مختصر السيرة الذاتية

الاسم: صفاء حسين علي

اللقب العلمي: أستاذ مساعد

التحصيل العلمي:

- دكتوراه كيمياء لاعضوية/ جامعة جيمس كوك في استراليا 2017
- ما بعد الدكتوراه / جامعة اوكلاهوما في الولايات المتحدة الامريكية 2018
- ما بعد الدكتوراه / جامعة يلدز التقنية في تركيا 2020

عدد البحوث المنشورة: 28 بحثا في مجلات عالمية ومحلية مع باحثين من دول عديدة مثل الولايات المتحدة وأستراليا وكذلك عدد من الباحثين العراقيين.

الاشراف على طلبة الدراسات العليا: 4 طالب ماجستير **1 طالب دكتوراه**

المؤتمرات العلمية

شاركت في العديد من المؤتمرات العلمية الدولية في اليابان وأستراليا والولايات المتحدة ومؤتمرات محلية في عدد من الجامعات العراقية (تفاصيلها في النسخة الإنكليزية من السيرة الذاتية المرفقة ادناه).

الهاتف:07808901830

البريد الالكتروني: safaa.ali@shu.edu.iq

Safaa Hussein Ali

Email: safaa.ali@shu.edu.iq Mobile: +9647808901830

Education

2018	Postdoc Fulbright Scholar	University of Central Oklahoma	(USA, Oklahoma)
2017	PhD Inorganic Chemistry	James Cook University/College of Science	(Queensland, Australia)
2010	M.Sc. in Chemistry	Thi-Qar University/College of Science	(Thi-Qar, Iraq)
2007	B.Sc. in Chemistry	Thi-Qar University/College of Science	(Thi-Qar, Iraq)
2003	High School	Al-Shatrah High School	(Thi-Qar, Iraq)

Past and current employment

Sep 2018-Current Time: Vice Dean of College of Veterinary Medicine and Chemistry Lecturer, Thi-Qar University, Iraq

30-Jun 2018 – 08-Sep/2018: Fulbright Visiting Scholar, Lecturer and Research Fellow at University of Central Oklahoma, USA.

Jul 2017 – June/2018: Associate Head of Animal Production Department, Lecturer and safety officer at environment centre Al-Shatrah Technical institute (www.shatrah-ti.org)/Southern Technical University/Iraq (www.stu.edu.iq).

Feb 2014 -Jun 2017: Lab demonstrator for 1st year Chemistry at James Cook University www.jcu.edu.au

June 2013-June 2017: PhD student at James Cook University/College of Science and Technology (Queensland, Australia)

Oct 2010-May 2013: Associate Head of Animal Production Department, Lecturer and safety officer at Environment Centre Al-Shatrah Technical Institute (www.shatrah-ti.org)/Southern Technical University/Iraq(www.stu.edu.iq).

Oct 2008-Sept 2010: Lab demonstrator at Thi-Qar University/College of Science/Chemistry Dep. www.utq.edu.iq

Dec 2007-Oct 2010: Chemistry teacher at Al-Shatrah high school (Grade 10th and Grade 11th)

Industrial experience

SGS Company, Townsville Lab, Queensland, Australia. Casual Job 2016 for data collation, quality control and reporting.

Editorial and Reviewing Experience

Editor in Journal of Thi-Qar Science (www.jsci.sci.utq.edu.iq). Reviewer for Royal Chemical Society: Inorganic Chemistry Frontiers Journal and New Journal of Chemistry. NJC - a journal for new directions in chemistry www.rsc.org/njc and Inorganic Chemistry Frontiers, www.rsc.org/inorg.chem.front. Reviewer for Wiley, Journal of Chemistry Select. Reviewer for Mediterranean Chemistry Journal; Moroccan Chemistry Journal and Arab Journal for Sciences and Research Publishing. Elsevier: Results in Chemistry Journal.

