



Dr. Nishith Parikh

Dy. Registrar (i/C) & Associate Dean

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Phone No. 9725669149

Education

PhD in Mechanical Engineering, Michigan Technological University, USA

MS in Mechanical Engineering, Michigan Technological University, USA

B.E In Mechanical Engineering, Shivaji University, Kolhapur, Maharashtra

Work History

GSFC University - Associate Dean & Dy. Registrar (I/C)

Vadodara, Gujarat

11/2018 - Current

- Managed the day to day operations of the academic department to support students, faculty and staff
- Provide administrative leadership for undergraduate curricula, academic policy and regulation
- Served as administrative liaison for the following committee: UGC Documentation, International Collaboration and ISO
- Taught Material Science & Engineering, fluid power system and manufacturing system.

GSFC University - Program Coordinator

Vadodara, Gujarat

05/2017 - 10/2018

- Convener, Board of Studies for Mechanical Engineering
- Planning and allocation of all the courses and faculty of Mechanical Engineering
- Develop, update, and oversee course design, including developing and aligning learning outcomes, activities, and assessment.
- Subject taught computer-aided design & manufacturing technology

GSFC University - Assistant Professor

Vadodara, Gujarat

11/2016 - 04/2017

- Taught metrology and measurement

- Faculty mentor for Automotive Club and Digital Manufacturing Club.
- Member of the lab development committee (Equipment specification, procurement, etc.)
- Design the Experiments for the metrology and fluid mechanics lab

ITM UNIVERSE VADODARA - Assistant Professor

Vadodara, Gujarat

06/2016 - 10/2016

- Taught computer-aided manufacturing and material science, and metallurgy
- Subject coordinator for computer-aided manufacturing
- Design Lab Manual for CAD/CAM Lab
- Act as a faculty advisor for a lean manufacturing project.

MICHIGAN TECHNOLOGICAL UNIVERSITY, MTU - Graduate Research Assistant, PhD Candidate

Houghton, MI

08/2009 - 04/2015

Development of Micro-structural Mitigation Strategies for PEM Fuel Cells Morphological Simulation and Experimental Approaches.

A sponsored project by the U.S. Department of Energy in collaboration with Ballard Power.

- Evaluated catalyst degradation using electron microscopy and x-ray microanalysis techniques and provided feedback for material optimization.
- Quantified changes in electrical conductivity, elasticity, adhesion, and deformation of the membrane-catalyst interface as a function of ageing.
- Performed structural Investigation and surface characterization of electrocatalyst and GDL using scanning electron microscopy and white light optical interferometer.
- Gathered input for the microstructural model by extracting critical structural data of electrocatalyst and GDL.

MICHIGAN TECHNOLOGICAL UNIVERSITY, MTU - Graduate Research Assistant, MS Candidate

Houghton, MI

05/2008 - 08/2009

Visualization of Fuel Cell Water Transport and Performance Characterization under Freezing Conditions

Project sponsored by U.S. Department of Energy in collaboration with General Motors and Rochester Institute of Technology.

- Developed image analysis algorithm to study the microstructure of GDL and extract particle size distribution and other statistical information representatives of GDLs.
- Studied deformation of carbon fiber of GDL using four-nanomanipulator system inside SEM and measured current-voltage response in fiber.

DELITE ENGINEERS PVT. LTD - CAD / CAM Engineer

Vadodara, Gujarat

06/2006 - 12/2007

- Led a team of 15 engineers in designing 3-D models of engineering components and generating CNC tool paths using Unigraphics NX4 and Solid Edge V19.

- Successfully monitored all phases of projects from design through manufacturing and final dispatch while ensuring delivery within time and budget requirements.
- Independently modelled and manufactured engineering components used in space applications for Indian Space Research Organization and Solectron Ltd., India.

Core Skills & Technologies

Instruments: SEM, EDS, TEM, AFM, Nanoindentation, FDM 3D Printer

Tools: MATLAB, CAD (Solidworks, Unigraphics, Catia, Solid Edge), CAM (Solidworks, Unigraphics)

Most Three Notable Publications

- N. Parikh, J. Allen, and R.S. Yassar, "Microstructure of Gas Diffusion Layers for PEM Fuel Cells," Fuel Cell Journal, 12, pp. 382-390, 2012.
- A. Pakzad, N. Parikh, P. Mainwaring, P.A. Heiden, and R.S. Yassar, "Revealing the 3D Internal Structure of Natural Polymer Microcomposites using X-ray Ultra Microtomography," Journal of Microscopy, 243, Pt. 1, pp. 77-85, 2011.
- N. Parikh, J. Allen, and R.S. Yassar, "Effect of Deformation on Electrical Properties of Carbon Fibers used in Gas Diffusion Layer of PEM Fuel Cells," Journal of Power Sources, 193, pp. 766-768, 2009.
- N. Parikh, R.S. Yassar, "Nanoscale Investigation of Catalyst Layer Degradation in Proton Exchange Membrane Fuel cell by Atomic Force Microscopy"