## FACULTY FULL NAME: Asla Abdullah Al-Zahrani

POSITION: Lecturer

Personal Data
Nationality | Saudi
Date of Birth | 15/05/1980
Department | Chemistry
Official IAU Email | aaalzahrani@iau.edu.sa

Language Proficiency

| Language | Read | Write | Speak |
| :--- | :---: | :---: | :---: |
| Arabic | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| English | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Others (Bahsa Malaya) | $\checkmark$ | $\checkmark$ | $\checkmark$ |

Academic Qualifications (Beginning with the most recent)

| Date | Academic Degree | Place of Issue | Address |
| :--- | :--- | :--- | :--- |
| 2012-2013 | Master's in physical chemistry | Dammam | Imam Abdulrahman bin Faisal University, Science <br> College ,Chemistry Department |
| 2003-2004 | Bachelor of Science and Education | AL-Baha | AL Baha University , College of Education for Girls , <br> Chemistry Department |

PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

| PhD | Synthesis and characterization of ZnO nanorods sensitized by narrow bandgap energy metal chalcogenides for <br> photoelectrochemical application |
| :--- | :--- |
| Master | Synthesis and Physical Properties Study of Some Luminescent Solar Collectors using Polymeric Media Doped <br> with Different Dyes. |

Professional Record: (Beginning with the most recent)

| Job Rank | Place and Address of Work | Date |
| :--- | :--- | :---: | :---: |
| Lecturer | Imam Abdulrahman bin Faisal University, Science College ,Chemistry <br> Department | 2013 till now. |


| Job Rank | Place and Address of Work | Date |
| :--- | :--- | :--- | :--- |
| Teaching assistant | Imam Abdulrahman bin Faisal University, Science College, Chemistry <br> Department | 2008-2013 |
| Teaching assistant | AL Baha University, College of Education for Girls, Chemistry Department | 2006-2008 |

Administrative Positions Held: (Beginning with the most recent)

| Administrative Position | Office | Date |
| :--- | :--- | :--- |
| The representative of the faculty of science for community <br> service and sustainable environment in the chemistry <br> department. | Chemistry Department | 2017 |
| The supervisor of Chemistry club | Chemistry Department | from 2015 to 2017. |
| Member of the Commission for Academic Accreditation <br> and Quality | Chemistry Department | from 2011 until <br> 2017. |
| Member of the Exams Management Committee | Chemistry Department | From 2009 to 2011 |
| Member of the Committee in Academic guidance | Chemistry Department | From 2008 to 2017 |
| Member of the Exams Committee | Department of Computer Science | 2009 |
| Member of the Exams Committee. | Department of Mathematics | 2008 |

## Scientific Achievements

## Published Refereed Scientific Researches

(In Chronological Order Beginning with the Most Recent)

$\left.$| \# | Name of Investigator(s) | Research Title |
| :--- | :--- | :--- |
| $\mathbf{1}$ | Al-Zahrani, A.A., Zainal, Z., Talib, |  |
|  | Z.A., Lim, H.N., Fudzi, L.M., Holi, |  |
| A.M., Ali, M. and Sarif, M., 2020.. |  |  |$\quad$| Effect of Annealing Temperature on |
| :--- |
| the Performance of ZnO Seed Layer |
| for Photoanode in |
| Photoelectrochemical Cells | \right\rvert\,

Publisher and Date of Publication
In Defect and Diffusion Forum (Vol. 398, pp. 156-166). Trans Tech Publications Ltd. (2020)

International Journal of Nanoelectronics and Materials,(2020) 13(2): 341-
360.(Q3/IF 2018=0.88).

Publisher:Universiti Malaysia Peerlis (UniMAP)

Journal of Nanomaterials, (2019)2019: 110. (Q2/IF 2019= 2.233). Puplisher: Hindawi Publishing Corporation.
(2019) ", special issue of the International Journal of Nanotechnology (Scopus Indexed) by Inderscience Publishers (In Press).

