

CALL FOR PAPERS

Applied Mechanics Division: Fracture and Failure Mechanics Technical Committee

2015 ASME International Mechanical Engineering Congress and Exposition *Houston, Texas, November 13-19, 2015*

Mechanics of Hydrofracking

Organized by

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PURPOSE AND SCOPE

The unconventional oil and gas production through hydraulic fracturing (commonly known as hydrofracking) has led to revertible energy revolution. Oil and gas production in the United States is booming as energy companies go after hydrocarbons that have never before been accessible or profitable to exploit. Therefore, there is a large need to understand the mechanics of fracking in order to guide and improve the process of hydrofracking for maximum production from unconventional reservoirs. Therefore, this symposium focuses on presentations that include, but not limited, to the following topics:

- Theoretical and computational models for simulating hydrofracking
- Laboratory experimental techniques that aid the understanding of hydrofracking
- Fracture mechanics of shale at reservoir conditions of high confining pressures and temperatures
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- Effects of rock natural fractures and heterogeneity on fracking
- Efficiency and viability of using different fluids (e.g., brine, sea-water, gas) to create and propagate hydrofractures
- Acoustic (seismic) data processing and interpretation
- Uncertainty and stochastic models

Interested authors should submit an abstract between 400 and 650 words via the web tool at the Congress 2015 website. http://www.asmeconferences.org/Congress2015/
Final papers will be available on CD-ROM at the meeting.

SUBMISSION DEADLINE: March 2, 2015

See Conference website for detailed Publication Schedule http://www.asmeconferences.org/Congress2015/