



السيرة الذاتية

رياض رمضان كريدغ

ليبيا

ماجستير من جامعة التكنولوجيا الماليزية/ ماليزيا

هندسة كيميائية (الطاقات المتجددة والمواد النانوية)

باحث أول

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الاسم

الجنسية

المؤهل العلمي

التخصص

الدرجة العلمية

المؤسسة العلمية التابع لها

البريد الإلكتروني

رقم الهاتف

المواقع الإلكترونية

<https://scholar.google.com/citations?hl=ar&user=TPV7hAEAAAAJ>

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أولاً / المؤهلات العلمية:

Graduate study	2010-2015 : Bachelor in Chemical Engineering from “CETJ” College of Engineerig Technology- Janzour – Libya- obtained with (84.6 %).
Postgraduate (MSc) From	2019-2021 : Master degree in Chemical Engineering from Universiti Teknologi Malaysia, obtained with a GPA of 3.95 out of 4, (Best Postgraduate Student).
Postgraduate study (PhD)	-2024 PhD candidate in Chemical and Petroleum Engineering Department, UAE University, United Arab Emirates.

PROFESSIONAL EXPERIENCE

الخبرات العلمية

- * Laboratory technician in Sarir Refinery Lab, Arabian Gulf Oil Company, (2009 – 2013)
- * Head of Analysis and Quality Control department, Sarir Refinery, Arabian Gulf Oil Company, (Present).

Duties and Responsibilities:

- Responsible for all Routine Tests of oil and gas products in Sarir Refinery.
- Providing the required quality certificates for all petroleum products (Diesel, Jet-fuel, Gasoline)
- Doing a wide range of water and gas analysis (e.g. Spectrophotometry, Gas Chromatography).
- Preparation of all chemical solutions required for analytical tests. - Calibration and Standardization of lab devices and equipment.

- * Lecturer and lab instructor in STC Specific Training Center for Oil Industries in Zawia (2018–2019).

Duties and Responsibilities:

- Giving lectures in Analytical Chemistry, Process Chemistry, Lab Technology to students.
- Preparing lab instruments and chemical solutions required for the practical work.
- Supervising and ensuring safe working environment in the lab for students.

First and Corresponding author papers

1. **Ikreedeeagh**, Riyadh Ramadhan, and Muhammad Tahir. "A critical review in recent developments of metal-organic-frameworks (MOFs) with band engineering alteration for photocatalytic CO₂ reduction to solar fuels." **Journal of CO₂ Utilization** 43 (2021): 101381. <https://doi.org/10.1016/j.jcou.2020.101381> (IF = 7.2)
2. **Ikreedeeagh**, Riyadh Ramadhan, et al. "A comprehensive review on anodic TiO₂ nanotube arrays (TNTAs) and their composite photocatalysts for environmental and energy applications: Fundamentals, recent advances and applications." **Coordination Chemistry Reviews** 499 (2024): 215495. <https://doi.org/10.1016/j.ccr.2023.215495> (IF = 24.83) * Corresponding author
3. **Ikreedeeagh**, Riyadh Ramadhan, et al. "Recent advances on synthesis and photocatalytic applications of MOF-derived carbon materials: A review." **Coordination Chemistry Reviews** 510 (2024): 215834. <https://doi.org/10.1016/j.ccr.2024.215834> (IF = 20.3) * Corresponding author
4. **Ikreedeeagh**, Riyadh Ramadhan, and Muhammad Tahir. "Indirect Z-scheme heterojunction of NH₂-MIL125 (Ti) MOF/g-C₃N₄ nanocomposite with RGO solid electron mediator for efficient photocatalytic CO₂ reduction to CO and CH₄." **Journal of Environmental Chemical Engineering** 9.4 (2021): 105600. <https://doi.org/10.1016/j.jece.2021.105600> (IF = 7.4)
5. **Ikreedeeagh**, Riyadh Ramadhan, and Muhammad Tahir. "Facile fabrication of well-designed 2D/2D porous g-C₃N₄-GO nanocomposite for photocatalytic methane reforming (DRM) with CO₂ towards enhanced syngas production under visible light." **Fuel** 305 (2021): 121558. <https://doi.org/10.1016/j.fuel.2021.121558> (IF = 6.7)
6. **Ikreedeeagh**, Riyadh Ramadhan, Sehar Tasleem, and Md Arif Hossen. "Facile fabrication of binary gC₃N₄/NH₂-MIL-125 (Ti) MOF nanocomposite with Z-scheme heterojunction for efficient photocatalytic H₂ production and CO₂ reduction under visible light." **Fuel** 360 (2024): 130561. <https://doi.org/10.1016/j.fuel.2023.130561> (IF = 6.7) * Corresponding author
7. **Ikreedeeagh**, Riyadh Ramadhan, and Muhammad Tahir. "Ternary nanocomposite of NH₂-MIL-125 (Ti) MOF-modified TiO₂ nanotube arrays (TNTs) with GO electron mediator for enhanced photocatalytic conversion of CO₂ to solar fuels under visible light." **Journal of Alloys and Compounds** 969 (2023): 172465. <https://doi.org/10.1016/j.jallcom.2023.172465> (IF = 5.8)
8. **Ikreedeeagh**, Riyadh Ramadhan, and Muhammad Tahir. "Photocatalytic CO₂ reduction to CO and CH₄ using gC₃N₄/RGO on titania nanotube arrays (TNTAs)." **Journal of Materials Science** 56 (2021): 18989-19014. <https://doi.org/10.1007/s10853-021-06516-7> (IF = 4.0)
9. **Ikreedeeagh**, Riyadh Ramadhan. "Recent developments of Fe-based metal organic frameworks and their composites in photocatalytic applications: Fundamentals; Synthesis and Challenges." **Russian Chemical Reviews** 91 (2022): 12. <https://doi.org/10.57634/RCR5064> (IF = 7.46) * Corresponding author

