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Australian National  
Chapter  
NSW Branch

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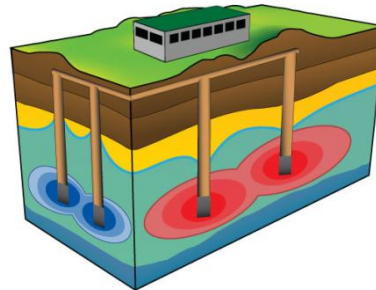


**2015 Darcy Lecture in Groundwater Science**  
**Monday 10 August 2015**  
5:30 pm for 6 pm start

**AECOM offices**

Level 21, 420 George Street, Sydney CBD

**\*\*For late arrivals, please phone Graham Hawkes on 0417134422 for access\*\***



*IAH NSW proudly presents a talk by* **Dr Rainer H. Helmig**,  
head of the Department of Hydromechanics and Modelling of Hydrosystems at the  
University of Stuttgart

**Evaluating the Competitive Use of the Subsurface: The Influence  
of Energy Storage and Production in Groundwater**

The subsurface is being increasingly utilised both as a resource and as an energy and waste repository. With increasing exploitation, resource conflicts are becoming increasingly common and complex, such as thermal energy storage and the effects surrounding hydraulic fracturing in both geothermal and shale gas production.

During this presentation Dr Helmig will describe how advanced numerical models may be used to analyse and predict the mutual influence of subsurface projects and their impact on groundwater reservoirs.

Specific topics will include:

- Possible utilisation conflicts in subsurface systems and how groundwater is affected
- Fundamental properties and functions of a compositional multiphase system in a porous medium
- Large-scale simulation that shows the general applicability of the modeling concepts especially the groundwater impact of simultaneously using geothermal energy and storing chemical and thermal energy

**Please RSVP to:**

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## The venue:

This year the lecture is to be held at AECOM at 420 George Street, Sydney, near the Wynyard, Town Hall and St James Railway Stations. The building lobby doors are located at street level on 420 George Street. Just travel up the escalators to the security gates and you will be swiped through. Access is also available from level 1 of the Mid City Centre off Pitt Street.

Late-comers please contact Graham Hawkes (mob 0417 134 422) for access.

