

Umair Sikander

Assistant Professor

School of Chemical & Materials Engineering

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About

Dr. Umair Sikander is working as Assistant Professor in the School of Chemical & Materials Engineering. Dr. Umair Sikander has a PhD in Catalysis, Cfd, Hydrogen. Dr. Umair Sikander has published 15 research articles & conference papers having a citation count of 562, carried out 3 projects and filed 1 intellectual property.

Qualifications

PhD in Catalysis, Cfd, Hydrogen Petronas Technology University , Malaysia	2014 - 2018
MS in Enegetics, Propellants, Hydrogen NUST, Islamabad , Pakistan	2010 - 2012
BSc in Chemical Engineering BZU, Multan , Pakistan	2004 - 2009

Experience

Assistant Professor School of Chemical & Materials Engineering	2018- Present
Assistant Professor School of Chemical & Materials Engineering	2018 - 2018
Lecturer School of Chemical & Materials Engineering	2013 - 2018
Assistant Professor NUST , SCME-NUST, Sector H-12, ISB	2018 - 2022

Awards

Graduate Assistantship Graduate Assistantship Merit Scholarship	2014
Fee Waiver Fee waiver scholarship	2011

Research Projects

National Projects

- Development of Testing rig for Hydrogen production by Sorption Enhanced Steam Reforming** 2022
Funding Agency: NUST
Amount: PKR 990,000.00
Status: Approved_inprocess
- Correlation of PSD with surface quality of fused silica during lapping and polishing process** 2019
Funding Agency: NESCOM
Amount: PKR 150,000.00
Status: Approved_inprocess
- Develop an innovative technique for processing the olive fruit waste to achieve leftover oil for edible use under Competitive Research Grants** 2021
Funding Agency: Pakistan Agricultural Council
Amount: PKR 7,013,000.00
Status: Completed

International Projects

Research Articles

- Impact of Mari Gas and RLNG Mixture on Pre-Existing Ammonia Plant** 2023
Fahim Uddin Syed Ali Ammar Taqvi Salman Raza Naqvi Fatima Asad Hamza Nauman Umair Sikander Sajid Muhat
Iranian Journal of Chemistry and Chemical Engineering-International English Edition, Volume 42, Issue 9, Pages 2928-2937
Impact Factor: 1.000 | **Quartile:** 4
DOI: 1021-9986/2023/9/3146-3155 10/\$/6.00
- Algal-derived biochar as an efficient adsorbent for removal of Cr (VI) in textile industry wastewater: Non-linear isotherm, kinetics and ANN studies** 2023
Abdul Ahad Khan Salman Raza Naqvi Imtiaz Ali Muazzam Arshad Hamad AlMohamadi Umair Sikander
Chemosphere , Volume 316, Article Number 137826
Impact Factor: 8.943 | **Quartile:** 1 | **Citations:** 65
DOI: <https://doi.org/10.1016/j.chemosphere.2023.137826>
- Exceptional stability of hydrotalcite derived spinel Mg(Ni)Al₂O₄ catalyst for dry reforming of methane** 2022
Umair Sikander Taqi Mehran Muzafar Abbas Sang Hoon Kim
Catalysis Today , Volume:403, Page:74-85
Impact Factor: 5.3 | **Quartile:** 1 | **Citations:** 37
DOI: 10.1016/j.cattod.2021.08.029
- Biolubricant production from castor oil using iron oxide nanoparticles as an additive: Experimental, modelling and tribological assessment** 2022
Uzair Ahmad Salman Raza Naqvi Imtiaz Ali Faisal Saleem Muhammad Taqi Mehran Umair Sikander Dagmar Juchelková
Fuel , Volume 324, Part A, Article Number 124565
Impact Factor: 6.609 | **Quartile:** 1 | **Citations:** 38
DOI: <https://doi.org/10.1016/j.fuel.2022.124565>
- Sorption enhanced steam reforming of methane over waste-derived CaO promoted MgNiAl hydrotalcite catalyst for sustainable H₂ production** 2022
Mariam Ayesha Asif Hussain Khoja Faaz Ahmed Butt Umair Sikandar Ahad Hussain Javed Salman Raza Naqvi Israaf Ud Din Muhammad Taqi Mehran
Journal of Environmental Chemical Engineering , Volume 10, Issue 3, Article Number 107651
Impact Factor: 5.909 | **Quartile:** 1 | **Citations:** 25
DOI: 10.1016/j.jece.2022.107651
- One-Step Biodiesel Production from Waste Cooking Oil Using CaO Promoted Activated Carbon Catalyst from Prunus persica Seeds** 2022
Ayesha Hameed Salman Raza Naqvi Umair Sikander Wei-Hsin Chen
Catalysts , Volume 12(6), Article Number 592
Impact Factor: 4.146 | **Quartile:** 2 | **Citations:** 27
DOI: <https://doi.org/10.3390/catal12060592>
- Reutilizing Methane Reforming Spent Catalysts as Efficient Overall Water-Splitting Electrocatalysts** 2021
Muhammad Awais Khan Muhammad Taqi Mehran Salman Raza Naqvi Asif Hussain Khoja Faisal Shahzad Umair Sikander Sajjad Hussain Ramsha Khan

