Short Resume

I am a professor in chemical engineering / department of Pharmaceutical and Chemical Engineering, German Jordanian University. I got my undergraduate degree in chemical engineering from Mut'ah University (1999). I earned my Master and PhD degrees from the University of Sydney in 2005 and 2008, respectively. My Ph.D. research focused on multi-phase controlled/living emulsion polymerization (Reaction kinetics, monitoring, and optimization). After the completion of my PhD, I joined the School of Chemical and Biomolecular Engineering at the University of Sydney as a research fellow, where I continued my research in polymer nanocomposites with carbon nanotubes and Miniemulsion polymerization. I supported and co-supervised two Ph.D. students working on the aforementioned projects. I joined Al Hussein Bin Talal University (Jordan) as an assistant professor in 2010 and I got promoted to associate professor in 2015. I held the position as director of the Renewable Energy Research Center from 2014 to 2016, during which I established the Master's degree program in renewable energy, and I managed and supervised the construction of the 3MW PV power plant at the University. In September 2016, I moved to German Jordanian University (GJU) as an associate professor in the Pharmaceutical and Chemical Engineering department (PCE). During my service at GJU, I headed a committee for establishing a Master's degree program in Pharmaceutical and Chemical Engineering. In September 2021, I was appointed as the dean for the School of Applied Medical Sciences. Since then, I worked hard to get the German accreditation to all programs in the school, to launch the dual studies programs in collaboration with industry, to apply for establishing a new Master's program in Biomedical Engineering. In January 2023 I was assigned to lead and coordinate the task of establishing the School of Nursing at GJU which was inaugurated in August 2023 and I was appointed as its dean since then. My 14 years of involvement with academia include teaching and research has resulted in co-authoring 34 technical papers and 11 contributions in international conferences. My research is mainly in thermodynamics, energy, and catalysts. Along with supervising graduation projects, I have taught many courses, such as Thermodynamic, Fluid Mechanics, Heat transfer, Mass transfer, Polymer's engineering, Principles of chemical engineering, Corrosion, Process dynamics & control, and Numerical methods.

Personal Information

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Education

2005-2008	Doctor of Philosophy School of Chemical and Biomolecular Engineering, University of Sydney, Sydney, Australia. Thesis Title: Control of key polymer properties via reversible addition-fragmentation chain transfer in emulsion polymerization
2004-2005	Master of Engineering Studies (Hons) School of Chemical and Biomolecular Engineering, University of Sydney, Sydney, Australia.
1994-1999	Bachelor's Degree in chemical engineering (Hons) Chemical Engineering Department, Mut'ah University, Karak, Jordan.
1992-1994	High school Baccalaureate Alhussinya High School Karak, Jordan

Research Interests

- Computational thermodynamics and reaction kinetics.
- Environmental pollutants: formation and reaction kinetics
- Energy / Renewable Energy / solar energy collectors / solar desalination.
- Catalytic systems based on nonporous materials.
- Chemical processes modeling and simulations.

Funded research projects

- Ceramic nanofibers-reinforced silica aerogel as a potential reforming catalyst for biofuel upgrading:
  - Founded by Scientific Research Fund (SRF), ministry of higher education and scientific research, 94500 USD (2020-2022).
- Biodiesel from waste cooking oil using catalytically system based on nonporous materials:
  - Funded by the Deanship of Scientific Research, German Jordanian University, 81100 USD (2021-2023).
- Renewable energy: Solar energy and thermal desalination:
  - Funded by King Abdulla II Fund for Development (KAFD), 21450 USD (2013, 2014, 2015).
- Biogas production, and extraction of valuable products from vegetable waste:
  - Funded by King Abdulla II Fund for Development (KAFD), 7150 USD (2018).
- Emulsion polymerization and polymerization kinetics (during my Ph.D. study):
  - Founded by the Australian Research Council (ARC) and by a scholarship from Al Hussein Bin Talal University (AHU), ~315000 USD (2005-2009)
  - I was the Ph.D. student who run this project under the supervision of Dr. Vincent Gomes

