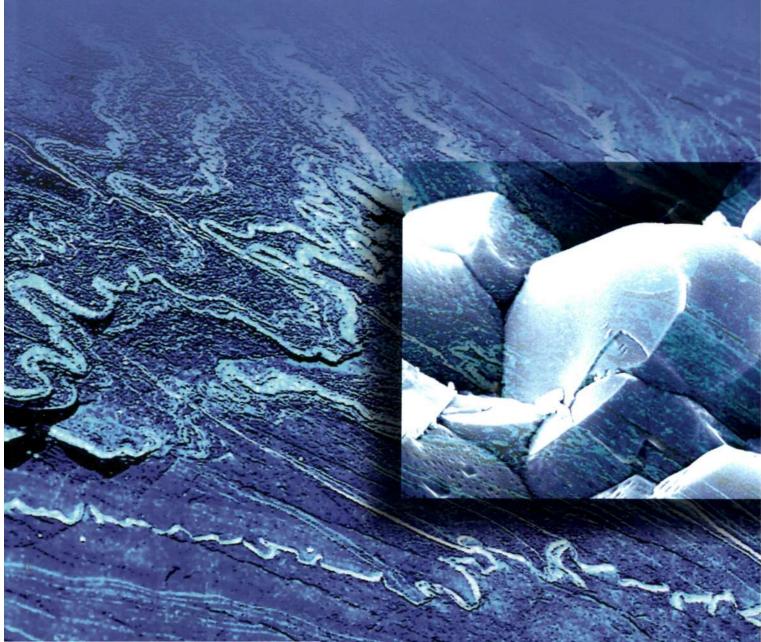


# JOURNAL OF STRUCTURAL GEOLOGY



### Journal of Structural Geology

### Volume 47, Pages 1-52 (February 2013)

#### Changes in to the Editorial board

Page 1 Cees W. Passchier

### Photograph of the month

Page 2

### Shear-enhanced compaction bands formed at shallow burial conditions; implications for fluid flow (Provence, France)

Original Research Article
Pages 3-15
Gregory Ballas, Roger Soliva, Jean-Pierre Sizun, Haakon Fossen, Antonio Benedicto,
Elin Skurtveit

#### Highlights

Description of shear-enhanced compaction bands formed in poorly consolidated sands. ▶
Bands formed during Pyrenean contraction involved cataclasis at only ~400 m burial depth. ▶
These deformation bands are too permeable to significantly influence fluid flow. ▶ Such bands are restricted in coarse-grained and less porous sand layers within the sand unit. ▶ Comparison with US bands shows the influence of burial depth on the sealing capacity of such bands.

### Computation of subsidence parameters resulting from layer movements post-operations of underground mining

Original Research Article

Pages 16-24

Eray Can, Çetin Mekik, Şenol Kuşçu, Hakan Akçın

#### Highlights

► Underground mining studies cause displacements on the earth's surface. ► Zonguldak Hard Coal Basin has been affected due to mining activities. ► This study yields computations about the subsidence parameters. ► The average slope angle values estimated as +16".67 and -18".03

directions. ► The horizontal unit deformation values estimated 0.26 mm/m for compression and 0.28 mm/m for extension.

## Dissimilar properties within a carbonate-reservoir's small fault zone, and their impact on the pressurization and leakage associated with CO<sub>2</sub> injection

Original Research Article

Pages 25-35

Pierre Jeanne, Yves Guglielmi, Frédéric Cappa

#### Highlights

▶ Damage zone of small faults are characterized by more or less fractured layers. ▶ Damage zone is composed by level acting as drain or barrier for fluid flow. ▶ The hydraulic properties variations influence the pressurization of the fault zone.

### Monitoring in situ stress/strain behaviour during plastic yielding in polymineralic rocks using neutron diffraction

Original Research Article

Pages 36-51

S.J. Covey-Crump, P.F. Schofield, I.C. Stretton, M.R. Daymond, K.S. Knight, J. Tant

### Highlights

▶ Neutron diffraction is used to monitor the deformation of calcite + halite composites. ▶ The measured elastic properties agree well with shear lag and Eshelby-type analyses. ▶ The importance of load transfer during plastic yielding is emphasized. ▶ In situ stress/strain curves are recovered for the weak phase during plastic yielding.

Corrigendum to "Patterns of mineral transformations in clay gouge, with examples from low-angle normal fault rocks in the western USA" [Journal of Structural Geology 43 (2012) 2–32]

Page 52 Samuel H. Haines, Ben A. van der Pluijm