CURRICULUM VITAE

DR. ZAHOOR-UL-HUSSAIN AWAN
Department of Food Engineering,
NED University of Engineering & Technology,
Karachi, Pakistan
Office: +92-21-99230602 & 04
Mobile: +92-343-5545859
e-mail : zahoor@neduet.edu.pk , zahoorulhussain@hotmail.com

Career Objectives

- To secure position in the higher management of a growing organization where I can practice my Educational and Professional skills for the benefit of organization & my career growth.

Qualification Highlights

- More than 15 years of teaching experience at university level.
- I am self-motivated, possess good communication, analytical skills and good business understanding, work well in both an individual and team environment and have the ability to keep up with emerging technologies.

Academic Qualifications

2011- 08/2014	Ph.D. (Chemical Engineering), Chonbuk National University, Jeonju, Republic of Korea Dissertation title: Evaluation of electrocatalytic properties of nanostructured manganese oxides for nonaqueous lithium-air batteries**.**
2009-12/2010	Master (Chemical Engineering), N.E.D.University of Engineering & Technology Karachi, Pakistan
1995-2000	Bachelor of Engineering (Mechanical), NED University of Engineering & Technology, Karachi, Pakistan.
1992-1994	Bachelor of Science, University of Karachi, Pakistan.

Work Experience

13-03-2020- till date	**Chairperson, Department of Food Engineering, NED University of Engineering & Technology, Karachi, Pakistan**
07/2017- 03/2020	Associate Professor, Department of Chemical Engineering, NED University of Engineering & Technology, Karachi, Pakistan
12/2014-07/2017	Assistant Professor, Department of Chemical Engineering, NED University of Engineering & Technology, Karachi, Pakistan.
10/2008- 12/2014	Lecturer, Department of Chemical Engineering, NED University of Engineering & Technology, Karachi, Pakistan.
04/2007-09/2008	Lecturer, S.M.A. Rizvi Textile Institute Karachi, Pakistan.
01/2006-04 /2007	Lecturer, Institute of Textile technology & Management, Karachi, Pakistan.

04/2000-2002 Sealing devices Specialist, Marine Services Pvt. Limited. Karachi, Pakistan.

Courses Conducted

Graduate Level Courses:
Advanced Process Control.
Advanced Reaction Engineering

Undergraduate Level Courses
Fluid Mechanics
Chemical Process Control
Chemical Plant Design.
Industrial Organization & Management

Projects Supervised

- Synthesis and Characterization of Transition Metal Oxides as Low Cost Catalyst for energy storage devices.
- Heat Transfer Characteristics of Nano-Composites Materials.
- Synthesis and Characterization of highly conductive graphene oxide as electrode materials for high capacity batteries.
- Drinking Water Treatment Parameters affecting overall efficiency of the process.
- Terephthalic Acid Plant design unit Increased Methyl Acetate Recovery.

Other Responsibilities

ISO 9001: 2008 Area Coordinator.
ISO Internal Quality Auditor.
Class advisor for the Final year Chemical Engineering
Project advisor for the final year students (2009-2011).
Final year Chemical Engineering Projects Coordinator (2009-2011).

Professional membership

Pakistan Engineering Council (PEC).
Registration No: MECH/15746

Achievements

HEC Approved Ph.D. Supervisor.

Technical Committee Member FluidsChe 2017 **Universiti Malaysia PAHANG**. (http://fluidsche.ump.edu.my/index.php/en/info/slideshow).

Editorial Board Member "Journal of Innovative Research" SCIENCEVIER

As Conference Secretary Organized "**First, second and third International Conference on Advanced Materials & Process Engineering**" at NED University. (www.nedampe.com)

Best Poster award in International Lithium Air Battery Symposium (ILAB) Seoul (South Korea) 4-6th October, 2013.

Language Skills

English	Able to read, write and speak fluently.
German	Able to read, write and speak fluently.
Korean	Able to read and write.

Selected Publications in International/SCI Journals:

1. **Awan Zahoor**, Maria Christy, Yun Ju Hwang, and Kee Suk Nahm "Lithium Air Battery: Alternate Energy Resource for the Future" **Journal of Electrochemical Science and Technology Vol. 3, No. 1, 2012, 14-23**. (http://dx.doi.org/10.5229/JECST.2012.3.1.14)

2. **Awan Zahoor**, Maria Christy, Yun Ju Hwang, Yi Rang Lim, Pil Kim, Kee Suk Nahm, "Improved electrocatalytic activity of carbon materials by nitrogen doping" **Applied Catalysis B: Environmental 147 (2014) 633– 641*.I.F: 6.007***

3. G. Gnana Kumar, **Zahoor Awan**, Kee Suk Nahm, J. Stanley Xavier "Nanotubular MnO_2/graphene oxide composites for the application of open air-breathing cathode microbial fuel cells" **Biosensors and Bioelectronics 53 (2014) 528–534. *I.F: 6.45***

4. K. Justice Babu**, Awan Zahoor**, Kee Suk Nahm, R. Ramachandran, M. A. Jothi Rajan, G. Gnana kumar "The influence of shape and structure of MnO_2 nanomaterials over the non-enzymatic sensing ability of hydrogen peroxide" **J Nanopart Res (2014) 16:2250. *I.F: 2.27***

5. **Awan Zahoor**, Ho Saeng Jang, Jeong Suk Jeon, Maria Christy, Yun Ju Hwang, Kee Suk Nahm "Comparative study of nanostructured α and δ-MnO_2 for lithium oxygen battery application" **RSC Adv., 2014, 4, 8973. *I.F: 3.708***