Participating in the following external funded research projects (partial contribution in some research topics):

- Environmental pollutants: formation and kinetics / Thermal Recycling of Bromine Containing-Polymers.
  - Funded by Abu Dhabi Award for Research Excellence, by ASPIRE, part of the Advanced Technology Research Council (ATRC, Abu Dhabi, United Arab Emirates), 242300 USD (2020-2022).
  - I contributed in some of the research articles that had resulted from this project (1 article).
- Computational thermodynamic and reaction kinetics / Catalytic Oxidation of Hydrocarbons:
  - Funded by the Collage of Engineering / United Arab Emirates University, 109000 USD, start-up grant (2020-2021).
  - I contributed in some of the research articles that had resulted from this project (1 article).
- Computational thermodynamic and reaction kinetics / Fume resistant explosives for critical areas:
  - Funded by the Research Council (ARC), and National Computational Infrastructure (NCI), Australia, 652000 USD (2016-2019).
  - I contributed in some of the research articles that had resulted from this project (4 articles).

Experiences

October 2022- Present	Dean: School of Applied Medical Sciences / German Jordanian university
August 2023 – February 2024	Dean: School of Nursing / German Jordanian University
October 2022 - Present	Professor- Department of Pharmaceutical-Chemical Engineering, School of Applied Medical Sciences at German Jordanian university
September 2021 –October 2022	Acting dean: School of Applied Medical Sciences / German Jordanian university

October 2016 –October 2022	Associate professor- Department of Pharmaceutical-Chemical Engineering, School of Applied Medical Sciences at German Jordanian university
July 2015 – September 2015	Visiting Academic, Department of Pharmaceutical-Chemical Engineering, School of Applied Medical Sciences at German Jordanian university
November 2014 –September 2016	Director of the renewable energy research center (RERC) / Al-Hussein Bin Talal University
September 2014 –October 2016	Associate professor-Chemical Engineering Department/ Al-Hussein Bin Talal University
Jun 2014-September 2017	Supervising and managing the construction of the 3MW PV power plant at AlHussain Bin Talal University (Renewable energy / project manager)
Jun 2014 – August 2014	Visiting Academic, Faculty of Engineering at Al-Balqa' Applied University
September 2012 - September 2014	Assistance professor-Chemical Engineering Department/ Al-Hussein Bin Talal University
Jun 2013 – September 2013	Visiting Academic, Faculty of Engineering at Al-Balqa' Applied University
September 2011 - September 2012	Assistance professor- Department of Metallurgical Engineering at AlBalqa' Applied University
February 2010 - September 2011	Assistance professor-Chemical Engineering Department/ Al-Hussein Bin Talal University
August 2008 - February 2010	Research Fellow in Polymer Engineering Laboratories/ School of Chemical and Biomolecular Engineering/ The University of Sydney, Sydney, Australia
July 2005 - July 2008	PhD candidate at Polymer Engineering Laboratories/ School of Chemical and Biomolecular Engineering / The University of Sydney, Sydney, Australia
July 2004 - Jun 2005	Master program at School of Chemical and Biomolecular Engineering / The University of Sydney, Sydney, Australia
Jun 2003 - Jun 2004.	Laboratory Supervisor, Department of Chemical Engineering / Mut'ah University.
February 2003 – Jun 2003	Quality Control Engineer / Jordan Institution for Standards and Metrology

Teaching and research experience

2016 – Present: German Jordanian University (GJU), Jordan.

- Courses delivered.

  Chemical reaction engineering, Transport phenomena, Separation processes II, Applied statistics and probability for engineers, Fluid mechanics, Thermodynamics for chemical engineers, Principles of chemical engineering, Numerical methods for engineers, Introduction to polymer science, Introduction to pharmaceutical and chemical engineering,

Process dynamic and control, Process dynamic and control lab, Separation process lab, heat, fluid and reaction lab, General Chemistry, and General chemistry lab.

