Jiancheng Du

GEOTECHNICAL ENGINEER

CONTACT

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4039211096

Calgary, Canada

SKILLS

Geo-slope, Abaqus, Flac2D and Flac3D

C#, Fortran and Matlab

LANGUAGES

English

Mandarin

AWARDS

Dean's Special Doctoral Scholarship
2003-11-20
University of Calgary

Alberta Ingenuity Industry Associate
2006-12-07
Alberta Ingenuity Fund

SUMMARY

- Ph.D. degree in geotechnical engineering from University of Calgary.
- Registered professional engineer with APEGA.
- 12+ years of experience in numerical modeling of geotechnical engineering problems, geotechnical laboratory testing, site investigations, and field experiments of minifrac tests.
- Familiarity with dam safety assessment for oil sands tailing ponds.
- Familiarity with Geo-slope, Abaqus, Flac2D and Flac3D.
- Strong problem analysis and solving skills, and excellent skills in communication and teamwork.
- Good understanding of Canadian Dam Safety Regulations and extensive knowledge of oil and gas development regulatory processes.

EXPERIENCE

Geomechanics/Geotechnical Engineer Oct 2008 - Jun 2019
Alberta Energy Regulator (AER)

- Assessed safety risk of tailing dam for oil sands mining projects, and prepared recommendations for appropriate AER decision making processes.
- Conducted technical reviews of geotechnical modelling of tailing dam seepage and slope stability.
- Assessed fluid containment risk and caprock integrity for in situ oil sands development and operations.
- Conducted geotechnical and geomechanics modelling studies for a variety of in situ oil sands projects regarding the caprock integrity.
- Coordinated oil and gas development applications and communicated with stakeholders for their concerns about the applications.
- Provided technical training to junior staff in the areas of geotechnical engineering, hydraulic fracturing, and wellbore stability.

Geotechnical Engineer Dec 2006 - Oct 2008
Imperial Oil Resources

- Numerically modeled fracture propagation in the Colorado shales as a result of high-pressure steam injection in the oil sands reservoir.
- Conducted minifrac tests in Cold Lake to determine the in-situ stresses.
- Performed tri-axial and hydraulic compression tests on Cold Lake oil sand samples under small-strain and high confining pressure conditions.
- History matched the surface heaves above a cyclic steam stimulation pad from InSAR to calibrate the geotechnical properties of the Colorado shales.
- Performed coupled geomechanics-reservoir simulation on UTF Project.
- Performed Biot's consolidation analysis using self-developed finite element simulator.

EDUCATION

Ph.D. degree in Geotechnical Engineering Sep 2001 - Nov 2006
University of Calgary