Dr. NASEEM IQBAL

Head of Energy System Engineering Department / Associate Professor
U.S. Pakistan Center for Advanced Studies in Energy, NUST, Islamabad, Pakistan
Phone: +92-333-5580400, +925190855281
E mail: naseem@uspcase.nust.edu.pk naseem@casen.nust.edu.pk
Visiting/Exchange Faculty
Arizona State University, Arizona, USA.

OBJECTIVE

I am interested to enhance my scientific vision and skills and to utilize my experience in catalysis, synthesis, and characterization techniques.

EDUCATION

Post Doctoral Fellow (Feb 2011-Mar-2014)
Norwegian University of Science and Technology (NTNU), Norway
Advisor: Prof. Anne Fiksdahl
Project: Gold catalysis for cycloaddition reaction

PhD Chemistry (Nov 2007-Jan 2011) (A grade with distinction)
Vienna University of Technology, Austria
Advisor: Prof. Marko D. Mihovilovic
Dissertation: **Application of Ene-Reductases in the Chiral Synthesis**

M. Phil Chemistry (2004-2006) (A grade, Merit Position, CGPA: 4.0)
Quaid-i-Azam University Islamabad, Pakistan.
Advisor: Prof. Dr. Javed Zaidi
Dissertation: Asymmetric Induction through Metalation of Chiral Oxathioacetals

RESEARCH PROJECTS/INTEREST

- ✓ Electrocatalyst for PEM Fuel Cell
- ✓ Organometallic Chemistry
- ✓ Metal catalysis
- ✓ Material Synthesis
- ✓ Batteries

WORK EXPERIENCE

Jan 2016-March 2016 **Visiting/Exchange Faculty** (Fuel Cell Lab) Polytechnic School, Arizona State University, Arizona, USA

June 2014- To date **Assistant Professor** U.S. Pakistan Center for Advanced Studies in Energy, NUST, Islamabad, Pakistan

Feb 2011-Mar 2014 **Post Doctoral Fellow** Department of Chemistry, Norwegian University of Science and Technology Trondheim, Norway

2007-2011 **Ph.D Researcher** Institute of Applied Synthetic Chemistry (IAS), Vienna University of Technology Vienna, Austria.

2004-2006 **Research Associate** Chemistry Department Quaid-i-Azam University Islamabad, Pakistan

2003-2004 **Sales Engineer** Imporient Chemicals (PVT) LTD, Lahore Pakistan

INTERNATIONAL JOURNAL PUBLICATIONS

1. Salahuddin,Haider Ejaz, **Naseem Iqbal,** Grid to wheel energy efficiency analysis of battery- and fuel cell–powered vehicles, ***International Journal of Energy Researrch, 2018, 42, 5, 2021-2028.***
2. Sarwar, Ehtsham, Noor, Tayyaba, **Iqbal Naseem,** Safeer Ahmed, Muhammad Yasir, Rimsha Mehek, Effect of Co-Ni ratio in graphene based bimetallic electro-catalyst for methanol oxidation. ***Fuel Cells, 18, 189-194, 2018.***
3. Rimsha Mehek, **Naseem Iqbal,** Tayyaba Noor, Habib Nasir, Yasir Mehmood, Safeer, Ahmed, Novel Co-MOF/Graphene Oxide Electrocatalyst for Methanol Oxidation, ***Electrochimica Acta*** 255, 20, **2017**, 195-204.
4. X. Shi, **Naseem Iqbal**, S. S.H. Kunwar, G. Wahab, H.A. Kasat, and A.M. Kannan, PtCo@NCNTs cathode catalyst using ZIF-67 for proton exchange membrane fuel cell, ***International Journal of Hydrogen Energy***, **2018**,43, 3520-3526.
5. Sharif, M.S., Arslan, M., **Iqbal, N.,** Ahmad, N., Noor, T. Development of Hydrotalcite Based Cobalt Catalyst by Hydrothermal and Co-precipitation Method for Fischer-Tropsch Synthesis. ***Bulletin of Chemical Reaction Engineering & Catalysis***, **2017**, 12 (3), 357-363.
6. **Naseem Iqbal** and Rimsha Mehek, Co-MOF/GO composites as electrocatalyst for DMFC, *2nd International Conference on Battery and Fuel Cell Technology*, Rome, Italy, 2017, *J Fundam Renewable Energy Appl* 2017, 7:6 (Suppl) DOI: 10.4172/2090-4541-C1-036.
7. Rimsha Mehek, **Naseem Iqbal**, Habib Nasir. Novel Co-MOF-71/GO Composites as Efficient Electrocatalyst for Methanol Oxidation Reaction in DMFC International Symposium on Advanced Materials (ISAM), NCP, Islamabad, 2017.
8. Muhammad Amin, Saleem munir , **Naseem Iqbal**. Synthesis and characterization of activated carbon from olive tree by H_3PO_4 chemical activation International Conference On Phosphorus, Boron and Silicon – Paris, PBSi 2017 Abstract ID: 300
9. Rimsha Mehek, **Naseem Iqbal**, Habib Nasir. Co-MOF-71/GO Composites as Efficient Electrocatalyst for, Methanol Oxidation Reaction in DMFC International Conference on Nano Composites and Multifunctional Materials (ICNMM) SNS, NUST, Islamabad, 2017.
10. Rimsha Mehek, **Naseem Iqbal,** Habib Nasir 4th Conference on Frontier of Nanoscience and Nanotechnology (CFNN 2017), Pinstech Nilore, Islamabad.
11. Salaman Raza Naqvi, M.Naqvi, Tayyaba Noor, Arshad Hussain, **Naseem Iqbal**, Y. Uemura, N. Nishiyama. Catalytic Pyrolysis Of Botryococcus Braunii (microalgae) Over Layered and Delaminated Zeolites for Aromatic Hydrocarbon Production, Energy Procedia 142 (2017) 381–385.
12. S. T Jan, A. Z Khan, A. K Janjua, Z. N Ahmad, **N. Iqbal**. study on GaN based converters for the application of power conditioning of photovoltaic systems, Electrical Engineering (ICEE), 2017 International Conference on, 1-6A
13. Ehtsham Sarwar, M. Irfan Raza, **Naseem Iqbal**, Development of Co-Ni/Graphene based bimettalic electrocatalyst for Methanol Oxidation. International Journal of Advances in Science Engineering and Technology, ISSN: 2321-9009, Vol-5, Iss-1, Spl. Issue-3 Mar.-2017.