- Research activities:
  - Experimental investigation on the effect of geometrical and operational parameters on the performance of parabolic trough solar collector
  - Integrated solar desalination system for enhanced performance.
  - Formation and remediation of pollutants in recycling, incineration, and fires of brominated flame retardants.
  - Computational thermodynamics and reactions kinetics/ Catalytic Oxidation of Hydrocarbons.
  - Producing biogas and bio-diesel from organic waste
  - Catalysts for biofuel upgrading and extraction of valuable compounds from organic materials

2010-2012, 2013-2016: Al-Hussein Bin Talal University, (AHU)

- Courses delivered:

  Mass transfer, Heat transfer, Water desalination, Fluid mechanics, Separation processes, Process control, Principles of chemical engineering, Polymer's technology, Engineering drawing and AutoCAD, Chemical reaction engineering I and II, Unit operations lab, fluid mechanics lab, thermodynamic lab, control lab and reaction lab.
- Research activities:
  - Modeling and validation of hourly global solar radiation on tilted surfaces in Ma'an City
  - Theoretical and experimental investigation of the effect of design and operational parameters on the performance of solar still
  - Computational thermodynamics and reactions kinetics.

2012-2013: Al-Balqa' Applied University (BAU), Jordan

- Courses delivered.

  Engineering mechanics: Statics, Engineering Mechanics: Dynamics, Corrosion and Metal Protection, Corrosion and Metal Protection lab, Polymeric Materials, Polymeric Materials lab, Engineering Drawing and AutoCAD

2004 – 2010: Sydney University, Australia

- Research Fellow in Polymer Engineering Laboratories / School of Chemical and Biomolecular Engineering / The University of Sydney, Sydney, Australia.
- Participating in the following research activities:
  - Conventional and Controlled Emulsion Polymerization
  - Conventional and Controlled Miniemulsion Polymerization
  - Control and Optimization of Emulsion Polymerization reactions
  - Block copolymer synthesis in nanoparticles (Di and Tri block copolymers)
  - Monitoring polymerization reactions via reaction calorimetry
  - Composite Polymeric Material (Polymer-Carbon nanotubes & Polymer-Silica Composites)
- Operating and running instrumental analysis for polymer and block copolymer characterizations using:

- Particle Size Distribution Analyzer (PSDA)
- Nuclear Magnetic Resonance (NMR)
- Fourier transform infrared spectroscopy (FT-IR)
- Differential Scanning Calorimeter (DSC)
- Size Exclusion Chromatography (SEC) with multiple detectors:
- Thermogravimetric analysis (TGA)

- Tutoring and teaching assistant
  - Polymer Engineering, Material and Energy Transformation, Process Control

2003-2004: Mut'ah University

- Laboratory Supervisor, Department of Chemical Engineering / Mut'ah University.
- Responsible for all activities in the laboratories including:
  - Instruments installation, operation, and maintenance
- Teaching the following laboratories:
  - Process Control Lab, Reaction Engineering Lab, Fluid Mechanics Lab, Thermodynamic Lab

Major administrative experience and achievements

Dean of the School of Applied Medical Sciences (28/9/2021 – Present)/ German Jordanian University

- Coordinating the establishment of the School of Nursing in collaboration with the related German Universities.
- Restructuring the study plan of Biomedical Engineering to accommodate three new tracks:
  - Bionic and biomechanical limbs and organs
  - Bioelectronics and medical devices Engineering
- Establishing and launching the dual studies program in the Pharmaceutical & Chemical Engineering department at the school in collaboration with the industry.
- Establishing and launching the master's degree program in Pharmaceutical & Chemical Engineering.
- Applying for obtaining the German Accreditation for all bachelor programs at the school (successfully assessed by ASIIN and the official approval by the German Accreditation Council has been issued).
- Reviewing and updating all study plans in the school and implementing/integrating E-learning methods in the school's study plans.
- Reviewing and updating the school's strategic and action plans and setting the school targets in accordance with the University's master strategic plan (2022– 2027).
- Preparing for developing dual studies track and master's degree programs in Biomedical Engineering.
- Preparing for equipping and furnishing a new state of art research lab at the school to accommodate the new research clusters.

