Khalid Hamid Rashid Abdul-Khalik

خالد حامد رشيد عبد الخالق

Professor

CONTACT

Phone: 07700733818
Email: khalid.h.rashid@uotechnology.edu.iq
khalid.h.rashid@uotechnology.edu.iq

EDUCATION

Doctorate (2014-04-09)
Corrosion Engineering
University of Baghdad

RESEARCH METRICS

h-index (Scopus)	22
h-index (GS)	24
Citations (Scopus)	921
Citations (GS)	1131
Documents (Scopus)	35
Documents (GS)	65

AWARDS

- The international scientific award in gold medal

PATENTS

- Synthesis of a novel pyrazole heterocyclic derivative as corrosion inhibitor for low-carbon steel in 1M HCls

RESEARCH INTERESTS

- corrosion and corrosion control
- green corrosion inhibitors
- green technologies
- chemical and corrosion engineering

PROFILE

Prof. Dr. Khalid Hamid Rashid Abdul-Khalik have many academic and research activities in the fields of chemical and corrosion engineering. The current research interests are corrosion and corrosion control, green corrosion inhibitors, green technologies, thermal engineering, and many other researches in the fields of chemical engineering. He have a B.Sc., M. Sc. and Ph.D. in chemical engineering from University of Baghdad and published more than 40 research papers in respected journals.

ACADEMIC TITLES

2021-12-09 **Professor**

GRADUATE SUPERVISION

Corrosion Inhibition of Mild Steel in CO2 Saturated Saline Solution Using Hexamethylenetetraamine
Wasan Farhan Hameed (2021)

Synthesis and Investigations of Organic Corrosion Inhibitors for Mild Steel in Hydrochloric acid Solution
Ali Shareef Jasim (2022)

Synthesis and Characterization of New Heterocyclic Compounds Containing Oxazolidine Ring as Corrosion Inhibitors for Mild Steel in Acidic Solution
Zinah Ibrahim Jasim (2023)

Synthesis and characterization of some new heterocyclic compounds
Hussein Sami Hassan (2024)

Synthesis and Characterization of New Chalcones compounds as Corrosion Inhibitors for Mild steel in Acidic Solution
Wael Adel Mohammed (2025)

Mitigation of high-temperature corrosion of the fire side boiler tubes using thermal spray coating
Qusay Ghanim Finish (2027)

Synthesis, structural identifications of novel Schiff bases as corrosion inhibitors for mild steel in acidic solution
Arkan Muwafaq Atiyah (2026)

ADMINISTRATIVE POSITIONS

2021-12-09 - Present **Professor of Corrosion Engineering at the Chemical Engineering Faculty, University of Technology, Iraq**

PUBLICATIONS (72)

1. **Optimization of Ramazol Brilliant Violet-5R dye removal from wastewater by coriander seeds and cement kiln dust adsorbents**
International Journal of Environmental Science and Technology 23 (404), 1-14, 2026 | 2026

2. **Optimization of Ramazol Brilliant Violet-5R dye removal from wastewater by coriander seeds and cement kiln dust adsorbents**
International Journal of Environmental Science and Technology 23 (5), 404, 2026 | 2026 | Cited: 1

3. **Improving the convective heat transfer coefficient of a new design helical coiled tube heat exchanger via air injection technique**
Arabian Journal for Science and Engineering 50 (13), 10127-10147, 2025 | 2025 | Cited: 8

4. **Boiler corrosion in thermal power plant: kinetics and mathematical studies**
Heat Transfer 54 (7), 4299-4307, 2025 | 2025 | Cited: 5

5. **Boiler Corrosion in Thermal Power Plant: Kinetics and Mathematical Studies**
Heat Transfer, 2025 | 2025 | Cited: 2

6. **Influence of chloride ions, temperature, and pressure on boiler tubes corrosion: experimental, mathematical, and kinetics perspective**
Reaction Kinetics, Mechanisms and Catalysis 138 (6), 3705-3724, 2025 | 2025 | Cited: 3

7. **Novel Chalcone-Derived Bases as Efficient Corrosion Inhibitor for Carbon Steel in 1M HCl: Synthesis, Diagnosis, Gravimetrical, Electrochemical, Morphological, and Computational ...**
ChemistrySelect 10 (34), e03378, 2025 | 2025 | Cited: 4

8. **A review on corrosion inhibition performance of chalcones: a multi-technique study using weight loss, EIS, polarization, and quantum chemical calculations**
Moroccan Journal of Chemistry 13 (3), J. Chem. 13 (3)-1167, 2025 | 2025 | Cited: 14

9. **Optimization of process parameters for 4643 Al alloy anodization in mixed oxalic/phosphoric electrolytes: Doehlert experimental design**
International Journal of Electrochemical Science 20, 100945, 2025 | 2025 | Cited: 22