14. Mahmood Jamil, Zuhair S. Khan, Asghar Ali, **Naseem Iqbal**, Studies on solution processed Graphene-Nb2O5 nanocomposite based photoanode for dye-sensitized solar cells, ***Journal of Alloys and Compounds,*** 694, **2017**, Pages 401–407**.**
15. Florian Rudroff, Dario A. Bianchi, Roberto Moran-Ramallal, **Naseem Iqbal**, Dominik Dreier, Marko D. Mihovilovic. Synthesis of tetrahydrofuran-based natural products and their carba analogs via stereoselective enzyme mediated BaeyereVilliger oxidation ***Tetrahedron,*** **2016**, 72. 7212 - 7221.
16. Huey-San Melanie Siah, Morten Christian Hogsnes, **Naseem Iqbal**, Anne Fiksdahl Gold(I)-catalysed tandem cyclization of propargyl acetals and alkynes, ***Tetrahedron,*** **2016**, 72, 1058-1068.
17. Ehtsham Sarwar, M Irfan Raza, and **Naseem Iqbal.** Graphene based Electrocatalysts for DMFCs, 3rd International conference on Innovative Engineering Technologies (ICIET'2016) August 5-6, 2016 Bangkok (Thailand).
18. Muhammad Faizan Sharif, Muhammad Arslan, **Naseem Iqbal,** Hydrotalcite Based Cobalt Catalyst for Synthesis of Hydrocarbons from Syngas, 4th International Conference on Energy, Environment and Sustainable Development 2016 (EESD 2016) ID: 280.
19. Muhammad Arslan, Muhammad Faizan Sharif, **Naseem Iqbal,** Promoted Hydrotalcite Based Cobalt Catalyst for Fischer Tropsch Synthesis Application, 4th International Conference on Energy, Environment and Sustainable Development 2016 (EESD 2016) ID: 281.
20. Syed Majid Bukhari, Iftikhar Ali, Asma Zaidi, **Naseem Iqbal**, Tayyaba Noor, Rashad Mehmood, Muhammad Salman Chishti, Basit Niaz, Pharmacology and synthesis of daurichromenic acid as a potent anti-HIV agent, ***Acta Poloniae Pharmaceutica– drug research***, **2015**,72, 6, 1059-1071.
21. Asma Zaidi, Syed Majid Bukhari, Farhan A Khan, Tayyaba Noor and **Naseem Iqbal**, Ethnobotanical, Phytochemical and Pharmacological Aspects of Daphne mucronata (Thymeleaceae) ***Tropical Journal of Pharmaceutical Research,*** **2015**, 14, 8, 1517-1523.
22. Jon Erik Aaseng, **Naseem Iqbal,** Jørn Eivind Tungen, Christian A. Sperger and Anne Fiksdahl, 3-Fluorotetrahydropyran-4-one derivatives from homopropargyl acetal, ***Synn. Comm.***, **2014**, 44, 2458–2467.
23. Jon Erik Aaseng, **Naseem Iqbal,** Jørn Eivind Tungen, Christian A. Sperger and Anne Fiksdahl, 3-Fluorotetrahydropyran-4-one derivatives from homopropargyl acetal, ***Journal of Fluorine Chemistry***, **2014**, *161*, 142-148.
24. Melanie Siah, Maya Kaur, **Naseem Iqbal**, Anne Fiksdahl**,** Gold(I) catalyzed tandem cyclization reactions of propargyl acetals, ***Eur.J.Org.Chem,*** **2014**, 8, 1727-1740.
25. Nikolin Oberleitner, Christin Peters, Jan Muschiol, Maria Kadow, Stefan Saß, Thomas Bayer, Patricia Schaaf, **Naseem Iqbal**, R Florian., M. D. Mihovilovic, U. Bornscheuer, An enzymatic toolbox for cascade reactions: A showcase for an in vivo redox sequence in asymmetric synthesis, ***ChemCatChem***, **2013,** 5, 12, 3524-3528.
26. **Naseem Iqbal,** Anne Fiksdahl, Gold(I) catalyzed benzo[c]azepine synthesis by intermolecular [5 + 2] cycloaddition, *J.Org.Chem*, 2013, *78*, 7885-95.
27. Naseem Iqbal, Guro Blakstad, Anne Fiksdahl, Acid catalyzed vinylamide homo- and heterodimerization promoted by a catalytic [Au(I)SbF_6] – alkyne system, *Tetrahedron*, 2014, *70*, 6, 1317-1325.

