Rather, Sami ullah
Associate Professor, Department of Chemical and Materials Engineering, King Abdulaziz University

Education

Degree	*Field of Study*	*Institution*	*Year*
PhD	Chemical Engineering	Chonbuk National University, S Korea	2008
MS	Chemistry	University of Pune, India	2004
BS	English, Chemistry, Botany, and Zoology	Kashmir University, India	2000

Academic Experience

From	*To*	*Institution*	*Rank*	*Title*	*Full or Part Time*
2008	2009	Korea Institute of Science and Technology, S. Korea	Postdoctoral Research Fellow		Full Time
2009	2011	Pennsylvania State University, USA	Postdoctoral Research Fellow		Full Time
2011	2012	Oklahoma University, USA	Postdoctoral Research Associate		Full Time
2012	2017	King Abdulaziz University, KSA	Assistant Professor		Full Time
2017	Date	King Abdulaziz University, KSA	Associate Professor		Full Time

Non Academic Industrial Experience *(including Consultations)*

From	*To*	*Company/Entity*	*Title*	*Position Description (Brief)*	*Full or Part Time*
None					

Funded Research Projects and Patents from the Past Five Years

Principal Investigator

1. **"Linear Polarization Resistance of Metal Ferrite Nanoparticles Prepared by Hydrothermal Method" (KAU Distinct Research Study)**, Chemical and Materials Engineering Department, King Abdulaziz University, 80204, Jeddah 21589, Saudi Arabia (2014).
2. **"Lewis basic site based metallic organic frameworks (MOFs) for CO_2 capture" (KAU General),** Chemical and Materials Engineering Department, King Abdulaziz University, 80204, Jeddah 21589, Saudi Arabia (2014).
3. **"Development of Functionalized Metallic Organic Frameworks (MOFs) for Carbon Dioxide (CO_2) Capture" (KAU General)** Chemical and Materials Engineering Department, King Abdulaziz University, 80204, Jeddah 21589, Saudi Arabia (2013).

Co-Investigator

1. **"Post-Combustion CO_2 capture using Amines, Ionic liquids (ILs) and Metal organic frame works (MOFs)" (KAU General)** Chemical and Materials Engineering Department, King Abdulaziz University, 80204, Jeddah 21589, Saudi Arabia (2013).
2. **"Utilization of metallophthalocyanide-based organic framework material for CO_2**

Capture" (KACST) Chemical and Materials Engineering Department, King Abdulaziz University, 80204, Jeddah 21589, Saudi Arabia (2013).

Certifications and Professional Registrations

None

Current Membership in Professional Societies and Organizations

Society/organization	*Rank*	*Member Since*
None		

Honors and Awards

None

Institutional and Professional Services *(administration, committees, units, etc.)*

1.	Lead Guest Editor (Special Issue) - Journal of Nanomaterials (Nanomaterials for Renewable Energy Storage: Synthesis, Characterization, and Applications) - 2015
2.	Lead Guest Editor (Special Issue) - Current Nanomaterials (Development of Porous Nanomaterials for Energy Storage) – In Progress
3.	Editor - Multiple Exciton Generation in Nanostructures for Advanced Photovoltaic Cells – Journal of Nanotechnology, Published - 2017.
4.	Editor - Sr2-xBaxTiO4: Eu3+, Gd3+: A Novel Blue Converting Yellow-emitting Phosphor for White Light-emitting Diodes – Journal of Nanomaterials, Published - 2015.

