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Salah Eddin Abu Yahya

Personal Information

Marital status: Married
Nationality: Jordanian
Date of Birth: 6/8/1978
Place of Birth: Jordan

Education

September 2001 - April 2004

M.Sc. in Chemical Engineering. **GPA: 87.2 (Excellent)**
Jordan University of Science and Technology (J.U.S.T)/ I have been granted a scholarship to study a Master's degree at JUST and the thesis was completely done in Twente University the Netherlands.

Thesis title: "*Crystallization kinetics of CuS and ZnS using Mixed Suspension Mixed Product Removal (MSMPR) crystallizer* "

September 1996 - June 2001

B.Sc. in Chemical Engineering. **GPA: 77.3 (Very Good - top 10%**
Jordan University of Science and Technology (J.U.S.T).

B.Sc. graduation project: "*Production of Aluminum tri-Fluoride AlF3, Plant Design Project*"

July 1996

General Secondary Education Exam. **GPA: 94.4 %**
Al-Shamila High School, Zarqa, Jordan

Working Experience

September 2018-Current

Location: *Jordan University of Science & Technology (JUST) – Chemical Engineering Department-Jordan*

Job title: *Lecturer.*

Undertaken work and responsibilities:

Teaching the following courses:

1. ***Numerical Methods for Chemical Engineering CHE 202***
2. ***Communication Skills for Engineering CHE 303***
3. ***Unit Operation CHE362***
4. ***Professional Ethics for Engineers CHE 400***
5. ***Engineering Economy CHE 401***
6. ***Economics & Engineering Management (1) BME202***
7. ***Computer Applications Lab for Chemical Engineering (Aspen HYSYS) CHE454***
8. ***Unit Operation Lab CHE 565***
9. ***Supervise 2 groups each semester for Graduation Project 1 CHE 591***
10. ***Supervise 2 groups each semester for Graduation Project 2 CHE 592***
11. ***Preparing a course entitled 'Tanning Technology' to be presented as an elective course for the students.***

Jan 2107-September 2018

Location: *Institute of Applied Technology- Abu Dhabi Polytechnic – Academic Support Department. United Arab Emirates.*

Job title: ***Professional Lecturer.***

Undertaken work and responsibilities:

Teaching the following courses:

1. ***Fluid Flow and Heat Transfer ENG 227***
2. ***Thermodynamics ENG 126***
3. ***Numerical Computational Method Using MatLab MET 333***
4. ***Statics & Strength of Materials ENG 224***
5. ***Fluid Flow and Heat Transfer Lab ENG 227L***
6. ***Fundamentals of Thermodynamic Lab ENG 126L.***

August 2008-Jan 2107

Location: *The Petroleum institute - Chemical Engineering Department, College of Engineering.*
United Arab Emirates.

Job title: Lab Instructor

Undertaken work and responsibilities:

A- Teaching the following courses /Labs:

1. ***Strategies for Engineering problem solving II (STEPS II) course using Aspen HYSYS as the main simulators.***
2. ***Chemical Engineering Process Design I (Simulation using Aspen HYSYS and ProMax)***
3. ***Chemical Engineering Process Design II Lab (Profitability Analysis using Aspen Capita Cost Estimator (ACCE) and Aspen HYSYS Economic Analyzer)***

4. ***Process Dynamics and Control Lab (MatLab+ Simulink+Aspen HYSYS dynamic)***

5. ***The Lab component of the Petroleum Refinery course: Simulating of Different Refinery Processes using aspen HYSYS (oil Manager)***

6. ***Reaction Engineering Lab (Experimental and Simulation Parts using Aspen HYSY and PolyMath)***

7. ***Computational Methods in Chemical Engineering Lab (Numerical Methods Using MatLab)***

8. ***Introduction to polymer science lab***

B- Other responsibilities:

1. ***Fully in charge and responsible for the new polymer lab which includes installation, training and commission. Throughout the course of three years I have been trained on more than 15 polymer equipment's which include, but are not limited to: mini injection (HAAKE), min extruder, shear rehometer, HDT, MFI, FTIR, single screw extruder, twin screw extruder, capillary rehometre, DSC, Injection molding and universal testometric machine (tensile strength). I have received official certificates from the following training companies (Polymer lab):***
    - ***Lab Tech (Thailand)***
    - ***CEAST (Italy)***
    - ***Engel (Austria)***
    - ***TA (UK)***

2. ***Full responsibility and taking care of the equipment in the following labs:***
    - ***Polymer processing Lab***
    - ***Process Dynamics and Control Lab***
    - ***Reaction Engineering Lab***

