

Symposium-In-Print
Subsidence – Collapse: Occurrence, Impact and Mitigation

Thursday 4th September 2008 at the University of Birmingham

- 09.00 – 09.30 Registration; tea/coffee
- 09.30 – 09.45 Welcome from Prof Chris Rogers, Head of Infrastructure Engineering and Management, The University of Birmingham
- Introduction to the symposium – Dr Ian Jefferson, The University of Birmingham
- 09.45 – 11.15 **Session 1: Subsidence – Collapse**
- Karst and mining geohazards with particular reference to the Chalk outcrop: *Clive Edmonds*
- The nature, formation and engineering significance of sinkholes related to dissolution of chalk in SE Hampshire: *Peter McDowell, John Coulton, Clive Edmonds and Andy Poulson*
- Sinkhole hazard case histories in karst terrains: *Tony Waltham*
- Fault reactivation and delayed ground movements in the vicinity of fault outcrops: *Laurance Donnelly, Martin Culshaw & Fred Bell*
- Subsidence and associated ground movements on peat moorland plateaux in the Pennines: *Laurance Donnelly*
- 11.15 – 11.45 Coffee
- 11.45 – 13.00 **Session 2: Investigation options, limitations and strategies**
- Novel use of radio-location for a ground investigation at Pen Park Hole, Bristol: *Andy Farrant & Geoff Mullan*
- Karst geohazards in the UK: the use of digital data for hazard management: *Andy Farrant & Tony Cooper*
- Remote thermal infrared surveying to detect abandoned mineshafts in former mining areas: *Dave Gunn, S Marsh, Andy Gibson, G Ager, K McManus, Martin Culshaw.*

Symposium programme

The use of microgravity to detect small distributed voids and volumes of poorly consolidated ground: *George Tuckwell, Timothy Grossey, Stephen Owen & Paul Stearns*

13.00 – 14.00

Lunch

14.00 – 15.45

Session 3: Hazard, risk, public safety and monitoring

Protocol for subsidence characterization of abandoned chaotic mined ground, along projected US Highway 71, Joplin Lead-Zinc District, SW Missouri: *Allen Hatheway & Neil Anderson*

A GIS-based prediction method to evaluate subsidence-induced damage from coal mining under water: *Esaki, T., Djameluddin, I. & Y. Mitani*

Forecast of a collapse location: *Victor Khomenko*

Planning for development on land that is potentially prone to subsidence in England: *David Brook & Brian Marker*

The classification, recording, databasing and use of information about building damage due to subsidence and landslides: *Tony Cooper*

The impacts of coal mining subsidence on groundwater resources management of the East Midlands Permo-Triassic Sandstone aquifer: *Martin Shepley, Andrew Pearson & Gordon Smith*

Reducing ground subsidence involving geological CO₂ storage during longwall mining operations: *Thomas Kempka, Margret Waschbüsch, Tomás Fernández-Steege & Rafiq Azzam*

15.45 – 16.15

Discussion

16-15 – 16.30

Closing remarks Dr Mike Winter, Scientific Editor, Quarterly Journal of Engineering Geology and Hydrogeology