

EDUCATION

Master of Science in Mechanical Engineering (Dec 2010)

Specialization: Thermal and Fluid Sciences

Texas A & M University, College Station.

GPR: 3.66/4.0

Bachelor of Technology in Mechanical Engineering (Apr 2008)

J B Institute of Engineering and Technology, JNT University, India

GPR: 3.98/4.0

WORK EXPERIENCE

Graduate Research Assistant under Dr. David Staack. (Jan 09 – Dec 10)

Plasma Engineering and Diagnostics Laboratory, Texas A&M University

Experimentally investigated plasma reforming of methane into ethylene and acetylene. Produced Ethylene and Acetylene from Methane in normal and magnetic glow discharges. Also investigated plasma CO₂ conversion into O₂ & CO. Performed heat transfer, energy cost, mass balance calculations and analyzed results. Worked with various instruments like Gas chromatogram, oscilloscope, spectroscope.

Design Engineer Trainee, Orange Technologies, Hyderabad, India. (Jun 07 - Jul 07)

In-plant Trainee, Ramagundam Super Thermal Power Station, Ramagundam, India. (May 06 – Jul 06)

CONFERENCES

ACS Fall 2010 National Meeting, Boston, Aug 2010.

Title: "Methane conversion to higher hydrocarbons using warm non-equilibrium micro plasma glow discharge"

37th IEEE International Conference on Plasma Science, Norfolk, Jun 2010.

Title: "Effective plasma discharge reforming of methane using warm non-equilibrium discharges"

ACADEMIC PROJECTS

- Design and Construction of Research Lab Power Meter.
- Reconditioning of Coal Nozzles and Study of Burner Spares
- Product development - An Electric trolley, Tools used: ProE, ANSYS.
- Performed a literature review on "Methane conversion to acetylene or hydrogen by non equilibrium plasmas" & "Micro/Nano thermosize refrigerator & its performance analysis".
- Created 3D model of Kalpan turbine impeller and Pelton turbine using AutoCAD.
- Failure analysis of a swing hook using ABAQUS.
- Solution to Laplace equation using Finite Volume Method and FLUENT.

SKILLS

CFD : Star CCM+, Fluent & Gambit
Packages : MATLAB, COMSOL, ANSYS
Design Tools : Auto CAD, Pro-E, Solid works
Programming / OS : C, C++, HTML, Windows, UNIX, Linux
Instrumentation : Gas Chromatography, Oscilloscope

HONORS AND LEADERSHIP ACTIVITIES

- JH Thompson graduate fellowship
- Organized college annual festival for 2 consecutive years "InXS 2006 & 07"
- Conducted Annual Sports Meet of JBIET during 2007-08
- Volunteered in National Service Scheme for a period of one year (2004-2005)