

# Hemendra Khakhar

414 Stasney Street # 6  
College Station, TX 77840, USA  
www.geocities.com/hmkhakhar

hmk@tamu.edu

Home: 979-268-2098

Work: 979-845-7562

## Objective

Seeking a challenging position for utilizing my skills and qualifications, enabling continuous learning and development of organizational goals.

## Education

### **Texas A&M University, College Station, TX, USA**

**Ph.D. ( Chemical Engineering ), expected December 2004**

Current GPA: 4.0/4.0

### **Gujarat University , Nadiad, Gujarat, India**

**B.S. ( Chemical Engineering ) , May 1999**

Summa Cum laude ( GPA: 4.0/4.0 - Gold medal )

## Professional Experience

### **Texas Engineering Experimental Station, College Station, TX, USA** 12/2001-Present **Research Scholar**

Working on ' Single Event Kinetic Modeling and determination of global rates of Hydroisomerisation and Hydrocracking process on bifunctional Pt/UltraStable Y zeolites in a three phase reactor for "non-ideal cracking" 'with world renowned prof. Dr. Gilbert Froment at Kinetics & Catalysis Research Center, Dept. of Chemical Engineering, Texas A & M University.

### **Texas A&M University, College Station, TX, USA** 1/2002-Present **Teaching Assistant**

Working as a teaching assistant for senior level course " Mathematical Models " with Dr. C.D.Holland.

### **Indian Petrochemicals Corporation Limited ,** 6/1999-7/2001 **India, Bharuch,, Gujarat, India**

**Process Engineer ( Projects & Process engineering )**

- Worked as an active team member for successful completion of Multifeed Gas Cracker project ( Licensor : Stone & Webster Engg. Corporation , Houston)
- Obtained a simulator and advanced process control training as a part of technology transfer at SWEC, Houston.
- Involved in throughout the project since mechanical construction to smooth operation.
- Carried out Heat and Mass balance and reviewed all PFDs and P&IDs with simulation packages Aspen Plus and PRO-II.
- Developed a Simulator in C language to optimise yield of ethylene and propylene and selection of feed among Ethane / Propane / LPG for economic operation.

### **Indian Oil Corporation Ltd., Baroda, Gujarat , India** 12/1998-5/1999 **Intern ( Hydrocracker Unit )**

## Research Interests

- \*Kinetic Modeling of Carbocation chemistry Reactions
- \*Computational Chemistry
- \*Molecular Simulations
- \*Kinetic Modeling of Free Radical Reactions
- \*Simulation and optimisation of Chemical/Biochemical/Petrochemical Reaction Systems.

## **Awards & Honours**

---

- \*Awarded Doctoral Research fellowship from Texas Engineering Experimental Station at Texas A&M University. (December, 2001)
- \*Awarded by a Gold Medal by Governor of state for securing 1st rank among 83 Students in B.E. (chemical engg.) , Gujarat university. (May 1999)
- \*"Best Engineer Award " among 83 Management trainees batch of 1999 at Indian Petrochemicals corp. ltd, India (December, 2000)
- \*Served as Joint Secretary of IChE Student Chapter, DDIT (Aug.'97-Dec.'98)
- \*Served as Jt.Organising Secretary of National level Chemical Engg. Conference " Collision'98"
- \*Received "Dharam Hinduja scholarship"( one of the three recipients in India ) for undergraduation in chemical engg. ( July'95 – May'99 )
- \*Achieved Top 10 positions in 10th & 12th grade examination among 5,00,000 candidates ( 0.0001%)of whole Gujarat State.(June 1993& June 1995)
- \*Awarded " Best outgoing Student Award" , Virani Highschool.( June 1995)
- \*Selected for " National Talent Search Competition" at national level. (April 1993)
- \*Awarded "National Talent Search Scholarship" for consecutive three years, Gujarat State. ('90-'92)
- \*Achieved " Best Academic Performance Award" in whole school for consecutive five years, Virani Highschool. ('90-'95)

## **Publications/ Presentations**

---

- A Paper on " A simulator for Ethane/propane Cracking process " published in Hydrocarbons Asia, Dec.'99.
- Presentations:
  - \*Modelling and simulation of Naphtha cracking process
  - \*Simulation & Optimization of Multifeed Cracker unit by Linear Programming algorithm using GAMS
  - \*catalysis of polyolefins manufacturing processes
  - \*Trigeneration: A novel approach for energy conservation and Process integration

## **Computer Proficiency**

---

- Operating systems: Unix, Windows, DOS
- Programming languages: C, FORTRAN, PASCAL
- Chemical Softwares: Aspen Plus, PRO-II, Hysim, Gaussian
- Mathematical tools: Polymath, GAMS, Math cad, Mathematica, Maple

## **Personnel Strengths**

---

Hard work, Dedication to work, Passion of Reseach, Punctuality, Honesty, Strong will power

## **References**

---

(1) Dr. Gilbert F. Froment  
Research Professor  
Department of Chemical Engineering  
Texas A&M University  
3122 TAMU  
College Station, TX 77843-3122  
Phone: (979) 845-0406  
Fax: (979) 845-6446  
E-mail: g.froment@che.tamu.edu

(2) Dr. Rayford G. Anthony  
Department Head & C.D. Holland Professor of Chemical Engineering  
Department of Chemical Engineering  
Texas A&M University  
3122 TAMU  
College Station, TX 77843-3122  
Phone: (979) 845-3370  
Fax: (979) 845-6446  
E-mail: rg-anthony@tamu.edu

(3) Dr. S.Ramamoorthy,  
Chairman, Dept. Of Chemical Engineering,  
DDIT, College Road, Nadiad- 387001  
Gujarat, India.  
Ph. : 091-268-60501  
Fax: 091-268-60502  
Email: sram47in@yahoo.co.in

(4) Mr. A.G. Shah,  
General Manager ,  
Vadodara Petrochemical Complex,  
Indian Petrochemicals Corporation Limited,  
Gorwa road,  
Vadodara, Gujarat, India.  
Ph. : 091-265-3498454  
Email: agshah@ipclmail.com