

Geophysics

Expertise Microseismic and Acoustic Emission (AE) Monitoring, Induced Seismicity, Integration and Validation of Numerical Models with Geophysics

Education Ph.D. (Applied Seismology), 1998, Keele University, Staffordshire, UK
BSc., (Geophysics (Physics), Honours), 1995
Liverpool University, Liverpool, UK

Honors & Awards Liverpool Geological Society Prize for Geophysics for Top Achievement in Honours Year, 1995
Sir W. H. Tate University Undergraduate Scholarship for Top Achievement in Degree Year 2, 1994
Royal Institution (Iliff) University Undergraduate Scholarship for Top Achievement in Degree Year 1, 1993; Graduating Prize in Chemistry for Top Achievement at A Level, 1992

Professional Affiliations Fellow, Geological Society of London (FGS)
Member, Society of Petroleum Engineers (SPE)

Professional Experience

2010 - Present Itasca Consulting Group, Inc., Minneapolis, Minnesota
General Manager, Principal

2003 - 2010 Applied Seismology Consultants, Shrewsbury, UK
Principal Geophysicist, Geophysics Operations Manager
1999-2003 Consultant Geophysicist

1998 - 1999 William Pettitt, Consultant Geophysicist

Project Experience

Microseismics: Leading expert in the field of microseismic and acoustic emission (AE) monitoring, principally for the Petroleum, Geothermal, Mining, Radioactive Waste and Laboratory testing markets, working at the leading edge of the development and application of techniques in passive seismology applied to induced seismicity.

Development: Creator and developer of the *InSite Seismic Processor*, a leading commercial microseismic acquisition, processing and visualization software system. Licensees include universities, petroleum, service, geothermal and radioactive-waste companies. Development of commercial high-frequency data acquisition systems for rock fracture monitoring. Technological development of seismological processing algorithms and integrated software solutions, particularly in the petroleum, geothermal and rock mechanics sectors. Developed a Quality Management System with the ISO 9001:2000 framework, receiving certification for ASC.

Project Management: General Manager of Itasca Consulting Group, Inc., based in Minneapolis, leading the business and technological development of the company's products, consultancy and support services, and supervising an internationally respected team of engineers, software developers and supporting staff. Extensive communication with world-wide clients. Previously, Scientific Coordinator for a multi-national EC project. Management and delivery of complex, international consultancy projects from first design and proposal through to reporting.