# Curriculum vitae



## Name: Zahraa Fadhil Zuhwar Al-Auda

E-mail: Zahraa.f.zuhwar@uotechnology.edu.iq alauda@ksu.edu

### Education:

Ph.D., Chemical Engineering, Kansas state University, USA M.S., Chemical Engineering, the University of Technology, Iraq B.S., Chemical Engineering, the University of Technology, Iraq

Research interests:

**Reaction Engineering and Catalysis** 

#### **Publications:**

- 1. Zahraa Al-Auda, Hayder Al-Atabi, Xu Li, Quanxing Zheng, Keith L. Hohn. "Conversion of methyl ethyl ketone to butenes over bifunctional catalysts."
- 2. Zahraa Al-Auda, Hayder Al-Atabi and Keith L. Hohn. "Metals on ZrO<sub>2</sub>: Catalysts for the Aldol Condensation of Methyl Ethyl Ketone (MEK) to C<sub>8</sub> Ketones."
- 3. Zahraa Al-Auda, Hayder Al-Atabi, Xu Li, Prem Thapa and Keith Hohn. "Conversion of 5-Methyl-3-Heptanone to C<sub>8</sub> Alkenes and Alkane over Bifunctional Catalysts."
- 4. Hayder A. Al Atabi, Zahraa F. Al Auda, B. Padavala, M. Craig, K. Hohn, and James H. Edgar. "Sublimation Growth and Characterization of Erbium Nitride Crystals."
- 5. Zahraa F. Zuhwar. "The Control of Non-Isothermal CSTR Using Different Controller Strategies."
- 6. Karima Putrus, Zahraa Al-Auda. "Adaptive control of a pH process."
- 7. Saffa al.Naami, Karima M. Putrus, Zahraa F. Zuhwar. "Modeling and Control of a Continuous Stirred Tank Reactor (CSTR)."
- 8. Karima Putrus, Zahraa Al-Auda. "Controlling the pH Neutralization Process Strategies."
- 9. Zahraa F. Zuhwar, Zaidoon M. Shakoor. "Control of Neutralization Process for Change over Titration Curve Using Model of Strong Base-Weak Acid System."

#### Patents:

1. Inventors: Z. Alauda, K.L. Hohn. "Catalysts and Methods for Converting Methyl Ethyl Ketone to Butene."

#### Conferences

- K.L. Hohn, Z. Alauda, Q. Zheng, "Controlling product selectivity in the conversion 2,3butanediol to valuable products", ACS Midwest Regional Meeting, Lawrence, KS, Oct. 18-20, 2018.
- 2. Z. Alauda, H. Alatabi, Q. Zheng, and K.L. Hohn, "Catalysts for Conversion of Methyl Ethyl Ketone to Butenes", AICHE National Meeting, Oct. 29 Nov. 3, 2017, Minneapolis, MN.
- 3. Z. Alauda, H. Alatabi, Q. Zheng, and K.L. Hohn, "Catalysts for Conversion of Methyl Ethyl Ketone to Butenes", ACS Midwest Regional Meeting, Lawrence, KS, 2017 (poster).
- Hayder A. Al Atabi, Zahraa F. Al Auda, B. Padavala, M. Craig, K. Hohn, and James H. Edgar. American Conference on Crystal Growth and Epitaxy-21 and Organometallic Vapor Phase Epitaxy-18 (ACCGE-21/OMVPE-18) (2017), "Sublimation Growth and Characterization of Erbium Nitride Crystals."
- 5. The 2016 ACS Midwest Regional Meeting in Manhattan, KS.
- 6. Karima Putrus, Zahraa Al-Auda. Adaptive Control of a pH Process (21 April 2011), the 1<sup>st</sup> scientific conference of modern techniques in the refining of petroleum and gas (University of technology).
- Zahraa Al-Auda and Zaidoon Mohsin Shakor. "Control of Neutralization Process for Change over Titration Curve Using Model of Strong Base- Weak Acid System." (9, October 2009), the 2<sup>nd</sup> scientific conference of the college engineering (University of Al-Qadisiya).
- Karima Putrus, Zahraa Al-Auda. "Controlling the pH Neutralization Process Strategies "(23 March 2009), the 11<sup>th</sup> scientific conference of the Foundation of Technical Education (Technical college-Baghdad).

Skills:

- 1. GAMS program for chemical engineering optimization.
- 2. Chemical engineering simulation by COMSOL.
- 3. Aspen HYSYS.
- 4. MATLAB.
- 5. Density Functional Theory (DFT) by VASP.
- 6. Wolfram Mathematica.
- 7. Visualization for Electronic STructural Analysis (VESTA).

Honors and Awards:

- 1. Shield of excellence from the University of Technology for earning first rank out of 132 graduates.
- 2. Letter of thanks and appreciation from the president of the University of Technology for publishing research papers in distinguished journals.