10. **A Review On Corrosion Inhibition Performance of Chalcones: A Multi-Technique Study Using Weight Loss, EIS, Polarization, and Quantum Chemical Calculations**
Moroccan Journal of Chemistry 13 (3), J. Chem. 13 (3)-1167, 2025 | 2025 | Cited: 10

11. **Improving the Convective Heat Transfer Coefficient of a New Design Helical Coiled Tube Heat Exchanger via Air Injection Technique**
Arabian Journal for Science and Engineering, 1-21, 2025 | 2025 | Cited: 7

12. **Synthesis and Diagnosis of New Heterocyclic Compound as Corrosion Inhibitor for Mild Steel in Acidic Solution**
Diyala Journal of Engineering Sciences, 180-196, 2024 | 2024 | Cited: 19

13. **Optimization for Corrosion Inhibition of Steel in Hydrochloric Acid by DHOT as a Novel Corrosion Inhibitor**
Petroleum Chemistry, 1-6, 2024 | 2024 | Cited: 21

14. **Mass transfer influence on the corrosion inhibition of N80 steel in 1 M H2SO4 by green corrosion inhibitor using MATLAB**
International Journal of Electrochemical Science 19 (10), 100764, 2024 | 2024 | Cited: 27

15. **Corrosion and Corrosion Control of the Steel in Acidizing Oil Wells Processes: An Overview of Organic Inhibitors**
RUSSIAN JOURNAL OF APPLIED CHEMISTRY 97 (1), 2024 | 2024 | Cited: 48

16. **The inhibition effect of 1, 3-diazole glyoxaline on corrosion of API 5L X52 pipeline steel in oilfield produced water under sweet corrosive conditions**
Results in Chemistry, 101528, 2024 | 2024 | Cited: 37

17. **A combined experimental and theoretical study into the effect of new heterocyclic compound containing β-lactam ring as corrosion inhibitor for mild steel in hydrochloric acid**
Results in Surfaces and Interfaces 17, 100319, 2024 | 2024 | Cited: 46

18. **Optimization of the corrosion inhibition performance of novel oxadiazole thione-based Schiff base for mild steel in HCl media using Doehlert experimental design**
Inorganic Chemistry Communications 160, 111911, 2024 | 2024 | Cited: 27

19. **Synthesis and diagnosis of new heterocyclic compound as corrosion inhibitor for mild steel in acidic solution**
Diyala Journal of Engineering Sciences 17 (4), 180-196, 2024 | 2024 | Cited: 23

20. **A combined experimental and theoretical study into the effect of new heterocyclic compound containing β-lactam ring as corrosion inhibitor for mild steel in hydrochloric acid ...**
2024

21. **AL-Azawi, Anees A**
Khadom, Hameed B. Mahood,"Synthesis and Diagnosis of New Heterocyclic ..., 2024 | 2024 | Cited: 2

22. **Synthesis and Characterization Heterocyclic Derivative as Corrosion Inhibitor 3- ((dicyclohexyl aminon) methyl)-5-(4-((2-hydroxybenzylidene) amino phenyl)-1,3,4-oxadiazole-2(3H ...**
ID Patent 8,329, 2024 | 2024

23. **Synthesis of a novel 3, 5-dimethyl-1H-pyrazol-1-yl m (4-((4-hydroxybenzylidene) amino) phenyl) methanone to prevent corrosion low-carbon steel in 1M hydrochloric acid**
ID Patent 8,220, 2024 | 2024

24. **Synthesis and Characterization of New Heterocyclic Compounds Containing Oxazolidine Ring as Corrosion Inhibitors for Mild Steel in Acidic Solution**
M.Sc. thesis, Chemical Engineering Department , University of Technology, 2023 | 2023

25. **Results in Surfaces and Interfaces**
2023 | Cited: 1

26. **Synthesis of schiff-based derivative as a novel corrosion inhibitor for mild steel in 1 M HCl solution: optimization, experimental, and theoretical investigations**
Journal of Bio-and Tribo-Corrosion 9 (3), 54, 2023 | 2023 | Cited: 26

27. **Synthesis and characterization of (E)-4-(((4-(5-mercapto-1, 3, 4-oxadia?zol-2-yl) phenyl) amino) methyl)-2-methoxyphenol as a novel corrosion inhibitor for mild-steel in ...**
Results in Chemistry 5, 100975, 2023 | 2023 | Cited: 33

28. **Optimization studies of expired mouthwash drugs on the corrosion of aluminum 7475 in 1 M hydrochloric acid: Gravimetrical, electrochemical, morphological and theoretical ...**
Results in Surfaces and Interfaces 13, 100165, 2023 | 2023 | Cited: 35