- Developing strategic relationships with industry: Siemens-Healthineers ITT-GJU, Hikma, Petra Engineering, Pharmaceutical and Cosmetics Companies, Medical devices companies, Al Abdali Hospital, EMPHNET, Jordan Uranium Mining Company,…etc.
- Overseeing the progress of teaching and research activities at the school. Evaluating the academic and administrative staff performances.
- Managing and supervising faculty's exams and discussing their results. Advising the council of deans to grant scientific degrees and certificates.
- Supervising and promoting scientific research in the faculty in coordination with the deanships of scientific research.

Dean of the School of Nursing (1//8/2023 – 25/2/2024)/ German Jordanian University

- Coordinating the establishment of the School of Nursing in collaboration with the related German Universities.
- Preparing the study plan and all other related documents.
- Hiring the academic staff for the school (evaluations, interviews, and nominations).
- Establishing the needed laboratories for the school.
- Marketing the newly established Nursing program.
- Reviewing and updating the school's strategic and action plans and setting the school targets in accordance with the University's master strategic plan (2022– 2027).
- Establishing collaboration with the local hospitals for training Nursing students.
- Establishing collaboration with the related German Universities to secure positions for Nursing students during their German year.

Director of the Renewable Energy Research Center (Nov. 2014 – Sep. 2016)/Al Hussein Bin Talal University

- Establishing the renewable energy research center.
- Applying for founds to construct the research center's building (secured).
- Supervising the construction of the 3 MW PV power plant.
- Establishing the Master's degree in renewable energy.

Additional Experience

- Reviewer for International Journals in Chemical Engineering.
- Evaluation of graduation projects for the national graduation projects prize.
- Grant Assessor for the Deanship of Scientific Research / Al-Hussein Bin Talal University.
- Grant Assessor for the Jordan Scientific Research Support Fund / Ministry of Higher Education.
- Guest Editor for the Journal of Chemical Product and Process Modelling.
- Member in different committees at department, school, and university levels.
- Developing strategic relationship with industry: Solar energy companies, Siemens-Healthineers, Hikma, Petra Engineering, Pharmaceutical and Cosmetics Companies

University and community services

German Jordanian University (GJU)

- Member of the Deans Council / German Jordanian University.

- Member of the Promotion and Appointment Committee / GJU.
- Member of the University Council.
- Member of the Strategic Plan Committee / GJU.
- Head of the Students' Affairs Committee / GJU.
- Member of the Vision Rehabilitation Center Council / GJU.
- Member of the E-Learning and Academic Performance Improvement Council /GJU.
- Member of the Consultation and Training Center Council / GJU.
- Member of the Management Committee of the Board of Trustees Donation Fund /GJU.
- Contributing to the Board of Trustees Donation Found.
- Oversaw the establishment and launching of the dual studies program in the pharmaceutical & chemical engineering department at the school of applied medical sciences in collaboration with the industry.
- Planning for launching a dual studies program in the biomedical engineering department at the school of applied medical sciences in collaboration with the industry.
- Oversaw the establishment and launching a new bachelor program in Nursing at the school of applied medical sciences
- Member of the products development team with Hikma.
- Head of committee for establishing a Master's degree program in pharmaceutical & chemical engineering at GJU.
- Member of Faculty Council / School of Applied Medical Sciences / German Jordanian University.
- Member in the following committees at the school level:
    a. School scientific research committee.
    b. School accreditation committee (German Accreditation).
    c. School faculty recruitment committee.
    d. School study plan committee.
    e. School promotion committee.
    f. School curriculum committee.
- Developing strategic relationship with industry: Siemens-Healthineers, Hikma, Petra Engineering, Pharmaceutical and Cosmetics Companies, Medical devices companies, Al Abdali Hospital, Jordan Uranium Mining Company, …etc.
- Preparing for establishing a new state-of-art research lab at the school of applied medical sciences.
- Preparing for establishing the process control lab at the school of applied medical sciences.
- Participating in the Open day and German week at the University.
- Coordinating the donation of laboratories devices from Hikma to the school of applied medical sciences.

