



Khaleel A. Abu-Sbeih C.V.



## CURRICULUM VITAE

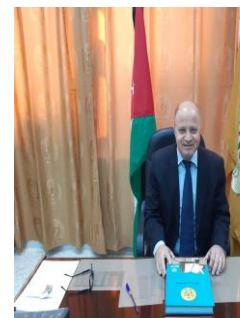
*Khaleel Abdallah Wahbe Abu-Sbeih*

June 2021

### PERSONAL

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*Place of Birth* Jordan  
*Date of Birth* January 8, 1971  
*Marital Status* Married  
*Nationality* Jordanian  
*Work Address* Department of Chemistry, College of Science, Al-Hussein Bin Talal University, Ma'an, Jordan. Phone: +962-3-2179000 Ext.: **6301**, E-mail: [abusbeih@ahu.edu.jo](mailto:abusbeih@ahu.edu.jo)  
*Academic Rank (date)* Associate Professor (2015)  
*Permanent Address* 11117 Amman, Jordan. Cell Phone:+962-799069734, E-mail: khaleelabusbeih@yahoo.com



### ACADEMIC QUALIFICATIONS

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1997 - 2003 **Ph.D.**, Bioinorganic Chemistry, Boston College, Massachusetts, USA  
1992 – 1995 **M.Sc.**, Inorganic Chemistry, The University of Jordan, Amman, Jordan  
1988 - 1992 **B.Sc.**, Chemistry, The University of Jordan, Amman, Jordan

### SPECIALTY

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*General Specialization:* Chemistry  
*Specialization :* Bioinorganic Chemistry

### CAREER HISTORY

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May 2015 -Present **Associate Professor**, Department of Chemistry, College of Science, Al-Hussein Bin Talal University, Ma'an, Jordan.



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September 2016 – September 17	<b>Visiting Associate Professor</b> , Department of Chemistry and Applied Chemistry, Faculty of Science, Tafila Technical University, Tafila, Jordan.
September 2005 – May 2015	Assistant professor, Department of Chemistry, College of Science, Al-Hussein Bin Talal University, Ma'an, Jordan.
September 2004 – September 2005	<b>Full-time lecturer</b> , Department of Chemistry, College of Science, Al-Hussein Bin Talal University, Ma'an, Jordan.
October 2003 – January 2004	Part-time lecturer, College of Sciences, Philadelphia University, Jordan
September 1997 - May 2003	<b>Graduate Teaching Assistant</b> , Chemistry department, Boston College, MA, USA
December 1996 – August 1997	Chemical Analyst, Dar Al-Dawa, Na'ur, Jordan

## ADMINISTRATIVE EXPERIENCE

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### *Positions*

October 2019 - present	<b>Head of the Chemistry Department</b> , Al-Hussein Bin Talal University, Ma'an, Jordan
September 2006 - September 2007	<b>Head of the Chemistry Department</b> , Al-Hussein Bin Talal University, Ma'an, Jordan

### *Committees*

Numerous times	Tenders (instruments, laboratory items, chemicals, etc.)
Numerous times	Study plans and course description (Bachelor and Master's)
Numerous times	Appointments (both faculty and employees)
Several times	Safety (both department and college)
Several times	Promotion



## HONORS, SCHOLARSHIPS, AWARDS AND GRANTS \_\_\_\_\_

- 1997-2003      **Teaching and Research Assistantship, Boston College, MA, USA**
- 2013            **Research grant, Shoman Fund, Amman, Jordan.** Awarded for the study titled “Selective Removal of Iron from acidic solutions containing Aluminum.”
- 2019            **Research grant, Al-Hussein Bin Talal University.** Awarded for the study titled “Modification and study of different polymer composites for extracting heavy metals from contaminated water.”

## PROFESSIONAL MEMBERSHIPS AND SERVICES \_\_\_\_\_

### *Membership(s)*

- None

### *Service(s)*

- Oriental Journal of Chemistry

## RESEARCH INTEREST \_\_\_\_\_

- Modeling of the active sites of enzymes including carbon monoxide dehydrogenase/ acetyl coenzyme A synthase and zinc enzymes for better understanding of these enzymes and the preparation of effective catalysts for some important chemical processes.
- Complexation and removal of metals (such as cadmium, iron, and uranium) from aqueous solutions using different complexing agents.
- Preparation of compounds capable of acting as pharmaceutical drugs. This includes the synthesis and study of vanadium complexes that are potential candidates for use as substitutes or as enhancing agents for insulin used by diabetes patients, some 300 million world-wide.
- Preparation of chitosan fragments and their use for the treatment of some health problems.
- Nitrogen fixation, by which atmospheric nitrogen is converted into ammonia, the basic fertilizer used in agriculture.

## PUBLICATIONS \_\_\_\_\_

### *Peer-reviewed journal articles*

- Khaleel A. Abu-Sbeih and Mohammad Al-Harabsheh. Hydroxyl- Terminated Dendrimers with Sulfonimide Linkers as Nano-Binders for Metals of Industrial Value. Submitted.



