

CURRICULUM VITAE
MARYAM BILAL HMOUDAH

Research and Teaching Assistant, University of Calgary
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EDUCATION

2014-Present: *MSc* in Chemical Engineering (first class academic standing), specialty of Energy and Environment, University of Calgary, Schulich School of Engineering, Calgary, Canada.

2004-2009: *BSc* in Chemical Engineering (first class academic standing), An-Najah National University, Faculty of Engineering, Nablus, Palestine. Graduation Project: "Charcoal Production and its Pollution Mitigation".

2003-2004: *High School* in Science stream, Kamal Junblat, Nablus, Palestine.

WORK EXPERIENCE

- **Research and Teaching Assistant: January 2014-Present**

Registered in the Faculty of Chemical and Petroleum Engineering at University of Calgary to pursue MSc graduate study in the field of energy and environmental engineering.

- **Senior Quality Engineer: October 2013-December 2013**

During the year of 2013, promoted to be a "senior quality engineer" at the Faculty of Engineering at An-Najah National University.

Responsibilities:

1. Development and implementation of accreditation processes for engineering programs at An-Najah National University, engineering accreditation unit. Specifically, processes for American accreditation board for engineering and technology (ABET).
2. Identify best practices; as well as feasible and effective strategies that will help meet ABET accreditation standards.
3. Leading the internal auditing processes in the departments of faculty of engineering.
4. ABET accreditation processes assessment and evaluation; through direct and indirect assessment, archiving and evaluating the academic and administrative systems to fulfil ABET standards and requirements and to track and improve the programs' constituencies satisfaction.
5. Developing continuous improvement plans, strengthening the processes, identifying communication and reporting strategies and statistical analysis, and identifying the appropriate support necessary to meet ABET standards.
6. ABET Processes quality assurance and quality control.
7. Preparing quality assurance reports and accreditations' self-evaluation reports.
8. Archiving and documenting ABET processes and requirements.
9. Assist in defining/developing quality key performance indicators, and reporting requirements.
10. Developing, maintaining and conducting different types of quality management systems and accreditation standards at the faculty of engineering & IT as continuous enhancement of the quality and standards framework.
11. Developing databases and management information systems for all constituencies in order to involve them in the continuous improvement and decision-making processes.
12. Developing quality system processes, i.e., records, procedures and document control.
13. Organizing the periodic committee's meetings and holding training workshops for the Engineering faculty's members concerning to ABET.

- **Quality Executive Engineer: April 2011-October 2013**

Got involved in a project related to evaluating the quality of engineering education at the Faculty of Engineering at An-Najah National University. In addition to this, got involved in the implementation and development processes to get ABET accreditation to the engineering programs in the faculty.

Responsibilities:

1. ABET accreditation processes development and implementation.
2. Internal auditing at the Engineering Departments.
3. ABET accreditation processes assessment and evaluation.
4. ABET processes quality assurance and quality control.
5. Daily running of ABET center operations.
6. Archiving and documenting ABET processes.
7. Organizing and holding the periodic committee's meetings.

- **Teaching and Research Assistant: January 2011- December 2011**

Employed in the Chemical Engineering Department at An-Najah National University.

Responsibilities:

1. Operating Distillation Unit Armfield UOP3CC in Unit Operations Laboratory.
2. Operating Electronica Veneta single stage evaporator Mod. UMEC/EV evaporation unit in Unit Operations Laboratory.
3. Preparing tutorial discussion classes for homework's of courses "Reaction Engineering", "Reactor design", "Fluid Mechanics" and "Mass transfer".
4. Assigned to demonstrate the practical part of course "Computer aided equipment design" using Aspen HYSYS software.

AWARDS AND SCHOLARSHIPS

1. FGS Maternity and Miscellaneous Award, Graduate Scholarship Office, University of Calgary, December 2014.
2. Schulich Student Activities Fund (SSAF) (to attend 64th CSChE conference, Niagara Falls, Ontario Conference, October 18-22, 2014), Schulich School of Engineering, University of Calgary, December 2014.
3. Best 3MT presentation award in "Research Seminar" course, Schulich School of Engineering, University of Calgary, November 2014.
4. Graduate Research Scholarship (MSc), Department of Chemical and Petroleum Engineering, University of Calgary, AB, Canada, January 2014. Amount: 21,000 CAD/year.
5. Tuition Fee Waiver Award for Nine Semesters, An-Najah National University, Nablus, Palestine, 2005-2009. Amount: 33% off total tuition fees.
6. Dean's List of Honor, An-Najah National University, Nablus, Palestine, 2004-2009.