Al Hussain Bin Talal University (AHU)

- Member of the Technical and Evaluation Committee for the selection of the contractor for the construction of the 20 MW PV power plant at AHU.
- Head of committee for supervising the construction of 3MW PV power plant, at AHU.
- Head of research group in Renewable Energy Research Center (RERC).
- Head of committee for following up the progress of the 20MW and 3MW power plants.
- Head of committee for evaluating the university's 20MW and 3MW solar power plants tender.

- Head of committee for establishing renewable energy Master's degree program in the University.
- Member of Faculty Council / Faculty of Engineering / Al-Hussein Bin Talal University.
- Member of the Investigation Committee / Faculty of Engineering / Al-Hussein Bin Talal University.
- Member of Laboratories Assessment Committee / Faculty of Engineering / Al-Hussein Bin Talal University.
- Member of Committee for Reviewing and Modifying the Chemical Engineering Study Plan / Faculty of Engineering / Al-Hussein Bin Talal University.
- Member of Committee for Addressing Students Suggestions and Complaints / Faculty of Engineering / Al-Hussein Bin Tala University.
- Grant Assessor for the Deanship of Scientific Research / Al-Hussein Bin Talal University.

External services

- Organizing a lecture about change management in collaboration with Petra Engineering (lecture delivered by Dr. Rolf Goeble, a senior expert from senior expert service SES)
- Member of Scientific Committee of the 9th Jordan International Chemical Engineering Conference (JIChE09).
- Chairing the session of the chemical engineering kinetics at the 9th Jordan International Chemical Engineering Conference (JIChE09)
- Member of the Organizing committee of the graduation projects competition (organized by Jordan engineering association).
- Member of Organizing Committee of the ^{7th} Jordan International Chemical Engineering Conference (JIChE07).
- Member of Technical Committee of the 7th Jordan International Chemical Engineering Conference (JIChE07).
- Chairing and co-chairing different sessions at the 7th Jordan International Chemical Engineering Conference (JIChE09)
- Grant Assessor for the Jordan Scientific Research Support Fund / Ministry of Higher Education.
- Guest Editor for the Journal of Chemical Product and Process Modelling.
- Member of the Jordan Engineers Association Scientific Committee for Graduation Projects
- Member of the Jordan Engineers Association Central Committee for Graduation Projects Awards (2016-2019)
- Member in Process System Engineering (PSE), Sydney University-Australia (2005-2010).
- Member in Jordan Engineering Association since August 1999.
- Associate member in IChemE, since February 2019.

Awards

- Scholarship towards B.Sc. in Chemical Engineering, September 1994, Jordanian Ministry of Higher Education& Scientific Research based on the General Secondary Examination / Scientific Stream.
- Scholarship towards M.Sc. in Chemical Engineering, Jun 2004, Al Hussein bin Talal University
- Scholarship towards Ph.D. in Chemical Engineering, Jun 2005, Al Hussein bin Talal University

- Post-doctoral position at the School of Chemical and Biomolecular Engineering / the University of Sydney

Computer and experimental skills

Softwares:

- MATLAB and Simulink for process modeling and control
- gPROMS (general PROcess Modeling System) for process modeling, simulation, and optimization
- AutoCAD and CAD software
- ChemSep, and PolyMath
- Other computer skill (word, excel, power point)

Instrumental Analysis:

- Particle Size Distribution Analyzer (PSDA)
- Nuclear Magnetic Resonance (NMR)
- Fourier Transform Infrared Spectroscopy (FT-IR)
- Differential Scanning Calorimeter (DSC), and Thermogravimetric Analysis (TGA)
- Size Exclusion Chromatography (SEC) with multiple detectors
- High Performance Liquid Chromatography (HPLC)
- X-ray diffraction analysis (XRD)
- Zeta Potential Analyzer
- BET Surface Area Analysis

Additional and continuing education

- Two months training course in Al-Hassa Mine (Jordan Phosphate Company).
- Four months as quality control engineer with JISM (Jordan Institution for Standards and Metrology)

Training Courses

- Technical reading & writing
- Critical review
- Environmental Impact Assessment (EIA)
- Innovation Management

Career Objective

- To have a significant role in the process of education development.
- To keep up with the latest developments in chemical engineering.
- To work in a motivating environment where I can implement and enhance my knowledge and skills to serve my firm and my students.