29. **New pyrazole derivative as effective corrosion inhibitor for carbon steel in 1 M HCl: Experimental and theoretical analysis**
Journal of Molecular Structure 1287 (135661), 1-24, 2023 | 2023 | Cited: 62

30. **Biosorption of Congo red dye removal from aqueous solution using fennel seed spent and garlic peel**
International Journal of Environmental Science and Technology 20 (12), 13845 ..., 2023 | 2023 | Cited: 24

31. **(3,5 - dimethyl-1H-pyrazol-1-y1)(4-((3,4-dimethoxybenzylidene) amino) phenyl) methanone as a novel corrosion inhibitor for low-carbon steel in hydrochloric acid: Synthesis ...**
Results in Chemistry 4 (100569), 1-10, 2022 | 2022 | Cited: 21

32. **Optimization of inhibition performance of hexa methylene tetra amine for corrosion of mild steel in CO2-saturated brine produced water**
AIP Conference Proceedings 2443 (030047), 1-12, 2022 | 2022 | Cited: 20

33. **Removal of methyl orange dye from simulated wastewater by electrocoagulation technique using Taguchi method: kinetics and optimization approaches**
Reaction Kinetics, Mechanisms and Catalysis, 2022 | 2022 | Cited: 32

34. **Investigation of tetraazaadamantane as corrosion inhibitor for mild steel in oilfield produced water under sweet corrosive environment**
Journal of Bio- and Tribo-Corrosion 8 (1), 27, 2022 | 2022 | Cited: 29

35. **New Developments in Inhibition of the Sweet Environment in a Variety of Corrosive Media: A Review**
Engineering and Technology Journal 40 (09), 1117-1130, 2022 | 2022 | Cited: 4

36. **amino) phenyl) methanone as a novel corrosion inhibitor for low-carbon steel in hydrochloric acid: Synthesis, diagnosis, and application**
Results Chem 4, 100569, 2022 | 2022 | Cited: 12

37. **Synthesis of a novel pyrazole heterocyclic derivative as corrosion inhibitor for low-carbon steel in 1M HCl: Characterization, gravimetrical, electrochemical, mathematical ...**
Results in Engineering 15 (100573), 1-12, 2022 | 2022 | Cited: 86

38. **Optimization, kinetics, and electrochemical investigations for green corrosion inhibition of low-carbon steel in 1 M HCl by a blend of onion-garlic leaves wastes**
Bioresource Technology Reports 19, 101194, 2022 | 2022 | Cited: 34

39. **Sulfosalicylic/oxalic acid anodizing process of 5854 aluminum-magnesium alloy: influence of sealing time and corrosion tendency**
Results in Chemistry 4, 100289, 2022 | 2022 | Cited: 29

40. **New Developments in Inhibition of the Sweet Environment in a Variety of Corrosive Media: A Review**
Engineering and Technology Journal 40 (09), 1-14, 2022 | 2022

41. **Synthesis and Investigations of Organic Corrosion Inhibitors for Mild Steel in Hydrochloric acid Solution**
M.Sc. thesis, Chemical Engineering Department , University of Technology, 2022 | 2022

42. **Optimization of inhibition performance of hexa methylene tetra amine for corrosion of mild steel in CO**
2022

43. **Corrosion Inhibition of Mild Steel in CO2 Saturated Saline Solution Using Hexamethylenetetramine**
M.Sc. thesis, Chemical Engineering Department , University of Technology, 2021 | 2021

44. **3-Methoxypropyl-amine as corrosion inhibitor for X80 steel in simulated saline water**
Journal of Molecular Liquids 319 (114326), 1-14, 2020 | 2020 | Cited: 45

45. **Sodium sulfite as an oxygen scavenger for the corrosion control of mild steel in petroleum refinery wastewater: optimization, mathematical modeling, surface morphology and ...**
Reaction Kinetics, Mechanisms and Catalysis 129, 1027-1046, 2020 | 2020 | Cited: 50

46. **Aluminum ASA 6061 Anodizing Process by Chromic Acid Using Box–Wilson Central Composite Design: Optimization and Corrosion Tendency**
Metals and Materials International, 2020 | 2020 | Cited: 32

47. **The Effect of Mass Transfer on Corrosion in Oilfield Production Processes by Wastewater Enriched with CO2: Computer-Aided Modeling and Experimental Verification**
Case Studies in Chemical and Environmental Engineering 2, 1-9, 2020 | 2020 | Cited: 25

48. **Mathematical Modeling and Electrochemical Behavior for Corrosion Inhibition of Steel by Kiwi Juice Extract**
Journal of Bio- and Tribo-Corrosion 6 (1), 1-8, 2019 | 2019 | Cited: 27

