



## Alternative Structural interpretation in the Walloon Coal Measures: fracture development and implications for permeability

### Brisbane Seminar

**Date:** Thursday, 27 April 2017

**Time:** 3.30 to 5.00 pm

**Registration:** Please register online at <https://fesaus.org/>  
**Numbers are limited so book early to avoid disappointment!**

**Place:** Shell  
275 George St - sign in at reception on Floor 30  
Brisbane, QLD 4000

**Cost:** **FESQ Members and Student Members free**

**Presented by:** Jeff Copley (Geophysicist) and Saswata Mukherjee (Geologist) from UQ

#### **Abstract:**

The recent CCSG Faults & Fractures project was intended to develop an improved understanding of permeability in the CSG production areas. Key highlights of the project which will be discussed in this presentation are the deformation styles within the Surat succession and the importance of stress in particular the relative orientation to fractures. Examples of the complexity of major deformation underlying the Surat and the controls on later fracture development in the Walloon Coal Measures are presented. Of importance is the development of net negative graben features recognized as “keystone” structures are shown to be an important component of fracture development. The complexity of this deformation is illustrated in 3D volumes. In addition, the connection between different structural domains and the in-situ stress and/or fracture relationship, in previously unidentified areas of strike slip is discussed.

#### **About the presenters:**

Jeff Copley is an interpretive geophysicist from The University of Queensland with more than 40 years industry experience in many basins and exploration plays around the world. His current research interests focus on the application of seismic to structural and stratigraphic challenges within Coal Seam Gas reservoirs, develop an integrated sequence stratigraphic framework for the Surat Basin.

Saswata Mukherjee is a geologist by background with a Master degree from Indian School of Mines, India. He is currently pursuing a doctorate degree from The University of Queensland looking into structural controls on in-situ stress and fractures in the Walloon Subgroup.

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