

# Nonlinear Effects, Shock Waves, and Fractures in Acoustics of Porous and Permeable Media

Chair: Dr. James G. Berryman  
Lawrence Livermore National Laboratory, USA

15:45 – 18:00; June 9, 2009  
Room 555

- **Keynote** Prof. Shaul Sorek (Israel)  
*Shock Wave Through Deformable Saturated Porous Media*
- 26 Serge A. Shapiro (Germany)  
*Microseismicity of Non-Linear Fluid-Rock Interactions: From Stimulations of Geothermic Reservoirs to Hydraulic Fracturing of Shales*
- 161 Ashot V. Shekoyan & Alexander G. Bagdoyev (Armenia)  
*Linear and Nonlinear Waves in Porous Media Filled with Electrolyte*
- ? 174 Boris Plyushchenkov & Anatoly Nikitin (Russia)  
*New Method for Permeability Evaluation by Acoustic-Electromagnetic Logging*
- 175 James G. Berryman (USA)  
*Fluid Effects on Seismic Waves in Hard Rocks with Fractures and in Soft Granular Media*
- ? 181 M. Kaczmarek, R. Drelich, B. Piwakowski & P. Safinowski (Poland)  
*Ultrasonic Reflectometry and Studies of Inhomogeneous Waves in Porous Materials*
- 225 Weimin Nian, Kolluru V. Subramaniam & Yiannis Andreopoulos (USA)  
*Energy Considerations in Shock Wave Propagation during the Dynamic Compaction of Porous Media*