10. Ikreedeegh, Riyadh Ramadhan, and Muhammad Tahir. "A Techno-Economical Evaluation Study for Upgrading Sarir Oil Refinery and Maximizing Gasoline Production." **Journal of Chemical and Petroleum Engineering** 58.1 (2024): 31-47.

<https://doi.org/10.22059/jchpe.2023.360196.1438>

* Corresponding author

11. Ikreedeegh, Riyadh Ramadhan, Muhammad Tahir, and Mohamed Madi. "Modified-TiO₂ nanotube arrays as a proficient photo-catalyst nanomaterial for energy and environmental applications." **Journal of Solar Energy and Sustainable Development** 13.1 (2024): 133-144.

<https://doi.org/10.51646/jesd.v13i1.196>

* Corresponding author

12. Ikreedeegh, Riyadh Ramadhan, Md. Arif Hossen and Muhammad Tahir. "2D/2D GO-Modified g-C₃N₄ Nanocomposite for Efficient Photocatalytic CO₂ Reduction to CH₄ Under Visible Light." **Journal of Solar Energy and Sustainable Development** 13.1 (2024): 254-263.

<https://doi.org/10.51646/jesd.v13i2.218>

* Corresponding author

13. Ikreedeegh, Riyadh Ramadhan, Md. Arif Hossen and Muhammad Tahir. "Noble-Metal-Free Modified TiO₂ Nanotube Arrays (TNTAs) for Efficient Photocatalytic Reduction of CO₂ to CO Under Visible Light.

" **ChemistrySelect** 2024, 9, e202403536 <https://doi.org/10.1002/slct.202403536> (IF = 1.9) *

Corresponding author

Co-author papers

1. Zhou, Yingtang, et al. "Bimetallic metal–organic frameworks and MOF-derived composites: Recent progress on electro-and photoelectrocatalytic applications." **Coordination Chemistry Reviews** 451 (2022): 214264. <https://doi.org/10.1016/j.ccr.2021.214264> (IF = 24.83)

2. Hossen, Md Arif, et al. "Enhanced photocatalytic CO₂ reduction to CH₄ using novel ternary photocatalyst RGO/Au-TNTAs." **Energies** 16.14 (2023): 5404. <https://doi.org/10.3390/en16145404> (IF = 3.0)

3. Hossen, Md Arif, et al. "Carbon-based nanomaterials (CNMs) modified TiO₂ nanotubes (TNTs) photodriven catalysts for sustainable energy and environmental applications: A comprehensive review." **Journal of Environmental Chemical Engineering** (2024): 114088. <https://doi.org/10.1016/j.jece.2024.114088> (IF = 7.4)

4. W. A. Khalifa, R. R. Ikreedeegh, M. F. A. Alkbir, M. A. F. M. S. Janudd, Well-Designed 2D/2D/2D Ternary ZCO/CN/TiC Nanocomposite for Efficient Photocatalytic H₂ Production Through Water Splitting Under Visible Light. **ChemistrySelect** 2024, 9, e202403308.

<https://doi.org/10.1002/slct.202403308>

(IF = 1.9)

5. Hossen, Md Arif, et al. "Optimization of anodizing parameters for the morphological properties of TiO₂ nanotubes based on response surface methodology." **Next Materials** 2 (2024): 100061. <https://doi.org/10.1016/j.nxmte.2023.100061>

6. Zhang, Zongwen, et al. "Efficient photocatalytic degradation of bisphenol A on 2D-3D spherically hierarchical structure Zn₅In₂S₈." **Frontiers in Chemistry** 12 (2025): 1519370.

(IF <https://doi.org/10.3389/fchem.2024.1519370>

= 3.8)

7. Afif, Benameur, et al. "Enhanced Efficiency and Dynamic Performance in Wind Power Generation Systems using Artificial Neural Networks and Predictive Current Control for PMSG-based Turbines." **Solar Energy and Sustainable Development Journal** 14.1 (2025): 157-181.

<https://doi.org/10.51646/jsesd.v14i1.390>

* Corresponding author

Book chapters

1. Ikreedeeh, Riyadh R., and Muhammad Tahir. "Titanium Carbide (TiC) MXene-Based Titanium Dioxide Composites for Energy and Environment Applications." *Titanium Carbide MXenes: Synthesis, Characterization, Energy and Environmental Applications* (2024): 87-114.
<https://doi.org/10.1002/9783527838707.ch5>