List of Publications

1- Angus C. G. Shephard, **Safaa H. Ali**, Glen B. Deacon and Peter C. Junk. Carbon bridged biphenolate ligand in rare earth chemistry. ***New Journal of Chemistry***. 2022, 46, 19612-19628. Journal indexed on

2- **Safaa H. Ali**, Angus C. G. Shephard, Jun Wang, Zhifang Guo, Murray S. Davies, Glen B. Deacon, Peter C. Junk. Lanthanoid biphenolates as a rich source of lanthanoid-main group heterobimetallic complexes. ***Chemistry Asian Journal***. 2022, e202101328 https://doi.org/10.1002/asia.202101328 Journal indexed on

3- Angus C. G. Shephard, **Safaa H. Ali**, Jun Wang, Zhifang Guo, Murray S. Davies, Glen B. Deacon and Peter C. Junk. New lanthanoid biphenolate complexes, their further reactivity with trimethylaluminium and catalytic activity for the polymerization of rac-lactide. ***Dalton Transection.***, 2021,50, 14653-14661 https://DOI:101039/d1dt02513a Journal indexed on

4- **Safaa H. Ali**, G. B. Deacon, P. C. Junk, S. Hamidi, M. Wiecko, J. Wang. ***Chemistry European Journal***. 2018, *24,* 230-242. (Impact factor 5.7) Journal indexed on

5- **Safaa H. Ali**. Hasan. M. Abed, Haider. S. Abdulhussein. Antibiotic activity of new species of Schiff base metal complexes. ***Periódico Tchê Química***. 2020, 17 (n°35), 837-860. Scopus index Journal.

6- **Safaa H. Ali**. Qayssar A. Obaid, Khairi G. Awaid. ***Baghdad Science Journal***. 2020, 17(1), 207-213. https://dx.doi.org/10.21123/bsj.2020.17.1(Suppl.).0207. Journal indexed on

7- Hassan M. A. Al-Redha, **Safaa H. Ali**, Saad S. Mohammed. Syntheses, Structures and Biological Activity of Some Schiff Base Metal Complexes. ***Baghdad Science Journal***. 2022, 29(3), 704-715. http://dx.doi.org/10.21123/bsj.2022.19.3.0704 Journal indexed on

8- **Safaa H. Ali**, Hassan M. A. Al-Redha, Bassam A. Sachit. Antibacterial activity of some Salen metal complexes. Second International conference of Al-Ayen University, ***IOP Conference Series***: Materials Science and Engineering 2020. *IOP Conf. Ser.: Mater. Sci. Eng.* 928 052016 http://doi:10.1088/1757-899X/928/5/052016

9- **Safaa H. Ali**, Salam H. Ewaid, Sanjeewa Gamagedara. Water Quality Index Using Sparse Principal Component Analysis for the Tigris River in Iraq. ***Water Resources***. 2022. Journal indexed on

10. Aqeel Q. Kareem, Saher A. A. Al-shamkhawy, Safaa H. Ali. Syntheses and spectral properties of Zn and Cu complexes with tetra-(4-bromo-2-formylphenoxy) phthalocyanine. ***Chemical Journal of Chinese Universities.*** Accepted 2022. Journal indexed on

11. **Safaa H. Ali**, *Saad S. Mohammed, Mohsin E. Al-Dokheily, Laith Algharagholy*. Photocatalytic activity of defective Tio2-x for water treatment/methyl orange dye degradation. ***Chemistry and Chemical Technology Journal***. 16 (4), 2022, . https://doi.org/10.23939/chcht16.04.639 Journal indexed on

12- **Safaa H. Ali**, Hadeel A. Ghajiri, Wed Al-Graiti. Evaluation Cholesterol and Triglycerides Levels for Type One Diabetes Patients. International conference of the National University of Science and Technology. IOP Conference Series: Materials Science and Engineering 2020. ***IOP Conference Series***: Materials Science and Engineering 2020. *Accepted 2022.* Journal indexed on