February 2008-July2008

Location: *American University of Sharjah (AUS) – Chemical Engineering Department, College of Engineering*

Job title: Lab Instructor

Undertaken work and responsibilities:

Teaching the following labs:

1. ***Mat lab, Poly Math, Aspen HYSYS, Aspen Plus and MathCAD Lab.***

2. ***Unit Operation Lab I which includes fluid and heat transfer processes.***

February 2007- October 2007

Location: *Qatar University- Chemical Engineering Department, College of Engineering*

Job title: Teaching Assistant and lab instructor

Undertaken work and responsibilities:

1. ***Worked as an instructor for Lab II which includes unit operations and mass transfer processes.***

2. ***Assisted in teaching the following courses: Thermodynamics I, Thermodynamics II, and Chemical Reaction Engineering.***

3. ***Conducted tutorial and problem solving sessions, prepared quizzes as well as graded them.***

4. ***Teaching, managing and installing all of the software's related to the department which included but were not limited to: ASPEN Plus, HYSYS and ProMAX***

October 2004 – January 2007

Location: *United Arab Emirates University – General Requirements Unit, College of Engineering*

Job title: Teaching Assistant

Undertaken work and responsibilities:

1. ***Assisted in the teaching of the following courses: Thermodynamics, Engineering Materials, Introduction to engineering design & ethics and Engineering practices and entrepreneurship.***

2. ***Conducted tutorial and problem-solving sessions, prepared quizzes as well as graded them.***

September 2001 – February 2004

Location: *Jordan University for Science & Technology– Chemical Engineering Department, College of Engineering*
Job title: Teaching Assistant
Undertaken work and responsibilities:

1. ***Assisted in the teaching of the following courses: fluid mechanic lab, unit operations lab, measurements lab, basic principles of chemical engineering, material sciences, separation processes, equipment design, experimental design, reactor design, thermodynamics and desalination.***

2. ***Conducted tutorial and problem-solving sessions, prepared quizzes.***

Relevant Experience & Training

April 01 - April 05/ 2019

Location: ***INCDTP – ICPI, BUCHAREST, ROMANIA***

Nature of training:
Participating in INNOLEA project which has a duration of 3 years and is expected to end on 14-10-2020.
Training session related to leather as part of the **ERASMUS+** project with the title: "***Innovation for the leather industry in Jordan and Egypt/ INNOLEA***"

Feb 24 - March 01 /2019

Location: ***CTIC - Technological Center of Leather Industries, Alcanena, Portugal***

Nature of training:
Participating in INNOLEA project which has a duration of 3 years and is expected to end on 14-10-2020.
Training session related to leather as part of the **ERASMUS+** project with the title: "***Innovation for the leather industry in Jordan and Egypt/ INNOLEA***"

October 2015

Location: ***ASPENTECH-HOUSTON, TX / USA***

Nature of training:
One-week training course entitled "***Introduction to Aspen Capital Cost***

Estimator, EEE1011" This course learns how to use Aspen In-Plant Cost Estimator to evaluate company's projects, it covered the following subjects:

- Maximize your company's return on investment (ROI) and reduce the risk involved in making decisions
- Obtain in-plant designs and estimates from minimal input in a fraction of the time required by traditional methods
- Compose specific outline scope definitions for Aspen In-Plant Cost Estimator projects
- Reduce estimation variability by adopting a consistent methodology
- Increase costing accuracy by generating detailed reports for analysis, traceable to line items, not lump sums of money.
- Make adjustments to project estimates according to local area conditions.
- Use system documentation to improve estimate consistency and reliability.

June 2011

Location: ***Dubai Knowledge Village – UAE***

Nature of training:
3-days training course entitled "***Aspen HYSYS: Advanced Process Modeling Topics EE101***''. This course Learn how to use and apply advanced modeling techniques to enhance existing Aspen HYSYS flow sheet. It covered the following subjects:

- Create custom column templates, including non-standard configurations
- Perform complex calculations on flow sheet variables using the Spreadsheet
- Realistically simulate separator carryover
- Optimize process conditions to meet one or more process constraints
- Integrate rigorous heat exchanger models into a standard flowsheet
- Define reaction sets and utilize different types of reactors

October 2014

Location: ***The Petroleum Institute (PI)/ Abu Dhabi – UAE***

Nature of training:
4 days training course entitled "***Advanced Process Modeling for the***

Petroleum Industry" offered by the Process Systems Enterprise Ltd (PSE) based on its gPROMS modeling platform. This course includes the gPROMS process builder – Anew steady –state and dynamic modeling tool and gFLARE.