| \# | Name of Investigator(s) | Research Title | Publisher and Date of Publication |
| :---: | :---: | :---: | :---: |
| 5 | AL-Zahrani, A. A., Zainal, Z., Talib, Z. A., Lim, H. N., \& Holi, A. M. | Bismuth sulphide decorated ZnO nanorods heterostructure assembly via controlled SILAR cationic concentration for enhanced photoelectrochemical cells | (2020). Materials Research Express, 7(2): 025510. (Q2/IF 2019= 1.449). Puplisher: IOP Publishing Ltd. |
| 6 | AL-Zahrani, A. A., Zulkarnain Zainal, Zainal Abidin Talib, Janet Lim Hong Ngee, Laimy Mohd Fudzi, Araa Mebdir Holi and Mahanim Sarif @Mohd Ali | Effect of the heat treatment on the photoelectrochemical performance of binary heterostructured photoanode $\mathrm{Ag}_{2} \mathrm{~S} / \mathrm{ZnO}$ nanorods in photoelectrochemical cells, | (2020) "Materials Science Forum under the Special Issue «Current Advances in Materials Applications» (In Press) (Q3/IF 2018= 0.35). Publisher: Trans Tech Publications Ltd. |
| 7 | Al-Weally, D.H., Holi, A.M. and ALZahrani, A.A., | Structural, Optical, Morphological <br> Properties of ZnO <br> Nanoparticle/ZnO Nanorods. | 2019, September. Journal of Physics: Conference Series (Vol. 1294, No. 2, p. 022030). IOP Publishing. |
| 8 | Holi, A. M., \& AL-Zahrani, A. A.. | Spin Coating Technique for the Synthesis of Hexagonal CdxZn1-xS Decorated Pure ZnO Nanorods Arrays | (2020). solar cells, 16, 17 |
| 9 | Holi, A.M. and Al-Zahrani, A.A., | Preparation and improved photoelectrochemical performance of ternary nano-heterostructure of $\mathrm{Bi}_{2} \mathrm{~S}_{3} / \mathrm{CdS} / \mathrm{ZnO}$ nanorods. | 2019. Materials Research Express, 6(11), p. 115073. |
| 10 | Holi, A. M., Al-Zahrani, A. A., Najm, A. S., Chelvanathan, P., \& Amin, N . | $\mathrm{PbS} / \mathrm{CdS} / \mathrm{ZnO}$ nanowire arrays: Synthesis, structural, optical, electrical, and photoelectrochemical properties. | $\begin{aligned} & \text { (2020). Chemical Physics Letters, } \\ & 137486 . \end{aligned}$ |
| 11 | DALLEL, M., AL-ARFAJ, A. A., AL-OMAIR, N. A., ALKHALDI, M. A., ALZAMEL, N. O., ALZAHRANI, A. A., \& OUERFELLI, N. | A Novel Approach of Partial Derivatives to Estimate the Normal Boiling Temperature via Viscosity Arrhenius Behaviour in $\mathrm{N}, \mathrm{N}$ Dimethylformamide+ Ethanol Fluid Systems. | $\begin{aligned} & \text { (2017). Asian Journal of Chemistry, } \\ & 29(9) \text {. } \end{aligned}$ |
| 12 | S. M. Reda, Asla A. Al-Zahrani | Ponceau 2R Doped Poly (ST/MMA) as Fluorescent Solar Collectors and Evaluation Effect of Matrix on Their Field Performance." | (2012), Open Journal of Energy Efficiency. |

Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

| \# | Name of Investigator(s) | Research Title | Conference and Publication Date |
| :--- | :--- | :--- | :--- |
| 1 | Asla.A.AL-Zahrani, | "Bismuth sulphide decorated ZnO nanorods | 6th International Conference on |
|  | Zulkarnain Zainal, Zainal | heterostructure assembly via controlled | Nanotechnology, Nanomaterials \& Thin |
|  | Abidin Talib, Janet Lim | SILAR cationic concentration for enhanced | films for Energy Applications(27-29 July |
|  | Hong Ngee, Araa Mebdir <br> Holi (2019) | photoelectrochemical cells," | 2019). The National Energy University, |
|  |  |  | Kuala Lumpur, Malaysia. (Best Presenter |
| Award) |  |  |  |


| \# | Name of Investigator(s) |
| :---: | :---: |
| 2 | Asla.A.AL-Zahrani, <br> Zulkarnain Zainal, Zainal Abidin Talib, Janet Lim Hong Ngee, Araa Mebdir Holi |
| 3 | Asla.A.AL-Zahrani, <br> Zulkarnain Zainal, Zainal Abidin Talib, Janet Lim Hong Ngee, Laimy Mohd Fudzi, Araa Mebdir Holi and Mahanim Sarif @Mohd Ali (2019) " |

\(\left.$$
\begin{array}{|l|l|}\hline \text { Research Title } & \text { Conference and Publication Date } \\
\hline \begin{array}{l}\text { Effect of the annealing temperature on the } \\
\text { photoconversion efficiency of } \\
\text { heterostructured photoanode } \mathrm{Bi}_{2} \mathrm{~S}_{3} / \mathrm{ZnO} \\
\text { nanorods in photoelectrochemical cells," }\end{array} & \begin{array}{l}\text { "International Symposium on Advanced } \\
\text { Materials \& Nanotechnology (i-SAMN }\end{array}
$$ <br>
2019) (19-20th August 2019 at Putrajaya <br>

