Dr.-Ing. Syed Mushahid Hussain Hashmi

Professor

Department of Automotive & Marine Engineering, NEDUET Contact # 99261261-8 Ext: 2675 Email: mushahid@cloud.neduet.edu.pk





Academic Qualification:

(In chronological order)

Ph.D., Mechanical (Thermal Modeling of PEM Fuel Cell), Helmut Schmidt University, University of Federal Armed Forces of Germany Hamburg, March 2010.

M.Sc., Mechanical (Energy Systems), NED University of Engineering & Technology, 2001

B.E., Mechanical, NED University of Engineering & Technology, 1997

March 2011-To date: Professor, Dept. of Automotive & Marine Engineering, Experience:

NED University of Engineering & Technology.

April 2010- March 2011: Associate Professor, Dept. of Automotive & Marine

Engineering, NED University of Engineering & Technology.

July 2003- March 2010: Assistant Professor, Dept. of Mechanical

Engineering, NED University of Engineering & Technology.

May 2002- July 2003: Laboratory Engineer, Dept. of Mechanical

Engineering, NED University of Engineering & Technology.

July 1997- October 1999: Quality Assurance Engineer, Trans Mobile Ltd,

Bin Qasim, Karachi.

Jan 1997- July 1997: Trainee Engineer, Lakson Tobacoo Co. Ltd. Korangi,

Karachi

Professional

Life Member PEC, MECH/13221

Membership: Fellow of Pakistan Academy of Engineering (PAE), Karachi.

Honors & Awards: "Sehr Gut" Grade in PhD, 2010

(if any) PhD Scholarship for Germany, 2006 from NEDUET

Chaired the department of Automotive & Marine Engineering at NED UET

from May 2010 to May 2023.

Worked as Program Evaluator (PEV) for NTC-HEC and PEC

Conference. Presentation

& Course Attended:

(if any)

Attended 5 Days Workshop on "Vacuum Science and Technology" (WVST-

05) held at NINVAST, Islamabad 20-24 December 2010

Attended a short course on "Nuclear Reactor Thermal Hydraulics" organized by Pakistan Institute of Engineering and Applied Science,

Islamabad from 22nd May, 2012 to 24th May, 2012

Attended Fourteen day visit to USA on "SE Michigan Tech Transfer Program" October 4-13, 2016. Sponsored by CLDP, USA. Link: https://cldp.doc.gov/programs/cldp-in-action/pakistan-se-michigan-tech-

transfer-program

Presented a talk on "Technology Forecasting Methods" on 20 April

2019 in Technology Assessment workshop at PAE, Karachi.

Presented a talk on "Emerging Technology-Fuel Cells" on 27 June 2020 at PAE, Karachi.

Conducted a workshop on "Parameters of Technology Transfer" on 5 December 2020 at PAE, Karachi.

Conducted a two day workshop on" **Outcome Based Education**" in NHU Karachi, March 2023.

Attended 4 days PEC PEVs Training on "Outcome Based Accreditation for Evaluators", September 19-22, 2023. NEDUET.

Publications:

Cooling Strategies for PEM FC Stacks, by **Hashmi, S. M. H,** *PhD Dissertation*, Helmut-Schmidt-Universität, Hamburg. (Electronic Resource available at Deutsche National Bibliothek: http://d-nb.info/1001185463)

Hashmi, S. M. H. and Kabelac, S., "Temperature distribution in PEM-FC stacks -experimental and theoretical", *International Conference Hydrogen & Fuel cells*, In CD ed., Vancouver BC, Canada, 2009.

Amber Fishan Zafar, **S.M.H. Hashmi**, "First Fuel Cell Powered Vehicle of Pakistan-A Case Study", presented at International Conference on Energy Systems Engineering (ICESE-2010), October 2010, Islamabad

- M. Muzzaffar Mahmood, **S. M. H. Hashmi,** "Fuel Cell Technology and its Applications-Pakistan's Perspective", presented at 2nd International Conference on energy, environment & sustainable Development (EESD2012), February 2012, MUET Jamshoro.
- **S. M. H. Hashmi**, H.M. Iqbal, S.H. Hassan, Engine performance and emission comparison of gasoline and E10 fuels using the spark ignition engine at part and full load condition, Proceeding of Conference on Energy and Sustainability, NED University of Engineering & Technology, Karachi, Pakistan, April 27, 2013.

Amber Fishan Zafar and **S. M. H. Hashmi**, Numerical Simulation of Proton Exchange Membrane Fuel Cell, Proceeding of Conference on Energy and Sustainability, NED University of Engineering & Technology, Karachi, Pakistan, April 27, 2013.

Obaid ur Rehman, **S. M. H. Hashmi**, and Inayat Ullah Memon, "Numerical Investigation of the effect of thermal conductivity and porosity of gas diffusion layer on performance of PEMFC" Conference on Advanced Materials & Process Engineering, NED Karachi, December 14-15, 2015.

Citations:

There are **three** journal citations of my PhD thesis titled "Cooling Strategies for PEM FC Stacks" are given below with their references.

- 1. International Journal of Hydrogen Energy 37 (2012) 2412-2429
- 2. International Journal of Hydrogen Energy 41 (2016) 5096-5112
- 3. International Journal of Hydrogen Energy 41 (2016) 8525-8532

There is **one** citation of the thesis in a book written in German language titled" Kühlkonzepte für Hochtemperatur- Polymerelektrolyt-Brennstoffzellen-Stacks" by Jen Supra.