- Khaleel A. Abu-Sbeih, Ghassab M. Al-Mazaideh, Wael A. Al-Zereini. Selective Production of Chito-oligomers using molecular sieves and their Antibacterial Activity. Submitted.
- Ghassab M. Al-Mazaideh, Khaleel A. Abu-Sbeih, Salim M. Khalil (2017). Computational calculations of chitosan fragments as corrosion inhibitors of metals. *Journal of Chemical, Biological and Physical Sciences, Section A: Chemical Sciences*, 7(2), 398-409.
- Khalid A. Ibrahim, Bassam I. El-Eswed, Khaleel A. Abu-Sbeih, Tawfeeq A. Arafat, Mahmoud M. H. Al Omari, Fouad H. Darras, Adnan A. Badwan (2016). Preparation of chito-oligomers by hydrolysis of chitosan in the presence of zeolite as adsorbent. *Marine Drugs*, 14(8), 43. DOI: 10.3390/md14080043
- Habis Al-Zoubi, Khalid A. Ibrahim, Khaleel A. Abu-Sbeih (2015). Removal of heavy metals from wastewater by economical polymeric collectors using dissolved air flotation process. *Journal of Water Process Engineering*, 19-27. DOI: 10.1016/j.jwpe.2015.08.002
- Khaleel A. Abu-Sbeih, Mahmoud Salman, Idrees Al-Momani, Bassam El-Eswed (2015). Cooperative Binding of Cadmium(II) on PVA-Bentonite Complex in Water. *Der Chemica Sinica*, 6(4), 11-17.
- Khalid A. Ibrahim, Khaeel A. Abu-Sbeih, Ibrahim Al-Trawneh, Laurance Bourghli (2014). Preparation and Characterization of Alkyd Resins of Jordan Valley Tomato Oil. *Journal of Polymers and the Environment*, 22(4), 553-558. DOI 10.1007/s10924-014-0664-9
- Khaleel A. Abu-Sbeih and Abdel Aziz Abu-Yamin (2014). Reduced Schiff base zinc complexes as proposed models of the active site of the dinuclear zinc enzyme A. Aminopeptidase. *Journal of Chemical and Pharmaceutical Research*, 6(7), 162-171.
- Khaleel A. Abu-Sbeih and Tareq Irshaidat (2013). On the methyl and carbon monoxide coupling reaction: A simulation study of acetyl coenzyme-A synthase. *Journal of Chemical and Pharmaceutical Research*, 5(12), 1354-1362.
- Fuad A. Ababneh, Khaleel A. Abu-Sbeih and Idrees F. Al-Momani (2013). Evaluation of Allergenic Metals and Other Trace Elements in Personal Care Products. *Jordan Journal of Chemistry*, 8(3), 179-190.
- Khaleel A. Abu-Sbeih, M. Hasan, H. Hodali. Bis(arylazoformaldoximate) palladium(II) complexes. *Dirasat*, 22B, **1995**, 219-225.

#### **Books and book chapters**

- Khaleel A. Abu-Sbeih, Eid Al-Zouby, Lawrance Bourghli, Laboratory Manual for General Chemistry 2, **June 2006**.
- Khaleel A. Abu-Sbeih, Lawrance Bourghli, Eid Al-Zouby, Laboratory Manual for General Chemistry 1, **May 2005**.

#### **Patents**

- William H. Armstrong, Khaleel A. Abu-Sbeih. Dinitrogen Reduction. *U.S. patent* number WO2006028982 A2, date of publication **16-3-2006**.



## CONFERENCES AND PROCEEDINGS

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- Armstrong, William H., and Khaleel Abu-Sbeih (2006). "INOR 72-Polynuclear vanadium (II, III) complexes." *ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY*. Vol. 232. 1155 16TH ST, NW, WASHINGTON, DC 20036 USA: AMER CHEMICAL SOC.
- W. H. Armstrong, Peter J. Bonitatebus, Jr., Khaleel A. Abu-Sbeih (2004), "Multinuclear Vanadium (II,III) Complexes," lecture at *V4 symposium*, Hungary.
- Khaleel A. Abu-Sbeih, W. H. Armstrong (2002), "Nitrogen fixation using low-valent vanadium complexes," 224<sup>th</sup> *ACS national meeting*, Boston, MA, USA.

## TEACHING

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### *Courses Taught-undergraduate*

- Biochemistry 1 (CHEM 481), Al-Hussein Bin Talal University
- Biochemistry (CHEM 471), Tafila Technical University
- Pharmacology for nursing students (NURS 203), Al-Hussein Bin Talal University
- Industrial Chemistry 1 and 2 (CHEM 461, 462), Al-Hussein Bin Talal University
- Chemical Process Technology (CHEM 452), Tafila Technical University
- Environmental Chemistry (CHEM 413), Al-Hussein Bin Talal University
- Inorganic Chemistry 1 (CHEM 221), Al-Hussein Bin Talal University, Tafila Technical University
- Inorganic Chemistry 2 (CHEM 321), Al-Hussein Bin Talal University
- Inorganic Chemistry 3 (CHEM 421), Al-Hussein Bin Talal University
- Inorganic Chemistry lab (CHEM 322), Al-Hussein Bin Talal University
- Special Topics in Inorganic Chemistry (CHEM 422), Al-Hussein Bin Talal University
- Descriptive chemistry of the elements (CHEM 423), Al-Hussein Bin Talal University
- Chemistry in our Lives, (CHEM 201) Al-Hussein Bin Talal University
- General Chemistry 1 (CHEM 101), Al-Hussein Bin Talal University, Tafila Technical University, Philadelphia University
- General Chemistry 2 (CHEM 102), Al-Hussein Bin Talal University, Philadelphia University
- General Chemistry lab 1 (CHEM 103), Al-Hussein Bin Talal University, (CHEM 105), Tafila Technical University



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- General Chemistry lab 2 (CHEM 104), Al-Hussein Bin Talal University, (CHEM 106), Tafila Technical University

*Courses Taught-postgraduate*

- Medicinal inorganic chemistry, Tafila Technical University

**SKILLS**

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*Languages*

- Arabic (native)
- English (fluent)
- German (poor)

*Computer Programs*

- Gaussian
- Microsoft Word, Excel, Power Point, Teams, Chem Draw