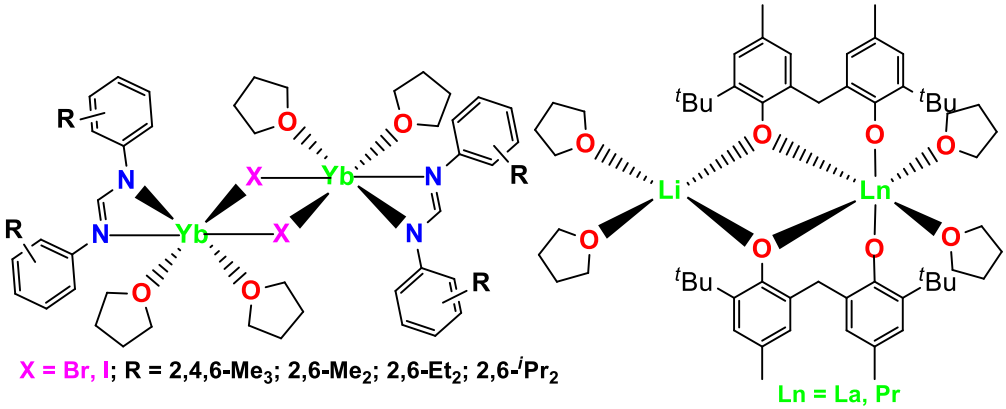
13- **Safaa. H. Ali**. ***Al-Qadisiya Pure Science Journal***. 2012. *17*, 4, 130-141. Iraqi Journal issue by College of Science, Al-Qadisiya University.

14- **Safaa. H. Ali**. ***Thi-Qar Science Journal***. 2013. *3*, 3, 107-116. Iraqi Journal issue by College of Science, Thi-Qar University.

Research experience

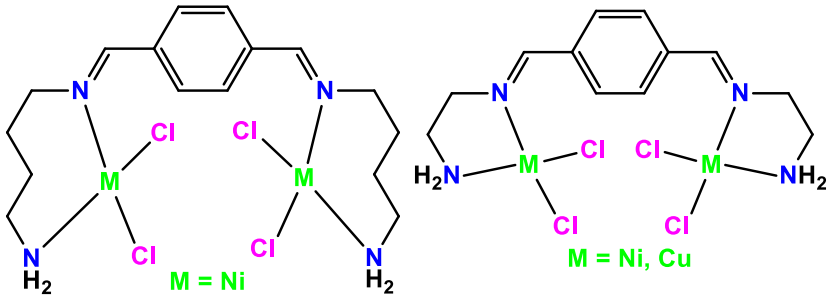
Synthesis, structure and reactivity organolanthanoid/main group complexes, majoring pseudo-Grignard lanthanoid formamidinate, heterobimetallic biphenolate complexes and Aluminum Selenate Octamer clusters. These complexes have relevance to such areas as catalysis, organic syntheses, and organic transformation CO_2 reduction. There is a strong emphasis on design and structural studies which involve a range of structural techniques, in particular X-ray crystallography (single crystal), Synchrotron, NMR, Glove box, Schlenk line, IR, Mass and Micro analysis.

PhD thesis title: Syntheses, structures and reactivity organolanthanoid complexes. DOI: 10.4225/28/5a962d209ad60



Current Projects

1- Antibacterial activity of Schiff base metal complexes including synthesis, structure and reactivity of Schiff base metal complexes.



2- Synthesis, structure and reactivity of different species of chloride metal clusters.