6. **Awan Zahoor**, Jeong Suk Jeon, Ho Saeng Jang, Maria Christy, Kee Suk Nahm "Mechanistic Study on Phase and Morphology Conversion of MnO_2 Nanostructures Grown by Controlled Hydrothermal Synthesis" **Science of Advanced Materials Vol. 6, pp. 2712–2723, 2014**. ***I.F: 2.908***

7. **Awan Zahoor**, Maria Christy, Yunju Hwang, Yun Sung Lee, Kee Suk Nahm "Increasing the reversibility of Li–O_2 batteries with MnO_2 grown on GNF as bifunctional catalysts for oxygen reduction in the air cathode**" Electrochimica Acta 157 (2015) 299–306** .
I.F: 4.086

8. Ho Saeng Jang, **Awan Zahoor**, Maria Christy, Kee Suk Nahm "Sea urchin shaped α- MnO2/RuO2 mixed oxides nanostructure as promising air cathode catalyst for lithium air battery" **Journal of The Electrochemical Society, 162 (3) A300-A307 (2015).*I.F: 2.859***

9. **Awan Zahoor**, Maria Christy, Jeong Suk Jeon, Yun Sung Lee, Kee Suk Nahm "Improved lithium–O_2 battery performance by addition of Pd nanoparticles on the MnO_2 bifunctional catalyst" **J Solid State Electrochem DOI: 10.1007/s 10008-015-2739-5.**
I.F: 2.234.

10. Zafar Khan Ghouri, M. Shaheer Akhtar, **Awan Zahoor**, Nasser A.M. Barakat, Weidong Han, Mira Park, Bishweshwar Pant, Prem Singh Saud, Cho Hye Lee, Hak Yong Kim "High-efficiency super capacitors based on hetero-structured α–MnO2 nanorods" **Journal of Alloys and Compounds 642 (2015) 210–215. *I.F: 2.7.***

11. Zafar Khan Ghouri , **Awan Zahoor ,** Nasser A.M. Barakat , Mohammad S. Alsoufi , Tahani M. Bawazeer , Ahmed . Mohamed, Hak Yong Kim. "The (2 x 2) tunnels structured manganese dioxide nanorods with a phase for lithium air batteries". **Superlattices and Microstructures 90 (2016) 184-190. *I.F: 2.09.***

12. **Awan Zahoor**, Maria Christy, Yongbin Kim, Anupriya Arul, Yun Sung Lee, Kee Suk Nahm "Carbon/titanium oxide supported bimetallic platinum/iridium nanocomposites as bifunctional electrocatalysts for lithium-air batteries". **J Solid State Electrochem DOI 10.1007/s10008-016-3134-6. *I.F: 2.234***

13. Mi Young Oh, Jong Ju Lee, **Awan Zahoor**, G. Gnana kumar, and Kee Suk Nahm "Enhanced electrocatalytic activity of three-dimensionally-ordered macroporous La 0.6 Sr 0.4 CoO 3-δ perovskite oxide for Li–O2 battery application" **RSC Adv., 2016, 6, 38, 32212-32219 (DOI: 10.1039/C6RA02459A) *I.F: 3.708.***

14. Hosaeng Jang, **Awan Zahoor**, Yongbin Kim, Maria Christy, Mi Young Oh, Vanchiappan Aravindan, Yun Sung Lee,, Kee Suk Nahm "Tailoring three dimensional α–MnO_2/RuO_2 hybrid nanostructure as prospective bifunctional catalyst for Li–O_2 batteries" **Electrochimica Acta 212 (2016) 701–709. *I.F: 4.504***

15. Kaliyamoorthy Justice Babu, **Awan Zahoor**, Kee Suk Nahm, Md. Abdul Aziz, Periasamy Vengadeshe and Georgepeter Gnana Kumar "Manganese dioxide–vulcan carbon@silver nanocomposites for the application of highly sensitive and selective hydrazine sensors" **New Journal of Chemistry DOI: 10.1039/c6nj00268d -2016. *I.F: 3.27.***

16. K. Ramachandran, **Awan Zahoor**, T. Raj Kumar, Kee Suk Nahmb,A. Balasubramani, G. Gnana Kumar "MnO2 nanorods grown NGNF nanocomposites for the application of highly sensitive and selective electrochemical detection of hydrogen peroxide" **Journal of Industrial and Engineering Chemistry 46 (2017) 19–27. *I.F: 4.17.***

17. Maria Christy, Anupriya Arul, Awan Zahoor, Kwang Uk Moon, Mi Young Oh, A. Manuel Stephan, Kee Suk Nahm "Role of solvents on the oxygen reduction and evolution of rechargeable Li-O_2 battery" **Journal of Power Sources 342 (2017) 825-835. *I.F: 6.33.***

PERSONAL DETAILS:

Name	:	Zahoor Ul Hussain Awan
Father's Name	:	Hussain Bakhsh Awan
Nationality	:	Pakistani
Date of Birth	:	16-03-1974
Place of Birth	:	Karachi (Pakistan)
Permanent Address	:	HNO:A-1/28 Rizwan Housing Society near Safoora Chowk District Malir Karachi Pakistan
Postal Address	:	Department of Chemical Engineering NED University of Engineering & Technology University Road Karachi Pakistan.
Office Telephone	:	0092-21 99261261-8, Extension: 2286,2577
Mobile number	:	0092-343-5545859
e-mail	:	zahoor@neduet.edu.pk
Reference	:	References will be provided upon request