

Personal Bio

Vital Stats

Full Name: Qing Lin

Affiliation: College of Petroleum Engineering, China University of Petroleum, Beijing

Position: Lecturer



Biography

My technical area of interest is rock fracture. Because failure of rock is essentially a process of fracture initiation and propagation, the understanding of fracture processes may lead to improved or more efficient means of rock support (preventing fracture) or rock removal (inducing fracture). After the graduation from the University of Alaska with an MS degree in Geoengineering (2003) for permafrost, I worked on rock fracture mechanics and petroleum related applications at the University of Minnesota and China University of Petroleum. My research experiences involve the setup and assembly of experimental devices, calibration of experimental systems, performance of the experiments, and analyses of experimental data and results. After more than 10 years, my research contributions in rock mechanics and rock engineering are: (1) non-contacting, optical deformation measuring systems (speckle pattern interferometry and digital image correlation); (2) characterization of the fracture process zone in opening and mixed-mode fractures, including displacement fields surrounding a crack tip.

Currently I work as a lecturer at China University of Petroleum and current researches are focus on: (1) experimental rock mechanics; (2) fracture mechanics of rocks and other quasi-brittle materials; (3) developments and utilizations of optical, acoustic and other testing techniques in rock mechanics and rock engineering, (4) experimental studies and numerical simulations of hydraulic fracture.

Personally, I love the traveling and reading. Traveling can make me communicate with different people and experience different culture. Reading books, especially the history books, not only let me learn the history but also calm my mind.

Education

Ph.D., Civil Engineering, University of Minnesota, Twin Cities. 2003-2010

M.S., Geological Engineering, University of Alaska, Fairbanks. 2001-2003

Bachelor, Civil Engineering, Nanjing Forestry University, China. 1995-1999

Awards and Major Publications

- Lin, Q., Yuan, H., Biolzi, L. and Labuz, J.F. Opening and mixed-mode fracture processes in a quasi-brittle material via digital imaging. *Engineering Fracture Mechanics* 2014. DOI: 10.1016/j.engfracmech.2014.07.028.
- Lin, Q. and Labuz, J.F. Fracture of sandstone characterized by digital image correlation. *International Journal of Rock Mechanics and Mining Sciences* 2013; 60: 235-245. DOI: 10.1016/j.ijrmms.2012.12.043.
- Sommerfeld Summer Fellowship (2003-2004), Department of Civil Engineering, University of Minnesota
- Research Fellowship (2002-2003), The Graduate School, University of Alaska