

# Maheen Mazhar

Department of Electronics Engineering, NED University of Engineering and Technology, University Road, Karachi - Pakistan.

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## CAREER OBJECTIVE

A hardworking and determined researcher with an ambition to explore novel approaches to resolve energy issue for betterment of human life. Highly motivated to work with interdisciplinary scientists to develop solutions and gain insight to resolve energy challenges.

## RESEARCH INTERESTS

To explore innovative ways of designing emerging photovoltaic devices. Major interest is towards fabrication and characterization of Dye Solar Cells with graphene counter electrodes

## PUBLICATIONS

- Maheen Mazhar, Muhammad Hassan Sayyad and Sadia Muniza Faraz, "Anthocyanin based photosensitizer for Natural Dye Sensitized Solar Cells", presented at the 2nd International Electrical Engineering Congress, Karachi, 2017.
- Maheen Mazhar, et al, "Fabrication of Dye Sensitized Solar Cells Using Natural dyes," presented at the 19<sup>th</sup> IEEE International Multi topic Conference, Islamabad, 2016.
- Maheen Mazhar, et al, "Synthesis of Dye Sensitized Solar Cells Using Natural Resources," presented at the 1st International Electrical Engineering Congress, Karachi, 2016.

## ACADEMIC ACHIEVEMENTS

Oct 4-6, 2018	Recipient of HEC travel grant for participation in International conference
Oct 4-6, 2018	Presented research work in 5 <sup>th</sup> International conference on Material Science and Nanotechnology for Next generation, Cappadocia, Turkey
July 4-6, 2018	Presented research work in international conference, "PVCon 2018, International conference on Photovoltaic Science and Technologies, Ankara, Turkey" organized by GÜNAM, Center for Solar Energy Research and Applications, METU.
May 23, 2018	Presented innovative research idea in "Falling Walls Lab Ankara", among 12 shortlisted candidates from several applicants, at METU, Turkey.
Feb-Jun 2018	Recipient of Erasmus+ student exchange scholarship of short term mobility at Middle East Technical University (METU), Ankara, Turkey
Dec 7-16 2016	Training on Fabrication and Characterization of DSSC at (GIKI), Topi, Swabi

## ACADEMIC QUALIFICATIONS

- 2015 to date Enrolled as PhD candidate, Electronic Engineering Department, NED University, Design and Fabrication of Third Generation Solar Cells , with 3.75 CGPA
- 2008-2010 M.E. Electronic Engineering Department, NED University, with 3.56 CGPA  
Design of High Efficiency class E Power Amplifier using Cadence on 0.13um technology with an efficiency of 98%
- 2003-2007 B.E. Electronic Engineering Department, NED University

## PROFESSIONAL EXPERIENCE

2012- current Department of Electronic Engineering, NED University

### Lecturer

- Taught theory courses with very good student feedback, 8.9/ 10.
- Final Year Project Coordinator, arranged seminars and workshops, involved in maintaining contacts with Directorate of Industrial Liaison and Office of Research Innovation & Commercialization to manage meetings and announcements for conduction of different project competitions, exhibitions and recruitment tests.

2009-2012 Department of Material Engineering, NED University

### Lecturer

- Taught theory courses and conducted lab sessions
- Duties of Class Advisor
- Faculty Incharge of students' NED Materials Society (NMS)

2008-2009 Department of Material Engineering, NED University

### Laboratory Engineer

- Imaging and characterization of different samples on SEM Quanta 200. Successfully characterized Carbon Nano Tubes and Silver Nano particles on SEM upto 60,000x showing 400nm CNT for the first time in NED University
- Involved in installation and commissioning of SEM and EDX and many other laboratory equipment.

2007-2008 Hamdard Institute of Information Technology, Hamdard University

### Lecturer/ Lab Engineer

- Taught theory courses, Very Large Scale Integration and Operational Amplifiers, obtained outstanding student feedback of 98%

## LANGUAGES

- Urdu - mother tongue
  - English - fluent
  - Turkish – Beginner level
  - French - beginner level
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