

Nicholas (Thomas) Bak

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Education

MSc. in Materials Engineering

2016-Present

University of Alberta, Edmonton, Alberta

- My work is being completed under supervision by Dr. Lianne Lefsrud and Dr. John Wolodko.
- Studying Technology Adoption tendencies of members of the Oil and Gas supply chain using semi-structured interviews with participants.
- This work is a part of a large-scale multi-university project supported by Genome Canada studying Microbiologically Influenced Corrosion (MIC) in pipeline systems.
- Developed skills in bibliometric and statistical analysis to better quantify the scope of MIC in research literature
- As part of my coursework I've completed a Strategic Management and Organization (SMO) course offered to all graduate students and then an advanced course restricted to students in the MBA program. These courses focused on entrepreneurship and how to manage and integrate innovation within a company.
- Completed CME 694, Advanced Engineering Risk and Safety continuing to develop my skills and capabilities in this field.
- Expected completion Summer 2018.

BSc. in Materials Engineering, Traditional Program

2012-2016

University of Alberta, Edmonton, Alberta

- Received Jason Lang Scholarship for 2014-2015 academic year.
- Senior Project (Process Design) designing and costing a process operation for assembly of a printed circuit board for a downhole directional drill for NOV Wellbore Technologies.
- Senior Project (Materials Design) designing a Nickel based alloy to resist stress corrosion cracking in chlorine containing steam based environments for Alberta Innovates Technology Futures.
- Completed the final two years of my degree with a cumulative EGA of 3.1/4.0.
- Keen interest in Corrosion Mechanisms, Welding Metallurgy and Mineral Processing as demonstrated by my elective selections.

Conference Presentations

Faculty of Engineering Graduate Research Symposium

Edmonton, Alberta

Poster Presentation

June 27, 2017

- Determining the Scope of Microbiologically Influenced Corrosion in Research Literature and in Industry

NACE 2017

New Orleans, Louisiana

Student Poster Session

March 27-29, 2017

- Determining the Scope of Microbiologically Influenced Corrosion in Research Literature and in Industry

Research Experience

- Additional lab experience in sample preparation including mounting and polishing of metallurgical samples with undergraduate lab coordinator Dr. Elizabeth Lee Ph.D.
- Completed Dean's Research Award project during the 2015/16 academic year, studying Internal Corrosion Failures of Pipelines supervised by Dr. James Hogan Ph.D.

Other Experience

Graduate Teaching Assistant ENGG 404/406

2016-Present

University of Alberta, Edmonton, Alberta

- Worked alongside members of the David and Joan Lynch School of Engineering Risk and Safety management as a teaching assistant.
- Duties included aiding students with completion of their midterm and final reports.
- Marked these reports and gave feedback to help students in developing their skills.
- Improved my own knowledge of Engineering Risk and Safety and methodologies used in industry.

Research Assistant ENGG 404

2017-Present

University of Alberta, Edmonton, Alberta

- Worked alongside members of the David and Joan Lynch School of Engineering Risk and Safety in developing a more sustainable course model for ENGG 404.
- Worked on developing an integrated system that allows for better course delivery and student engagement.

Senior Customer Service Representative

2009-2016

Andy's IGA, Edmonton, Alberta

- Used in a leadership role on weekends, organizing colleagues and completing various tasks to ensure the continued smooth operation of the store.
- Duties included organizing back stock room containing product and assisting customers with a variety of concerns.
- Improved conflict resolution skills by dealing with customers and fellow employees.

Associations

- Registered as an Engineering in Training (EIT) with APEGA as of February 2017.
- Registered as a student member of the National Association of Corrosion Engineers (NACE).

Skills

- Valid CSTS certification completed during my degree.
- Competency with Microsoft Office Suite: Word, Excel, and PowerPoint. Developed during my degree.
- Competency in NVivo text analysis software.
- Strong technical writing developed through various group reports and formal report writing classes taken during my degree.
- Experience leading two small design project teams (4 members) during my degree leading to adequate work distribution and excellent team performance.
- Completion of a course in Engineering Risk Management, experience in conducting Field Level Risk Assessments.
- Class 5 license with a clean driving abstract.
- Enjoy reading, recreational hockey, and soccer.