Education

2018	Fulbright Scholar	University of Central Oklahoma	(USA, Oklahoma)
2017	PhD Inorganic Chemistry	James Cook University/College of Science	(Queensland, Australia)
2010	M.Sc. in Chemistry	Thi-Qar University/College of Science	(Thi-Qar, Iraq)
2007	B.Sc. in Chemistry	Thi-Qar University/College of Science	(Thi-Qar, Iraq)
2003	High School	Al-Shatrah High School	(Thi-Qar, Iraq)

Online courses

1- Diabetes–a global challenge (12 weeks). Copenhagen University. Grade Achieved: 70.0%. Completed on July/2015

2- Chemicals and health (12 weeks). Johns Hopkins University. Grade Achieved: 95.9%. Completed with DISTINCTION on April/2015

Academic awards/Honors

1- Southern Technical University's Award for excellence in research and teaching August/2018

2- ICOMC 2016 Award

3- Graduate school/James Cook University award (2015 and 2016) (These award were as financial support to attend conferences).

Obtained grants and scholarships

1- HCED (Higher Committee for Education Development in Iraq- www.hcediraq.org) Scholarship for PhD study at James Cook University/Australia 2013-2017.

2- Fulbright Visiting Scholar, Teaching, Research and Faculty Development, University of Central Oklahoma/USA 30/Jun-08/Sep 2018.

Grants

1- Australian Synchrotron travel Grant 2014

2- School of Graduate, James Cook University Grant Oct/2015 and Apr/2016

3- Eric Booth Memorial Grants in Chemistry 2015 and 2016

Scientific skills and competencies

1- Knowledge and deep experience of crystallography XSeed, Olex2 and SHELX.

2- Knowledge and experience of HPLC and X-ray single crystal and X-ray powder, Synchrotron.

3- Experience with tools and methodology including: UV, IR, Atomic absorption, Mass and NMR.

4- Data Processing and Statistical Analysis (SPSS Program).

5- Licence to carry out Chemical and Physical Analysis Radiation Source (X-Ray diffraction apparatus), Queensland Government, Australia, Licence No: 944292-U004599914

Complementary skills & competencies

- I have certificate from UCO (University of Central Oklahoma, USA) about Transformative Learning: Concepts and Principles, Learning Pedagogies, Active Learning in Science, Technology, Engineer and Mathematics 2018.
- I have certificate from NOST (National On Site Training) in Australia about Radiation Safety for chemical analysis involving radiation sources X-rays and sealed sources 2014.
- I have certificate from Foundation of Technical Education in Iraq about Teaching Skills for University Lecturers 2012.

Selected Workshops at UCO (University of Central Oklahoma, USA)

- Learning Environment July/2018
- Grant Writing and Grant Development July/2018
- Supercomputing Research and Education July/2018
- Instructional Technology for Higher Education July/2018
- Higher Education in the United States
- Global Affairs and American Culture July/2018
- Service Learning August/2018

Postdoctoral experience

Fulbright Scholar, Teaching, Research and Faculty Development, University of Central Oklahoma/USA 30/Jun-08/Sep 2018.

Turkiye Burslari Scholarship, Research and Faculty Development, Yildiz Technical University, Istanbul, Turkey 1/3/2020-28/2/2021.

Teaching and leadership experience

Teaching Experience: currently I am teaching these classes below at Thi-Qar University and Southern Technical University in Iraq.

-1st year Organic and General Chemistry

-1st and 2nd years Inorganic Chemistry

-2nd year biochemistry

Leadership certificates

Logic and Knowledge 2012 (Academy of Rational Philosophy Qum/Iran) www.aqliyah.com (Critical Thinking, Active learning, Thinking logically, Branches of Knowledge)

Youth Leadership and Democracy 2011 NDI (National Democracy Institute of America) www.ndi.org

Participation in scientific projects and role in them

- Currently I am main researcher of ongoing project "Antibiotic activity of new organometallic Schiff bases". In this project two undergraduate students working under my supervision.

- International project "Annual study to evaluate equality of water of Tigris River at Baghdad City" between our team (Dr. Salam Al-Helali and Dr. Safaa Ali) at Environment Centre Al-Shatrah Technical Institute, Southern Technical University/Iraq and our friend Dr. Sanjeewa at University of Central Oklahoma, USA. In this project I am the main coordinator between our team at Al-Shatrah Technical Institute and my friends at University of Central Oklahoma this project completed and currently we are drafting our results to publish paper expected to publish this paper in December 2019.