Marriott Hotel, Malaysia.\end{array}\right]\)| Effect of the heat treatment on the |
| :--- |
| photoelectrochemical performance of |
| binary heterostructured photoanode <br> Ag2S/ZnO nanorods in |
| 11th International Fundamental Science <br> Congress 2019 (IFSC 2019), 30-31 October <br> 2019, Palm Garden Hotel, IOI Resort City, <br> Putrajaya, Malaysia. (Best Poster Reward) |

## Current Researches

| $\#$ | Research Title | Name of Investigator(s) |
| :--- | :--- | :--- |
| 1 | Improvement of photocurrent generation of ZnO NRAs sensitized <br> photoelectrochemical cell through co-sensitization with $\mathrm{Ag}_{2} \mathrm{~S}$ and $\mathrm{Bi}_{2} \mathrm{~S}_{3}$ | Asla.A.AL-Zahrani, Zulkarnain Zainal, <br> Zainal Abidin Talib, Hong Ngee Lim, Araa <br> Mebdir Holi, Noor Nazihah Bahrudin |

## Contribution to Scientific Conferences and Symposia

| \# | Conference Title | Place and Date of the Conference | Extent of Contribution |
| :--- | :--- | :--- | :--- |
| 1 | 6th International <br> Conference on <br> Nanotechnology, <br> Nanomaterials \& Thin films <br> for Energy Applications. | (27-29 July 2019). The National Energy <br> University, Kuala Lumpur, Malaysia | Oral presentation.(Best Presenter <br> Award) |
| 2 | "International Symposium <br>  <br> Nanotechnology (i-SAMN <br> 2019) | (19-20th August 2019 at Putrajaya Marriott <br> Hotel, Malaysia. | Oral presentation |
| 3 | 11th International <br> Fundamental Science <br> Congress 2019 (IFSC 2019), | 30-31 October 2019, Palm Garden Hotel, <br> IOI Resort City, Putrajaya, Malaysia. | Poster - (Best Poster Reward) |
| \{the RSC Congress Poster\} |  |  |  |

Teaching Activities

## Undergraduate

\# Course/Rotation Title | No./Code | Extent of Contribution <br> (no. of lectures/Tutorials. Or labs, Clinics) |
| :--- | :--- |


| 1 | General Chemistry (1) |  | labs |
| :--- | :--- | :--- | :--- |
| 2 | General Chemistry (2) | labs |  |
| 3 | Physical Chemistry (Thermodynamics) | labs |  |
| 4 | Physical Chemistry (electricity -1 ) | labs |  |
| 5 | Physical Chemistry (electricity -2 ) | labs |  |
| 6 | Physical Chemistry (phase rule). | labs |  |
| 7 | Physical Chemistry (surface chemistry and catalysis <br> colloids). | labs |  |
| 8 | Organic Chemistry (2). | labs |  |
| 9 | Organic Chemistry in the Department of Biology |  | labs |
| 10 | Analytical Chemistry. | labs |  |
| 11 | Chemistry of transition elements. | labs |  |
| 12 | Physical Chemistry ( kinetics of chemical <br> reactions ) | labs |  |
| 13 | Computer Applications in Chemistry |  | labs |
| 14 | Biochemistry | labs |  |

## Course Coordination

| $\#$ | Course Title and Code | Coordination | Co-coordination | Undergrad. | Postgrad. | From | To |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | Physical Chemistry (kinetics of <br> chemical reactions) | $\checkmark$ |  | $\checkmark$ |  | 2016 | 2017 |
| $\mathbf{2}$ | Biochemistry | $\checkmark$ |  |  |  |  | 2015 |

## Committee Membership

| $\#$ | From | To | Position | Organization |
| :--- | :--- | :--- | :--- | :--- |
| 1 | 2019 | now | Member | INSTITUT KIMIA MALAYSIA <br> Malaysian Institute of Chemistry |

## Volunteer Work

| \# | From | To | Type of Volunteer | Organization |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | 2019 | now | Member of club | Saudi Club in Kuala lumper |
| $\mathbf{2}$ | 2020 |  | Supervisor | creative Olympics for Science-Mawhiba |
| $\mathbf{3}$ | 2019 | now | Member | Rawasn for Saudi Academic Writing |

Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

| 1 | Leading international computer skills certification-ICDL (80 hours) |
| :--- | :--- |
| 2 | Training of Trainers (TOT) (120 hours) |

3 Chemical training Bag \{important skills for the data analysis and graphing software Origin Pro; laboratory safety; GATD (basic care: CPR \&AED); Xpert high score software Principle)

Last Update
22./...06.../2020