49. **Optimization of inhibitive action of sodium molybdate (VI) for corrosion of carbon steel in saline water using response surface methodology**
Korean J. Chem. Eng., 36 (8), 1350-1359, 2019 | 2019 | Cited: 27

50. **دراسة علمية هندسية تخصصية عن (التآكل في محطات إنتاج الطاقة الكهربائية و إيجاد الحلول المناسبة له)**
وتم تأييد الأستفادة العلمية من قبل الشركة حسب كتابهم المرقم 30512 في 15/9 ..., 2019 | 2019

51. **دراسة علمية (دراسة مُشكلة التآكل في أنابيب الماء و البخار و المراجل البخارية و بيان أسبابها و سبل معالجتها لزيادة العمر التشغيلي لها**
الشركة العامة لإنتاج الطاقة الكهربائية / المنطقة الوسطى/ قسم الوقود ..., 2019 | 2019

52. **To cite this document: Anees Khadom, Khalid Rashid,(2018)" Adsorption and kinetics behavior of kiwi juice as a friendly corrosion inhibitor of steel in acidic media", World ...**
World Journal of Engineering 388, 401, 2018 | 2018

53. **Electrochemical Behavior of C6.9 Mild Steel Corrosion Inhibition in Phosphoric Acid Using Extracted Aqueous of Red Pomegranate Peels**
Journal of the Association of Arab Universities for Studies and Engineering ..., 2018 | 2018 | Cited: 1

54. **Adsorption and kinetics behavior of kiwi juice as a friendly corrosion inhibitor of steel in acidic media**
World Journal of Engineering 15 (3), 388-401, 2018 | 2018 | Cited: 37

55. **Evaluation of environmentally friendly inhibitor for corrosion of mild steel in phosphoric acid solution: unconventional approach**
Anti-Corrosion Methods and Materials 65 (5), 506-514, 2018 | 2018 | Cited: 36

56. **Modelling and Optimization of Corrosion Inhibition of Mild Steel in Phosphoric Acid by Red Pomegranate Peels Aqueous Extract**
Journal of Engineering 23 (11), 25-42, 2017 | 2017 | Cited: 9

57. **Effect of Acetic Acid on Electrochemical Behavior of Sealed AA2319-T3 Al-Alloys Anodized in Phosphoric Acid Electrolytes**
AL-KHWARIZMI ENGINEERING JOURNAL 11 (4), 1-7, 2015 | 2015 | Cited: 1

58. **Modelling and Optimization of Carbon Steel Corrosion in CO2 Containing Oilfield Produced Water in Presence of HAc**
Iraqi Journal of Chemical and Petroleum Engineering 16 (2), 1-8, 2015 | 2015 | Cited: 4

59. **Effect of CO2 corrosion behavior of mild steel in oilfield produced water**
Journal of Loss Prevention in the Process Industries 38, 24-38, 2015 | 2015 | Cited: 84

60. **Determination of the Optimum Conditions in Evaluation of Kiwi Juice as Green Corrosion Inhibitor of Steel in Hydrochloric Acid**
Journal of Engineering 21 (8), 22-39, 2015 | 2015

61. **Corrosion Behavior of Carbon Steel in CO2 - Containing Oilfield Produced Water**
Ph.D. Thesis, 1-244, 2014 | 2014

62. **Rashid, Corrosion Behavior of Carbon Steel in CO2-Containing Oilfield Wastewater**
PhD thesis, Department of Chemical Engineering, College of Engineering ..., 2014 | 2014 | Cited: 2

63. **Comparative Study for Anodizing Aluminum Alloy 1060 by Different Types of Electrolytes Solutions**
Engineering and Technology Journal, 1-21, 2011 | 2011 | Cited: 12

64. **Electrochemical Behavior of Chemical Conversion of Coated Aluminum 1100Al in a Neutral Tartrate Solution**
Eng. & Tech. Journal 28 (18), 5640-5650, 2010 | 2010

65. **Electrochemical Behavior of Chemical Conversion Coated Aluminum ASA6061 in Chromic Acid**
Iraqi Journal of Chemical and Petroleum Engineering 8 (3), 49-52, 2007 | 2007 | Cited: 3

66. **Anodizing of Aluminum ASA 6061 Using Chromic Acid**
M.Sc. Thesis, 1-89, 2004 | 2004

67. **Results in Surfaces and Interfaces**
0

68. **Optimization studies of expired mouthwash drugs on the corrosion of aluminum 7475 in 1 M hydrochloric acid**
0

69. **Results in Chemistry**
0

70. **Khalid H. Rashid & Anees A. Khadom**
0

71. **Surface engineering with CROMVIC coating by PVD functioning at LARC Technology**
0

72. **Bioresource Technology Reports**
0