Conferences Presentations

Sanjeewa Gamagedara, Tyler Cook, Safaa H. Ali, Salam H. Ewaidb "Developing a Water Quality Index Using Sparse Principal Component Analysis for the Tigris River in Iraq" Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Virtual) March 2021.

Sanjeewa Gamagedara, Safaa H. Ali, Salam H. Ewaidb, Tyler Cook "Developing a Water Quality Index Using Sparse Principal Component Analysis for the Tigris River in Iraq" American Chemical Society- Midwest Regional Meeting, Wichita, Kansas, USA, October 2019

Safaa Ali, Peter Junk and Jun Wang. New formamidinate rare earth metal complex from pseudo-Grignard reaction with bromobenzene and iodobenzene. ICETA 2015-Fall. Nagoya, Japan.

Safaa Ali, Peter Junk and Jun Wang. New formamidinate rare earth metal complex from pseudo-Grignard reaction with bromobenzene and iodobenzene. OZOM 9 2015. Sydney University, Australia.

Safaa Ali, Peter Junk and Jun Wang. Redox Transmetallation Chemistry. Postgraduate Meeting. James Cook University. Townsville.

Safaa Ali, Peter Junk and Jun Wang. Control of Rare Earth Metal Coordination of Methylene(bisphenolate). Rare Earth Meeting 2016. Magnetic Island/Townsville.

Safaa Ali, Peter Junk and Jun Wang. Lanthanoid Methylene(bisphenolate) Chemistry. OZOM 10 2017. Otaq University, New Zealand.

Posters

Safaa, Ali, Eric Eitrheim. Synthesis of an Aluminum Selenate Octomer Cluster. University of Central Oklahoma 2018. Oklahoma/USA.

Safaa Ali, Peter Junk and Jun Wang. Control of Rare Earth Metal Coordination of Methylene(bisphenolate). ICOMC 2016. Melbourne/Australia.

Safaa Ali, Peter Junk and Jun Wang. New formamidinate rare earth metal complex from pseudo-Grignard reaction with bromobenzene and iodobenzene. July/2014. OZOM 8. Australian Organometallics conference.

Safaa Ali, Peter Junk and Jun Wang. New formamidinate rare earth metal complex from pseudo-Grignard reaction with bromobenzene and iodobenzene. Australian synchrotron User Meeting. November/2014.

Language skills

I have excellent skills in English language (Speaking, Academic Writing, Listening, and Reading). I have studied 30 Weeks Academic English Language Course at UIL on James Cook University Campus (Intensive English Language Course required for PhD at James Cook University in Australia) including ILEST test.

I have special interest in Spanish language since 2013 when I have studied and lived with students from Latin America but my skills still in elementary level even though I have plan to advance my knowledge and develop my skills in Spanish language. I have excellent skills in Arabic language because it is my mother language.

Memberships

2018 Fulbright Alumni Society

2017 Iraqi Academic Society

2016 RACI (Royal Australia Chemical Institute)

2010 Iraqi Chemists Society

2007 Iraqi Teachers Society

Supervision

Master students:

- Aqeel Qasim Kareem 2020
- Nida Sadiq Khamis 2021
- Abbas Kamil Shelaqa 2023
- Hawraa Abbas Ali 2024

PhD. students:

Huda Salih Mahdi 2025

Thesis examiner

Two PhD. students

3 Master students

Referees

1- Dr. Sanjeewa Gamagedara, Assistant Professor,
Department of Chemistry, College of Science, University of Central Oklahoma, USA

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2- Dr. Saad S. Mohammed,
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Al- Nasiriyah, Thi-Qar. 64001, Iraq
Email: saad.sh_chem@sci.utq.edu.iq
Phone: +9647801910885
3- Assit. Prof. Dr. Salam Alhelali
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