January 2013

Location: ***The Petroleum Institute (PI)/ Abu Dhabi – UAE***

Nature of training:
3-days training course entitled *"**ProMax training Level 1: Oil & Gas Focus**''*. This course Learn how to use and apply advanced modeling techniques to enhance existing Promax
flow sheet to simulate gas sweetening, gas dehydration and sulfur removal process.

September 2013

Location: ***The Petroleum Institute (PI)/ Abu Dhabi – UAE***

Nature of training:
One-day training on 'Platen Press Type P 200 P8/M' hot press, by Dr. COLLIN GmbH.

January 2010

Location: ***The Petroleum Institute (PI)/ Abu Dhabi – UAE***

Nature of training:
One-week training course in ***'Advanced Microsoft Excel".***

February 2010

Location: ***The Petroleum Institute (PI)/ Abu Dhabi – UAE***

Nature of training:
2-days training course on the "operation of Rotational rehometer AR2000ex instrumentation' , TA- Company
February 2010

Location: ***The Petroleum Institute (PI)/ Abu Dhabi – UAE***

Nature of training:

2-days training course on the "operation of RSAIII DMA instrumentation' , TA- Company

February 2010

Location: ***Labtech Engineering factory, Bangkok, Thailand***

Nature of training:
3-days training course on the "operation, running and maintenance of Labtech Engineering laboratory processing and testing machines.

October 2009

Location: ***The Petroleum Institute (PI)/ Abu Dhabi – UAE***

Nature of training:
5- days technical training course for " testing instruments Theory and Application. Practical and Professional use of equipment's with SW, Smart Reho 2000 Twin Bore, Stretching Unit, Slit Dies system, Die Swell system, PVT system and thermal Conductivity system, by CEAST, Italy.

June 2000

Location: ***Jordan Petroleum Refinery Company, Zarqa - Jordan***

Nature of training:
3 months of Dynamic Training Program as a Process Engineer which involved training in:

- Processes area.
- Quality Control laboratory.
- Boilers area (Steam Production and Water Treatment).

Research Experience

June 2011

Location: ***The Petroleum institute, Abu Dhabi***

Nature of research work:
Participating in a project entitled "*Computer-aided Process Simulation Modules in Chemical Engineering Education*" granted by CELT's 2011 Course Enhancement Mini Grant Program.A detailed manual includes 10 modules for the Chemical Engineering Process Design I Lab (HYSYS) was created; in addition a conference paper was published.

April 2009- April 2010

Location: ***The Petroleum Institute, Abu Dhabi***

Nature of research work:
Conducting research on "*Studying the Effect Of Temperature, Concentration and PH Of Ammonium Nitrate Solution On The Susceptibility Of Mild Steel To Stress Corrosion Cracking*". Two papers were published as a result of this research in 2010.

April 2004- July 2004

Location: ***Bremen University, Germany***

Nature of research work:
I have participated as a researcher in a project entitled "*Basic Experimental Studies of CO_2 Release and the Carbonate System in Sea Water Distillation*" which was a part of a main project conducted by the Middle East Desalination Research Center (MEDRC) and Bremen University, Germany.

Oct. 2002-Feb 2003

Location: ***University of Twente, the Netherlands***

Nature of research work:
I have participated as a researcher in a project entitled "*Precipitation Kinetics of CuS & ZnS particles*" which was a joint project between the University of Twente, Netherlands and Jordan University of Science & Technology, Jordan. During this period, I have acquired a practical experience in the following:

- Dealing with X-ray diffraction (Microtrac X100, size range 0.45 -1000 microns)
- Dealing with (Zetasizer 5000, size range 1-5000 nm)
- Operating at atomic absorption spectroscopy (AAS)

June 2001 – October 2001

Location: ***Jordan University of Science and Technology, Jordan Chemical Engineering Department, College of Engineering.***

Nature of research work:
I have worked as a research assistant for three months in a project entitled "*Adsorption of heavy metals on low-grade phosphate*". The project has resulted in two published articles and I have been acknowledged in one of them.

Workshops &Seminars

1. Buchi-one-day seminar: Include training and orientation on BUSCHI, Switzerland products, Dubai, UAE June 2014.

2. PI-Steven Institute of technology Collaboration workshop/training entitled" Rehology, processing, Structure Formation and Ultimate Prosperities of Polyethylene Resins," Abu Dhabi, UAE, 09—10 May 2014.

3. PerkinElmer one-day seminar entitled" latest Analytical Advancements from Perkin Elmer and Biolin' Feb 2016.

4. 30 hours lab safety training, PI, Abu Dhabi, Dec. 2011.

