challenges in monitoring, discrimination and management of seismicity induced by underground industrial activities: a European perspective (Simone Cesca, GFZ)

13:00 – 14:00 Lunch

14:00 – 14:20 The Cuadrilla e-Portal (Sam Schofield, Cuadrilla)

Theme 3 Air Quality

- 14:20 – 14:50** The impact of shale gas exploration/exploitation activities on the quality of ambient air - Wysin, Poland case study (Prof Janusz Jaroslowski, IGF-PAS)
- 14:50 – 15:20** Air Quality research to support shale-gas regulation by the Environment Agency (Prof Roger Timmis, Environment Agency, England)

15:20 – 15:35 Coffee

Theme 4 Risk Management

- 15:35 – 16:05** Assessing risks associated with shale gas operations (Alexander Garcia, AMRA)
- 16:05 – 16:20** Reducing the risk of induced seismicity during Shale Gas operations (Sam Toon/ Rachel Westwood, Keele University)

Theme 5 SHEER – the next steps

16:20 – 16:30 The SHEER Project, Next Steps. (Prof Paolo Capuano, AMRA, SHEER Project Coordinator)

16:30 Close



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