Languages

- Arabic
- English

Publications

PhD Thesis:

Control of key polymer properties via reversible addition-fragmentation chain transfer in emulsion polymerization, School of Chemical and Bio-Molecular Engineering, The University of Sydney, May, 2009 (http://ses.library.usyd.edu.au/bitstream/2123/4984/1/IS-Altarawneh-2009-thesis.pdf)
Record contributed by: Australasian Digital Theses Program, The University of Sydney

International Journal Articles:

1. Ibrahem S Altarawneh, Mohammednoor Altarawneh, "On the formation chemistry of brominated polycyclic aromatic hydrocarbons (BrPAHs)", Chemosphere, 2022 (IF: 7.086)
   Research project: Computational thermodynamics and reaction kinetics: Thermal recycling of bromine containing-polymers.
   Funded by: Advanced Technology Research Council (ATRC, Abu Dhabi, United Arab Emirate).

2. Ibrahem Altarawneh, Mohammad Alnaief, Balsam Mohammad, Muafag Tarawneh, "Comparative study on the effect of the absorber geometry, rim angle and operational modes on the distribution of the heat flux over the absorber's surface", Solar Energy, 2021 (IF: 5.742)
   Research project: Energy / Renewable Energy / solar energy collectors / solar desalination.
   Funded by: Funded by King Abdulla II Fund for Development (KAFD, Amman, Jordan).

3. Ibrahem S. Altarawneh, Mohammednoor Altarawneh, Saleh E. Rawadieh, Mansour H. Almatarneh, Abolfazl Shiroudi, Ahmed M. El-Nahas, "Updated Yields of Nitrogenated species in Flames of Ammonia /Benzene via Introducing an Aniline sub-Mechanism", Combustion and Flame, 2021 (IF: 4.185)
   Research project: Computational thermodynamics and reaction kinetics: Catalytic oxidation of hydrocarbons.
   Funded by: College of Engineering at the United Arab Emirates University, UAEU.

4. Saleh E. Rawadieh; Mohammednoor Altarawneh; Ibrahem S. Altarawneh; Abolfazl Shiroudi; Ahmed M. El-Nahas, "Exploring Reactions of Amines-Model Compounds with NH2: In Relevance to Nitrogen Conversion Chemistry in Biomass", Fuel, 2021 (IF: 6.609)
   Research project: Computational thermodynamics and reaction kinetics: Catalytic oxidation of hydrocarbons.
   Funded by: College of Engineering at the United Arab Emirates University, UAEU.

5. Alnaief, M.; Sandouqa, A.; Altarawneh, I.; Al-Shannag, M.; Alkasrawi, M.; Al-hamamre, Z., "Adsorption Characteristics and Potential of Olive Cake Alkali Residues for Biodiesel Purification", Energies, 2021 (IF: 3.004)
   Research project: Biodiesel from waste cooking oil using catalytically system based on nonporous materials.

Funded by: Deanship of Scientific Research (DSR), German Jordanian University, Amman, Jordan.

6. Saleh E. Rawadieh, Mohammednoor Altarawneh, Ibrahem S. Altarawneh, Mohammad A. Batiha, Leema A. Al-Makhadmeh, "A kinetic model for evolution of H_2 and CO over Zr-doped ceria", Molecular Catalysis, 2020 (IF: 5.062)
   Research project: Computational thermodynamics and reaction kinetics: Catalytic oxidation of hydrocarbons.
   Funded by: College of Engineering at the United Arab Emirates University, UAEU.

7. Ibrahem Altarawneh, Mohammad Batiha, Saleh Rawadieh, Mohammad Alnaief, Muafag Tarawneh, "Solar desalination under concentrated solar flux and reduced pressure conditions ", Solar Energy, 2020, (IF: 5.742)
   Research project: Energy / Renewable Energy / solar energy collectors / solar desalination.
   Funded by: Funded by King Abdulla II Fund for Development (KAFD, Amman, Jordan).