Principal Publications/Presentations from the Past Five Years

1. Arshid M. Ali, Aishah Mahpudz, Abdulrahman M. Basahel, Usman Saeed, Aqeel Ahmad Taimoor, **Sami U. Rather** and Hui Zhang "Impact of Cobalt as dopant on surface morphologies of undoped ZnO nanostructured thin films" Asia-Pacific Journal of Chemical Engineering, **Accepted** 2018.
2. **Sami ullah Rather** "Hydrogen Uptake of Manganese Oxide-Multiwalled Carbon Nanotube Composites" Internatioanl Journal of Hydrogen Energy, **Accepted** 2018.
3. **Sami ullah Rather** "Hydrogen Uptake of Cobalt and Copper oxide-Multiwalled Carbon Nanotube Composites" Internatioanl Journal of Hydrogen Energy 42 (2017) 11553.
4. **Sami ullah Rather** "Corrosion Study of Ferrites Prepared by Hydrothermal Method" Bulgarian Chemical Communications 49 (2017) 444.
5. **Sami ullah Rather,** Sang-Woon Hwang **"**Comparative Hydrogen Uptake Study on Titanium-MWCNTs Composite Prepared by Two Different Methods" Internatioanl Journal of Hydrogen Energy 41 (2016) 18114.
6. Bake Habibulla, Sharif F. Zaman, Mohammad Daous, Abdulrahim Al-Zahrani, **Sami ullah Rather**, Lecher Petrov "Partial oxidation of methanol over Co_3O_4-CeO_2 composite system promoted by nano-structured Iron particles" Comptes rendus de l'Acad´emie bulgare des Sciences 69 (2016) 993.
7. Habibullah Bake, Sharif F. Zaman, Yahia A. Alhamed, Abdulrahim A. Al-Zahrani, Muhammad A. Daous, **Sami Ullah Rather**, Hafedh Driss, Lachezar A. Petrov "Partial oxidation of methanol over Au/CeO2–ZrO2 and Au/CeO2–ZrO2–TiO2 catalysts" RSC Advances 6 (2016) 22555.
8. **Sami ullah Rather**, Aqeel Ahmad Taimoor, Ayyaz Muhammad, Yahia Abobakor Alhamed, Arshid Mahmood Ali, Sharif Fakhruz Zaman "Kinetics of hydrogen adsorption on MgH2/CNT composite" Materials Research Bulletin 77 (2016) 23.
9. **Sami ullah Rather** "Trimetallic Catalyst Synthesized Multiwalled Carbon Nanotubes and its Application for Hydrogen Storage**"** Korean Journal of Chemical Engineering 33 (2016) 1551.

10. **Sami ullah Rather**, Renju Zacharia, Arul M. Stephan, Lachezar A. Petrov, and Jijeesh R. Nair, "Nanomaterials for Renewable Energy Storage: Synthesis, Characterization, and Applications" Journal of Nanomaterials 2015 (2015) 1.
11. Muhammad Zain-ul-abdein, Waqas S. Awan, Hassan Ijaz, Aqeel A. Taimoor, Muhammad Ayyaz, and **Sami ullah Rather** "Effect of Micro- to Nano-size Inclusions upon the Thermal Conductivity of Powdered Composites with High and Low Interface Resistance" Journal of Nanomaterials 2015 (2015) 1.
12. Renju Zacharia1, **Sami-ullah Rather** "Review of solid state hydrogen storage methods adopting different kinds of novel materials" Journal of Nanomaterials 2015 (2015) 1**.**
13. Yahia Abobakor Alhamed, **Sami ullah Rather**, Ahmad Hasan El-Shazly, Sharif Fakhruz Zaman, Mohammad Abdulrhaman Daous, Abdulrahim Ahmad Al-Zahrani, "Preparation of activated carbon from fly ash and its application for CO_2 capture" Korean Journal of Chemical Engineering 32 (2015) 723.
14. Muhammad Omer Farooqi, Aqeel Ahmad Taimoor, Saad Al-Shahrani, Dumitru Baleanu**, Sami ullah Rather,** "Detection of Lead and Cadmium Ions by Voltammetry using Antimony Impregnated Activated Carbon" Revista de Chimie (Bucharest) 66 (2015) 499.
15. **Sami ullah Rather** "Synthesis, characterization, and hydrogen uptake studies of magnesium nanoparticles by solution reduction method**"** Materials Research Bulletin 60 (2014) 556.
16. **Sami-ullah Rather**, Kee Suk Nahm, "Hydrogen uptake of high-energy ball milled nickel-multiwalled carbon nanotube composites" Materials Research Bulletin 49 (2014) 525.
17. **Sami ullah Rather**, Jae Hyeok Shim, "Dehydrogenation Behavior of NbF_5, $NbCl_5$, and Nb_2O_5 Catalyzed $NaAlH_4$" Energy Environmental Focus 2 (2013) 121.

Recent Professional Development Activities *(Workshops, training, etc.)*

1. **Sami ullah Rather**, "Hydrogen Uptake of Multiwalled Carbon Nanotube Composites" AEM 2017 – 3rd International Conference on Hydrogen Energy, September 11-13, **2017** University of Surrey, Guildford, England (**Oral Presentation**).
2. ABET Program Assessment Workshop, ABET Professional Services, King Abdulaziz University, Jeddah, Saudi Arabia, 15 November **2012**.