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 2014 - 2018
Petronas Technology University , Malaysia

MS in Enegetics, Propellants, Hydrogen 2010 - 2012
NUST, Islamabad , Pakistan

BSc in Chemical Engineering 2004 - 2009
BZU, Multan , Pakistan

Experience

Assistant Professor 2018- Present
School of Chemical & Materials Engineering

Assistant Professor 2018 - 2018
School of Chemical & Materials Engineering

Lecturer 2013 - 2018
School of Chemical & Materials Engineering

Assistant Professor 2018 - 2022
NUST , SCME-NUST, Sector H-12, ISB

Awards

Graduate Assistantship 2014
Graduate Assistantship Merit Scholarship

Fee Waiver 2011
Fee waiver scholarship

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 Muhbat
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 Israf 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 Fakhrul 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