PROFESSIONAL AFFILIATIONS

- Member: Chemical Institute of Canada and Constituent Societies (MCIC), 2014-present.
- Scholar of An-Najah National University, 2013-Present.
- Research Assistant in CBUG, University of Calgary, 2013-Present.
- Member: American Institute of Chemical Engineers, USA. (AIChE), 2012-2013.
- Member: Institute of Chemical Engineers, UK. (AMICChE), 2011-2013.
- Member: Jordanian Engineers Association, 2009-present.

PROFESSIONAL DEVELOPMENT

- Overview of the NI LabVIEW environment, April 2014.
- VMGSim Training Course, March 2014.
- Valve Tube Bending Training Course, February 2014.

PROFESSIONAL CERTIFICATION

- Workplace Hazardous Materials Information systems (WHIMIS), February 2014.
- H₂S Alive, February 2014.
- French Course (Level 4), September 2014.
- IELTS academic band score 6.5, February 2013.

RESEARCH INTERESTS

Environmental impact assessment, wastewater treatment, hazardous waste management, accident investigation and safety of chemical process industries.

INTERESTS AND SKILLS

- Wide interest in computing, with programming knowledge in Matlab, VMGSim, Aspen Hysys and Chemcad. Good knowledge of P.C's and their associated packages. Good ability in using the Internet and the electronic e-mail. Other interests include reading, especially books, magazines and watching TV programs including comedy and documentary programs.
- Ability to organise, lead and deal tactfully with people of different thinking ability.
- Ability to lead team in areas related to improving the evaluation and assessment processes of engineering education.

PUBLICATIONS, PRESENTATIONS, PERFORMANCES, EXHIBITIONS

Peer-reviewed journal article:

A. El-Qanni, N. N. Nassar, and **M. Hmoudah**, The Phenomenal Use of Metal Oxide Nanoparticles (MONPs) as Adsorbents and Catalysts for Wastewater Treatment: A review, Nanotechnology Reviews, (In Preparation), 2015.

Peer-reviewed conference proceeding:

A. Abu-Safa and **M. Hmoudah**, Engineering Education in Palestine (Evaluation and Accreditation Criteria), Second Conference of Engineering Education in the Arab Homeland in Lebanon, Beirut 22-23th March 2012.

Peer-reviewed abstracts:

A. Hamouz, A. Jaaron, F. Halawa, B. Shaheen, **M. Hmoudah**, The Impact of Effective Staff Involvement on the Successful Realization of ABET Requirements, 14AIChE Annual Meeting, Atlanta, GA, USA, November 16-21, 2014.

M. Hmoudah, N. N. Nassar, G. Vitale, Nano-Iron Silicate for Adsorption of Waste Heavy Hydrocarbons, 64th Canadian Chemical Engineering Conference, Niagara Falls, Ontario, Canada, October 19-22, 2014.

Exhibition poster:

M. Hmoudah, S. Khalili, Weam Marbo', Charcoal Production and its Pollution Mitigation, Chemical Engineering Innovation Exhibition, An-Najah National University, West Bank, Palestinian Authority, May 4th 2009.

Seminar presentation:

M. Hmoudah, Nano-iron silicate for Enhancing Heavy Oil Quality, 3MT presentation, ENCH 601 Research Seminar, Schulich School of Engineering, University of Calgary, November 18th, 2014.

Thesis:

M. Hmoudah, Charcoal Production and its Pollution Mitigation, Bachelor of Science Thesis, An-Najah National University, West Bank, Palestinian Authority, 2009.

SPOKEN LANGUAGES

- Arabic: Native, English: Fluent, and French: Good.

REFERENCES

1. **Prof. Amer Elhamouz**, Ph.D, Department of Chemical Engineering, An-Najah National University. Address: Nablus, Palestine. Email: elhamouz@najah.edu
2. **Dr. Nashaat N. Nassar**, Ph.D, P.Eng, Department of Chemical & Petroleum Engineering, Alberta Ingenuity Centre for In Situ Energy (AICISE). Address: 2500 University Drive, NW, Calgary, AB, Canada T2N 1N4. Office: (403) 210-9772, Fax: (403) 210-3973, CCIT 119, Email: nassar@ucalgary.ca
3. **Prof. Pedro Pereira Almao**, Department of Chemical and Petroleum Engineering, Professor, NSERC/NEXEN IR Chair in CBUG, Phone: (403) 220-4799, Address: 2500 University Drive, NW, Calgary, AB, Canada T2N 1N4, CCIT 118, E-mail: ppereira@ucalgary.ca