Bilal Sarfaraz Mutawara Mahmood Baig
ACS Omega , Volume 6(33), Pages 21316–21326
Impact Factor: 3.512 | **Quartile:** 2 | **Citations:** 21
DOI: <https://doi.org/10.1021/acsomega.1c01558>

Improving functional properties of PVA/starch-based films as active and intelligent food packaging by incorporating propolis and anthocyanin 2020

Pakeeza Mustafa Zaib Jahan Muhammad Bilal Khan Niazi Sikander Rafiq Tahir Ahmad Umair Sikander Farhan Javaid
Polymers & Polymer Composites , Pages 1-13
Impact Factor: 2.000 | **Quartile:** 3 | **Citations:** 32
DOI: <https://doi.org/10.1177/0967391120973503>

Performance Comparison of Industrially Produced Formaldehyde Using Two Different Catalysts 2020

Salman Raza Naqvi Muhammad Taqi Mehran Umair Sikandar Kamran Shakeel Muqaddam Javaid Yusra Muazzam Syed Ali Ammar Taqvi Fahim Uddin
Muhammad Bilal Khan Niazi
Processes , Volume 8, Issue 5, Article Number 571
Impact Factor: 2.847 | **Quartile:** 3 | **Citations:** 12
DOI: <https://doi.org/10.3390/pr8050571>

Experimental Study of CO2 Conversion into Methanol by Synthesized Photocatalyst (ZnFe2O4/TiO2) Using Visible Light as an Energy Source 2020

Salman Raza Naqvi Umair Sikandar Numair Manzoor Muhammad Sadiq Muhammad Naqvi
Catalysts , Volume 10, Issue 2, Article Number 163
Impact Factor: 4.146 | **Quartile:** 2 | **Citations:** 19
DOI: <https://doi.org/10.3390/catal10020163>

Tailored hydrotalcite-based Mg-Ni-Al catalyst for hydrogen production via methane decomposition: Effect of nickel concentration and spinel-like structures 2019

Mohamad Fakhrol Samsudin Suriati Sufian KuZilati KuShaari Chong Fai Kait Salman Raza Naqvi Wei-Hsin Chen Umair Sikander
International Journal of Hydrogen Energy , Volume: 44, Issue: 28, Pages: 14424-14433, Special Issue: SI
Impact Factor: 4.939 | **Quartile:** 2 | **Citations:** 61
DOI: <https://doi.org/10.1016/j.ijhydene.2018.10.224>

Experimental and Simulation Analysis of Hydrogen Production by Partial Oxidation of Methanol. 2014

Umair Sikander Arshad Hussain Arshad Hussain
Journal of Chemical society of Pakistan , Volume: 36 Issue: 5 Pages: 798-805
Impact Factor: 0.345 | **Quartile:** 4
DOI: https://www.jcsp.org.pk/PublishedVersion/9bfecf8e-2666-4d5d-8e21-a3060a7e0127Manuscript%20no%203,%20Final%20Gally%20Proof%20of%209983%20_Umair%20Sikandar_.pdf

Intellectual Property

Copyrights

Patents

A product of Poly(1,4-cyclohexanedimethylene isosorbide terephthalate)(PICT)/Polyacrylonitrile (PAN) based nonwoven nano fabric, incorporated with Calcium Oxide / Silicon dioxide (CaO /SiO2) and Zinc Oxide / Hydroxyapatite (ZnO/HA) nanoparticles for guided bone regeneration 2022
Status: Filed

Industrial Designs

Trademarks

Trainings

Aging Studies of Energetic Materials (Propellant and Explosive) 2024
Partner: Defense/Strategic Organization
Duration: 15-Jan-2024 to 19-Jan-2024

Aging Studies of Energetic Materials (Propellant and Explosive), 13- 17 June 2022 2022
Partner: Defense/Strategic Organization
Duration: 13-Jun-2022 to 17-Jun-2022