

DIVYAM CHANDRA

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Current Address: Apt 905, 301 S Highland Ave, Pittsburgh, PA 15206 (412) 973-0602

OBJECTIVE A permanent/temporary position in the process research & development unit of a pharmaceutical/ biochemical company that would harness my technical and research skills.

EDUCATION **Carnegie Mellon University**, Pittsburgh, PA
Master of Science in Chemical Engineering, Expected December 2008

Anna University, Chennai, INDIA
Bachelor of Technology in Chemical Engineering May 2006
Overall Percentage: 85%, First Class with Distinction

EXPERIENCE **Master's Thesis Project, Carnegie Mellon**
Advisors: Prof. Newell Washburn & Prof. Michael Domach
January 2008 - Present

- * To find a sustainable process to produce petroleum based chemicals.
- * Genetically engineering yeast strains to over express proteins like *styrene* and *cinnamic acid* through the phenylpropanoid pathway.
- * Growing yeast in different media like glucose, glycerol to optimize the styrene production and analyze their toxicity on hcells.

Indian Institute of Technology (IIT) Madras, INDIA
Project Associate, September 2006 – July 2007

- * Monitored air quality for different pollutants like NO_x, SO₂, CO, Aldehydes and HC at different places in Chennai and prepared their emission inventory.

Southern Petrochemical Industries Corporation Biotech Ltd, Chennai, INDIA
December 2005 – April 2006

- * Optimized the shake flask conditions such as pH, temperature, substrate concentration for production of *cellulase* enzyme in *Trichoderma reesei*.
- * Set up trials in a 10 L fermenter with focus on agitation parameters to achieve the desired enzyme activity after selecting the most optimum fermentation medium.
- * Culture characteristics were studied to propose a model for scale up to 200L and 1500L fermenters.

RELEVANT TRAINING Underwent plant trainings at the following major manufacturing companies. Acquired practical experience and an appreciation of the latest technologies implemented in production.

- **Cetex Petrochemicals Ltd, Chennai** **June 2005**
- **Orchid Chemicals & Pharmaceuticals Ltd, Chennai** **June 2005**
- **Kiran Pandy Chems Limited, Chennai** **May 2005**
- **Manali Petrochemical Ltd, Chennai** **June 2004**

RELEVANT COURSEWORK Biotechnology and Environmental Processes Biochemistry
Genetics Math Techniques for Chemical Engineers
Advanced Reactor Kinetics Advanced Chemical Thermodynamics

SKILLS INSTRUMENTS: UV/VIS, Ion Chromatograph, HPLC, GPC, OC/EC analyzer, Partisol Sampler
COMPUTER: Mathematica, Gaussian, MS Office

ACTIVITIES & HONORS

- Participated in the EPA P3 conference at Washington DC, 2007
- Academic Project nominated for the best project award in the University, 2006
- President, Annets Club, Rotary Club of Annanagar, 2003-04.
- Vijaya Srinivasan Gold Medal for topping in Mathematics in State Sec exam, 2002