

Personal Bio

Vital Stats

Full Name: Andrew P. Bungler

Affiliation: University of Pittsburgh
Department of Civil and Environmental Engineering
Department of Chemical and Petroleum Engineering

Position: Assistant Professor



Biography

Andrew Bungler is an Assistant Professor in the University of Pittsburgh's Department of Civil and Environmental Engineering. He joined the University of Pittsburgh in 2013 after spending 10 years in Melbourne, Australia working in the Geomechanics Group within the Commonwealth Scientific and Industrial Research Organization (CSIRO). During this period he was responsible for research efforts in hydraulic fracturing, wellbore stability, and drilling mechanics. His research ongoing interests include the mechanics of hydraulic fractures, coupled fluid-shale interaction, and the emplacement dynamics of magma-driven dykes and sills. He teaches a combined graduate/undergraduate course at the University of Pittsburgh on mechanics and applications of hydraulic fracturing to over 60 students each year. He holds a PhD in Geological Engineering from the University of Minnesota.

Education

Ph.D. Geological Engineering, University of Minnesota, 2005

M.Sc. Geological Engineering, University of Minnesota, 2002

B. Geological Engineering, University of Minnesota, 2000

B.A. Physics/Engineering Science, Bethel University, 2000

Awards and Major Publications

Cheng C, Bungler AP. In Press. Rapid Simulation of Multiple Radially-Growing Hydraulic Fractures Using an Energy-Based Approach. *International Journal of Numerical and Analytical Methods in Geomechanics*. DOI: 10.1002/nag.2471. Accepted 2 September 2015.

Bungler AP, Lu G. In Press. Time-Dependent Initiation of Multiple Hydraulic Fractures in a Formation with Varying Stresses. *SPE Journal*. Accepted 20 March 2015. <http://dx.doi.org/10.2118/171030-PA>.

Bunger AP, Kear J, Dyskin AV, Pasternak E. 2015. Sustained Acoustic Emissions Following Tensile Crack Propagation in a Crystalline Rock. *International Journal of Fracture*, 193:87-98.

Awards:

Best Paper Award, ISRM Congress 2015: Bungler AP, Kear J, Jeffrey RG, Prioul R, Chuprakov D. 2015. Laboratory Investigation of Hydraulic Fracture Growth Through Weak Discontinuities with Active Ultrasound Monitoring. Proceedings 13th International Society for Rock Mechanics (ISRM) Congress, Montreal, Canada, 10-13 May 2015.

Society of Petroleum Engineers Journal 2014 Outstanding Technical Editor Award.

Pittsburgh Business Times Who's Who in Energy 2014.

Neville G.W. Cook Award for Innovative Research in Geomechanics, Minneapolis, USA, May 2005