28. **Naseem Iqbal**, Christian Sperger, Anne Fiksdahl, Gold-catalysed alkene cycloaddition reactions of propargyl substrates, ***Eur.J.Org.Chem*, 2013,** *5*, 907–914,
29. D. Bianchi, R. Ramallal, **Naseem Iqbal,** F. Rudroff, M. D. Mihovilovic, Enantiocomplementary access to carba-analogs of C-nucleoside derivatives by recombinant baeyer-villiger monooxygenases, ***Bioorg.Med.Chem.Lett*, 2013**, *23*, 2718-2720.
30. **Naseem Iqbal,** F. Rudroff, A. Brige, M. D. Mihovilovic, Asymmetric bioreduction of activated carbon-carbon double bonds using *Shewanella* Yellow Enzyme (SYE-4) as novel enoate reductase, ***Tetrahedron*,2012,** *68*, 7619-7623.
31. M. Huck, P. Gemeiner, V. Stefuca, **Naseem Iqbal,** M. D. Mihovilovic, Encapsulation of recombinant E. coli expressing cyclopentanone monooxygenase in polyelectrolyte complex capsules for Baeyer–Villiger biooxidation of 8-oxabicyclo[3.2.1] oct-6-en-3-one, ***Biotechnol Lett,* 2010,** 32, 5, 675-680.
32. J. H. Zaidi, **Naseem Iqbal**, K. M. Khan, M. Arfan, Synthesis of Benzyl chloromethyl ether in situ and its use for the Protection and Deprotection of Bifuctional Hydroxyl Compounds. ***Letters in Org.Chem*. 2008**, 5, 125-127.
33. J. H. Zaidi, **Naseem Iqbal**, Asymmetric Induction through metalation of chiral oxathioacetals and dithioacetals, ***Synn. Comm*. 2007**, 37, (17), 2835-2845.
34. Jamil, M.; Ali, A.; Husnain, I.; Mushtaq, W.; **Iqbal, N**.; Khan, Z.S., "Effect of calcination on the particle size of nano-Nb2O5 for development as photo-anode material in advanced generation DSSCs," in *Power Generation System and Renewable Energy Technologies (PGSRET)*, **2015** , ***IEEE Explorer***, pp.1-6, 10-11 June **2015**, doi: 10.1109/PGSRET.2015.7312194.
35. Siddique, S.; Wazir, R.; Khan, Z.A.; **Iqbal, N**., "Technical and financial analysis of 50MW wind farm at Gwadar, Balochistan," in *Power Generation System and Renewable Energy Technologies (PGSRET)*, **2015**, ***IEEE Explorer***, pp.1-5, 10-11 June **2015**, doi: 10.1109/PGSRET.2015.7312211.

REFERENCES

Prof. Dr. A.M. Kannan
The Polytechnic School, Ira A. Fulton Schools of Engineering,
Arizona State University, Arizona, USA
amk@asu.edu, 480 727 1102 (Office) & 808 392 0036 (Cell)

Prof. Dr. Anne Fiksdahl
Department of Chemistry,
Norwegian University of Science and Technology, Trondheim, Norway
+47-73594094, anne.fiksdahl@chem.ntnu.no

A.o.Univ.-Prof. Dipl.-Ing. Dr Marko D. Mihovilovic
IAS, Technical University Vienna, Austria
+43-1-58801-15420, mmihovil@pop.tuwien.ac.at