5. Emergency Medical Response course (EMR), Abu Dhabi, 25-27 January 2011.

6. Workshop" Endnote Bootcamp Week', Abu Dhabi, UAE, October 18, 2012.

7. Workshop at the CELT (Centre for Excellence in Learning and Teaching), the PI- Abu Dhabi, Dec 2016.

8. Special Seminar, entitled "Operation and Maintenance of ENGEL injection molding machines' by ENGEL, Austria. Abu Dhabi, 12-14 October 2009

Honors & Awards

1. Laboratory Academic Staff Service Award, the PI, Abu Dhabi, 2015.
2. Jordan University of Science and Technology (JUST), Scholarship (2001-2004)

Languages

1. Arabic: Mother's tongue
2. English: Excellent in reading, writing and understanding. Fluent in speech and very good in translation.

Computer Skills

1. Professional knowledge of specific Engineering Software Packages which includes: Aspen HYSYS, Aspen Plus, Polymath, Matlab, EES (Engineering Equation Solver) and MathCAD.

2. Excellent experience in computer software

3. Windows, Microsoft Office (Word, Excel, Power Point and Access).

Special Courses

1. Electrochemical cells.
2. Advanced Catalysis.
3. Advanced reactor design
4. Advanced separation process.

Special Achievements

1. Creating eleven modules for Process Design Lab **(Aspen HYSYS Laboratory**) which later became as an official manual for the Process design Lab at the PI (UAE) and the Waterloo University, Canada. An educational paper in Computer-aided Process Simulation Modules in ChE Education was published 2012.

2. Creating ten modules for process control lab includes **MatLab and Simulink**. An educational paper in Computer-aided Process Simulation Modules in ChE Education is in progress to be completed and published.

Publications

[1] Hanan Jalal Qeshta, **Salaheddin Abuyahya**, Priyabrata Pal, Fawzi Banat. "Sweeting liquefied petroleum gas(LPG):Parametric sensitivity analysis using Aspen HYSYS" Journal of Natural Gas Science and Engineering. 26, 2015, 1011-1017

[2] Fathia S. Mohammed, Alyaa G. Elramady, **Salaheddin E. Abu Yahya** "The Effect of the pH of Ammonium Nitrate Solution on the Susceptability of Mild Steel to Stress Corrosion Cracking (SCC) and General Corrosion" . Materials Sciences and Applications, 2010, 1, 191-198.

[3] Fathia S. Mohammad, **Salaheddin E.A Abu Yahya**, Alyaa G. Elramady "Effect Of Temperature And Concentration Of Ammonium Nitrate Solution On The Susceptibility Of Mild Steel To Stress Corrosion Cracking". Journal of Electromagnetic Analysis & Applications (JEMAA), 2010, 2: 91-97.

[4] Mousa Al-Tarazi, A. Bert M. Heesink, Mohammed O.J. Azzam, **Salah Abu Yahya** and Geert F. Versteeg. "Crystallization kinetics of ZnS precipitation; an experimental study using the MSMPR Method" Cryst. Res. Technol. 39, No. 8, 675 – 685 (2004).

Conferences

[1] M.D. Islam, A.A. Alili and **S.A. Yahya**, "Modelling of a Solar Powered Multistage Flash (MSF) Desalination System" using Aspen HYSYS, Poster presentation in the 2nd International Conference on Innovative Engineering Technologies (ICIET'2015), Bangkok, Thailand, August 7-8, 2015

[2] "Computer-aided Process Simulation Modules in ChE Education" Proceedings of the 2012 International Conference on Industrial Engineering and Operations Management Istanbul, Turkey, July 3 – 6, 2012. Ali Almansooria, **Salah Abu Yahyaa**, and Ali Elkamel.

References:

1. **Prof. Ali El Kamel,** aelkamel@uwaterloo.ca, Waterloo, Canada.
2. **Prof. Sameer Al Asheh**,sslasheh@aus.edu, American University of Sharjah,UAE.
3. **Dr. Lua"Y A. Zeatoun,** zeatoun@just.edu.jo, Jordan University of Science and Technology.
4. **Prof Mufeed Batarseh** Mufeed.Batarseh@adpoly.ac.ae, Abu Dhabi Polytechnic, UAE
5. **Prof. Hazim Qablawi**, hazim@qu.edu.qa , Qatar University, Qatar.
6. **Prof Chandrasekhar Srinivasakannan** csrinivasakannan@pi.ac.ae, The Petroleum Institute (PI), UAE
7. **Prof. Nabil Abdel Jabbar,** nabdeljabbar@aus.edu, American university of Sharjah (AUS), UAE.