8. Mohammad A. Batiha, Abdullah A. Marachli, Saleh E. Rawadieh, Ibrahem S. Altarawneh, Leema A. Al-Makhadmeh, Marwan M. Batiha, "A study on optimum insulation thickness of cold storage walls in all climate zones of Jordan ", Case Studies in Thermal Engineering, 2019, (IF: 4.724)
   Research project: Energy / Renewable Energy / solar energy collectors / solar desalination.
   Funded by: Self-funding.

9. Saleh E. Rawadieh, Ibrahem S. Altarawneh, Mohammad A. Batiha, Leema A. Al-Makhadmeh, Mansour H. Almatarneh, and Mohammednoor Altarawneh, "Reaction of Hydroperoxy Radicals with Primary C_{1-5} Alcohols: A Profound Effect on Ignition Delay Times". Energy & Fuels, 2019, (IF: 3.605)
   Research project: Computational thermodynamics and reaction kinetics. Fume resistant explosives for critical areas
   Funded by: Australian Research Council (ARC).

10. Ibrahem S. Altarawneh, Saleh E. Rawadieh, Mohammad A. Batiha, Leema A. Al-Makhadmeh, Mouath A Al-Shaweesh, Mohammednoor K. Altarawneh, "Structures and Thermodynamic Stability of Cobalt Molybdenum Oxide ($CoMoO_4$-II)". Surface Science, 2018, (IF: 1.942)
    Research project: Computational thermodynamics and reaction kinetics. Fume resistant explosives for critical areas
    Funded by: Australian Research Council (ARC).

11. Leema A Al-Makhadmeh, Mohammad A Batiha, Joerg Maier, Saleh E Rawadieh, Ibrahem S Altarawneh, Guenter Scheffknecht. "Effect of air and oxyfuel staged combustion on oil shale fly ash formation with direct in-furnace limestone addition for Sulphur retention". Fuel, 2018, (IF: 6.609)
    Research project: Environmental pollutants: formation and kinetics.
    Funded by: Deutsche Forschungsgemeinschaft (DFG).

12. Leema A. Al-Makhadmeh, Mohammad A. Batiha, Mohammad S. Al-Harahsheh, Ibrahem S. Altarawneh, and Saleh E. Rawadieh. "The Effectiveness of Zn Leaching from EAFD Using Caustic Soda". Water, Air, & Soil Pollution, 2018, (IF: 2.574)

Research project: Environmental pollutants: formation, and kinetics.
Funded by: Self-funding.

13. Ibrahem Altarawneh, Saleh Rawadieh, Mohammad Batiha, Lima Mkhadmeh, Sultan Alrowwad, Muafag Tarawneh. "Experimental and numerical performance analysis and optimization of single slope, double slope and pyramidal shaped solar stills". Desalination, 2017, (IF: 9.501)
    Research project: Energy / Renewable Energy / solar energy collectors / solar desalination.
    Funded by: Funded by King Abdulla II Fund for Development (KAFD, Amman, Jordan).

14. Ibrahem S. Altarawneh, Saleh I. Rawadieh, Muafag S. Tarawneh, Sultan M. Alrowwad and Firas Rimawi. "Optimal tilt angle trajectory for maximizing solar energy potential in Ma'an area in Jordan". Journal of Renewable and Sustainable Energy, 2016, (IF: 2.004)
    Research project: Energy / Renewable Energy / solar energy collectors / solar desalination.
    Funded by: Funded by King Abdulla II Fund for Development (KAFD, Amman, Jordan).

15. S Rawadieh, VG Gomes, I Altarawneh. "Optimizing packing heterogeneity for sorption enhanced metathesis reaction". Adsorption, 2014, (IF: 2.412)

16. I Altarawneh, S Rawadieh, VG Gomes. "The influence of intermediate radical termination and fragmentation on controlled polymer synthesis via RAFT polymerization". Designed Monomers and Polymers, 2014, (IF: 2.650)
    Research project: Emulsion polymerization and polymerization kinetics.
    Funded by: Australian Research Council (ARC) and by a scholarship from Al Hussein Bin Talal University (AHU).

