

**Sergey Kuzmichev**

**Instructor**

### **Career synopsis**

Experienced in the Oil and Gas sector with focus on drilling risers and wellhead systems with different types of rigid lock mechanisms, deep knowledge in structural analysis (FEA) and leading R&D projects. I am a quick learner, open-minded and team-oriented. Ready for a new everyday challenges.

### **Professional experience**

#### **January 2014-Until now - Principal Engineer Platform Technology Dynamic risers - Equinor ASA, Norway**

- Finite-element analyses: all activities regarding fatigue issues for subsea equipment during well construction and finite-element analysis documentation (riser analysis, system wellhead analysis, component analysis) in all ongoing projects (historical and planned)
- Instrumentation/Measurements: post-processing of the data from measurements to evaluate well fatigue status
- Research and Technology: develop and introduce technology improvements (compile internal technical requirements and recommendations to industry standards DNVGL RP 0142, DNV WHF Analysis Method 2011, NORSOK U001)
- Curriculum development

#### **October 2009-January 2014 - Senior Structural Analysis Engineer - FMC Technologies, Norway**

- Provide input to engineering planning of own tasks, report deviations from plan and propose corrective actions accordingly.
- Take responsibility to keep up with product standardization and implement standard products in WAS.
- Plan and perform design reviews on own technical documents and update same as required.
- Participate in training of internal personnel if required.
- Challenge the internal work processes and contribute to their development and improvement.
- Ensure that agreed final version of codes, standards and software are used in all work.
- Participate in meetings with suppliers and customers if required
- Perform wellhead fatigue analysis based on ISO 13628-7, DNV RP-C203, DNV Wellhead Fatigue Analysis Method, FMC policies and procedures, and to the quality specified or implied by contract documents, FMC specifications and ISO 9001
- Provide a full package of documentation regarding wellhead fatigue analysis
- Personnel training

#### **July 2008-June 2011 - Scientific associate - Institute for Problems in Mechanical Engineering Russian Academy of Science, Russia**

- Perform a full package of FEA analysis in all grants
- Analysis of the evolution of the morphology of a micropore in a brittle solid under external stress.
- Analysis of an external tensile mechanical stress applied to a fiber and highpower UV lightpulses on a photosensitive optical fiber.

- Development of the mechanism of formation of fiber Bragg gratings of the type IIA in photosensitive optical fibers and a theoretical model of their formation
- Investigation of the critical value of the tensile stress of the fiber at which structural defects intensively nucleate in the fiber under the joint action of the irradiation and external load. This stress coincides with the breaking stress in experiments made.
- Personnel training

**April 2006-December 2006 - Stress engineer - Boeing, Russia**

- Perform a full cycle of FEA analysis in the project
- Development of a 3D composite models of fuel separating plates
- Analysis of maximum stress in acc. with internal Boeing standards
- Perform optimization of the wing's weight

**Education and qualifications**

Type	Name
2008 - 2011, Ph.D	Institute for Problems in Mechanical Engineering of Russian Academy of Sciences, Applied Mechanics
2009	FMC Kongsberg Subsea AS, Subsea Technology / Presentation techniques / Abaqus software courses, 379 hours

**Language: English**