



UNIVERSITÉ  
DE GENÈVE

FACULTÉ DES SCIENCES

Section des sciences de la Terre



**Jeudi 17 janvier 2008**

**salle 001, 18.00 h.**

13, rue des Maraîchers, 1205 Genève

## **The Structure, Content and Growth of Fault Zones within Sedimentary Sequences (and the implication for the sealing of Hydrocarbons)**

**Prof. John J. Walsh**

*University of Dublin (Ireland)*

*2007-08 AAPG Distinguished Lecturer*



This talk outlines the main characteristics of fault zones developed within a broad range of host rock sequences and at different deformation conditions. High quality outcrop constraints illustrate how the combined effect of host rock rheology and prevailing deformation processes is capable of generating the full range of fault rock types, including those which have a major impact on hydrocarbon flow, such as shale/clay smears through to shaley faults. Despite the inherent complexities of fault zones, new approaches are briefly described which are capable of incorporating the effects of faults in both hydrocarbon exploration and production models.