17. Saleh Rawadieh, Mohammednoor Altarawneh, Ibrahem Altarawneh, Mouath A. Al-Shaweesh. "Mechanisms for the Formation of Polychlorinated Dibenzo-p-dioxins and Furans (PCDD/Fs) from Chlorinated Toluenes". Reaction Kinetics, Mechanisms and Catalysis, 2014, (IF: 1.762)
    Research project: Computational thermodynamics and reaction kinetics.
    Funded by: National Computational Infrastructure (NCI), Australia.

18. Khalid A. Ibrahim, Khaeel A. Abu-sbeih, Ibrahem Altarawneh, Laurance Bourghli. "Preparation and Characterization of Alkyd Resins of Jordan Valley Tomato Oil". Journal of Polymers and the Environment, 2014, (IF: 3.536)

19. Ibrahem Altarawneh, Mohammednoor Altarawneh, Saleh Rawadieh, Theoretical Study on Thermochemical Parameters and IR spectra of Chlorinated Isomers of Nitrobenzene. Canadian Journal of Chemistry, 2013, (IF: 1.118)
    Research project: Computational thermodynamics and reaction kinetics.
    Funded by: National Computational Infrastructure (NCI), Australia.

20. S Rawadieh, I Altarawneh, HB Alateyat, M Altarawneh, Theoretical Study on the Unimolecular Decomposition of Proline. Computational and Theoretical Chemistry, 2013, (IF: 1.926)
    Research project: Computational thermodynamics and reaction kinetics.
    Funded by: National Computational Infrastructure (NCI), Australia.

21. Ibrahem Altarawneh, Khaled Altarawneh, Ala'a H. Almuhtaseb, Saleh Alrawadieh, Mohammednoor Altarawneh. Theoretical study on thermochemical and structural parameters of chlorinated isomers of aniline. Computational and Theoretical Chemistry, 2012, (IF: 1.926)
    Research project: Computational thermodynamics and reaction kinetics.
    Funded by: National Computational Infrastructure (NCI), Australia.

22. Ibrahem S. Altarawneh, Vincent G. Gomes and Mourtada H. Srour. Block Copolymers from Living Emulsion Polymerization: Reactor Operating Strategies and Blocking Efficiency. Macromol. React. Eng, 2012, (IF: 1.931)
    Research project: Emulsion polymerization and polymerization kinetics.
    Funded by: Australian Research Council (ARC) and by a scholarship from Al Hussein Bin Talal University (AHU).

23. Marwan Batiha, Mohammednoor Altarawneh, Abdullah Alsofi, Mohammad Al-Harahsheh, Ibrahem Altarawneh, Saleh Alrawadieh. Theoretical study on the reaction of hydrogen atoms with aniline. Theor Chem Acc, 2011, (IF: 1.702)
    Research project: Computational thermodynamics and reaction kinetics.
    Funded by: Australian Centre of Advanced Computing and Communications.

24. Marwan Batiha, Mohammednoor Altarawneh, Mohammed Al-Harahsheh, Ibrahem Altarawneh, Saleh Alrawadieh. Theoretical derivation for reaction rate constants of H abstraction from thiophenol by the H/O radical pool. Computational and Theoretical Chemistry, 2011, (IF: 1.926)
    Research project: Computational thermodynamics and reaction kinetics.
    Funded by: Australian Centre of Advanced Computing and Communications.

25. Miftah U. Khan, Vincent G. Gomes, Ibrahem S. Altarawneh. Synthesizing polystyrene/carbon nanotube composites by emulsion polymerization with non-covalent and covalent functionalization. Carbon, 2010, (IF: 9.594)
    Research project: Emulsion polymerization and polymerization kinetics.
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Work in progress:

- Ceramic nanofibers-reinforced silica aerogel as a potential reforming catalyst for biofuel upgrading (Funded research project by SRF).
- Biodiesel a renewable energy sources from waste cooking oil using catalytically system based on nonporous materials (Funded research project by DSR).

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