



**BIO DATA**

1. Name : **Prof. Dr. P. Rajendra Prasad**
2. Designation : **Coordinator for B.Tech Ceramic Technology**
3. Department : **Chemical Engineering**
4. University : **A U College of Engineering, Andhra University, Visakhapatnam-530 003, A.P., INDIA**
5. Qualifications : **B.Tech, M.Tech, Ph.D**
6. Experience : **25 years of Teaching and Research**
7. Areas Specializations : **Mass, Momentum and Heat transfer, Mineral Process Engineering, Controlled release fertilizers, Polymer Technology, Energy Engineering, Process and Equipment design, Ceramic Technology**
8. Ph.D thesis guided : **02 (+ 05)**
9. M.Tech thesis guided : **09 (+ 02)**
10. Research papers published/presented : **52 (+04)**
11. Memberships in professional bodies : **04**
12. Memberships in Advisory boards : **05**
13. Technical Sessions Chaired : **03**
14. Conferences conducted : **02**
15. Workshops attended : **08**
16. Corresponding Address : **LIG 520, HB Colony, Seethammadhara, Visakhapatnam – 530 022, Andhra Pradesh, INDIA  
Cell No : 91-9441495848**



**Ph.D guided**

1. **V. Nageswara Rao**, “*Studies on ionic mass and momentum transfer with coaxially placed twisted tape disc assembly as turbulence promoter in circular conduits*” **2004**
2. **Vaka Murali Mohan** “*studies on mass and momentum transfer with coaxially placed entry region coil, disc, coil-disc assembly as turbulence promoters in circular conduit*” **2008.**



Ph. D., Works under progress

3. **Jagannadha Rao, P** “*Bio-sorption of Cd and Co with Calotropis gigantia and Ficus Bengalensis.*”
4. **Bala Barathi, P** “*Controlled release fertilizer formulation and release Studies with KCl, and ZnSO<sub>4</sub>.*”
5. **Ganapathi Rao, Y** “*Mass and momentum transfer studies with full length spiral coil and entry region coil as turbulence promoters at the inner surface of annular channels.*”
6. **Satyanarayana, D N V** “*Mass and momentum transfer studies with entry region helical tape on a rod in a circular conduits.*”
7. **Vijaya Lakshmi, G** “*Studies on controlled release fertilizer super phosphate with and without coating.*”
8. **Nagamalleswara Rao, K**

M.Tech guided

1. **Vigneswara Rao, K** “*Batch drying characteristics of black gram, green gram, Bengal gram, soya beans and wheat seeds*” **1999.**
2. **Yugandhar, Puli** , “*Batch grinding studies of hematite ore,* 2001
3. **Sujatha Kumari. B** “*Studies on mass transfer using coaxial orifice turbulence promoters*” **2002**
4. **Mangaiah, P** “*Flotation kinetics of graphite*” **2004**
5. **Srinivasa Murthy, B** “*Studies on controlled release fertilizer potassium chloride made from flyash lime inert matrix*” **2005.**
6. **Sailaja. K** “*Batch drying characteristics of green peas, horse gram, red gram, red chillies*” **2005**
7. **Aravind Gopal. S. P. V. V** “*Studies on the utilization of flyash in the manufacture of low density red clay bricks*” **2006**
8. **Vindhya Rani. Ch** “*studies on drying kinetics of tray drying of fish and prawn*” **2007**
9. **Kamalakar, D** “*Formulation of Zinc based controlled release fertilizer With and without naphthalene coating*”, **2008.**
10. **Seetharama Raju, D** “*Biosorption of lead using carica papaya as an adsorbent*” **2008**



### List of Research Papers Published in national and international journals

1. “Studies on ionic mass transfer in rectangular cells – influence of rectangular transverse baffles on the wall of the cell”  
Madhulatha. B., Rajendra Prasad. P., S. Sarveswara Rao., Sujatha, V.  
Int. communications for heat and mass transfer, Vol. 29, 2002, pp. 1139- 1150.
2. “Studies on ionic mass transf with insert helical tape promoters in batch fluidized beds”  
Sujatha.V., Rajendra Prasad. P ., Bhaskara Sarma, C and Jagannadha Raju.G.J.V.J.  
Indian Journal of Chemical Technology, Vol.10, Nov.2003, pp.694 – 700.
3. “Studies on ionic mass transfer in the presence of spiral coil turbulence promoters in Batch fluidized beds”  
Sujatha.V., Rajendra Prasad. P ., Bhaskara Sarma, C and Jagannadha Raju.G.J.V.J  
Chemical Engineering and processing Journal, vol 43, 2004, pp 1055-1062.
4. “Studies on the grinding kinetics of feldspar”  
Ch. Satyanarayana, S.Subba Rao, P.Rajendra Prasad, S.V. Naidu, and R. Bhima Rao  
Mining Engineering Journal volume no.6 , Dec.2004, pp. 21-25.
5. Studies on controlled release fertilizer of potassium chloride fertilizer coated with and without plaster of Paris coating.  
Prashanti Lakshmi, k., Rajendra Prasad. P., and Sujatha, V.  
Indian Chemical Engineer Journal, section A, Vol.45, No.4, Oct – Dec .2003
6. “Studies on the grinding kinetics of feldspar”  
Ch. Satyanarayana, S.Subba Rao, P.Rajendra Prasad, S.V. Naidu, and R. Bhima Rao  
Mining Engineering Journal, vol.6, (2004) pp. 21-25.
7. “Studies on slow release fertilizer – Potassium Chloride”  
Murali Mohan. V., Rajendra Prasad. P and Sujatha V.,  
Indian Chemical Engineer Journal, Vol. 47 / No.3, July-Sep. 2005, pp 161-166.
8. “Devolopment of controlled release Fertilizer by using Flyash”  
Murali Mohan. V., Srinivarao B Rajendra Prasad. P and Sujatha V.,  
*Indian Chemical Engineer Journal*, Kolkata, INDIA, **In Press**,
9. *Studies on batch drying kinetics of green peas and horse gram*  
Vaka Murali Mohan., Rajendra Prasad, P., Sarveswara Rao, S and Sujatha, V  
Int. J. of Nanosystems, Vol. 1, Issue 1, Jan – June 2008, pp 23-27.
10. *Studies on controlled release fertilizer of potassium chloride made with manure matrix*  
Vaka Murali Mohan., Sujatha, V., Sarveswara Rao, S and Rajendra Prasad, P  
Int. J. of Nanosystems, Vol. 1, Issue 1, Jan – June 2008, pp 67-71.



11. *Model development for mass transfer function with coaxially displaced disc as turbulence promoter in tube*

Vaka Murali Mohan., Sarveswara Rao, S and Rajendra Prasad, P  
Int. J. of Nanosystems, Vol. 1, Issue 1, Jan – June 2008, pp 73-79.

12. *Studies on drying kinetics of prawn head in a batch dryer*

Vindhya, Ch., Vaka Murali Mohan., Sarveswara Rao, S and Rajendra Prasad, P  
Int. J. of Nanosystem, Vol. 1, Issue 1, Jan – June 2008, pp 107-110.

13. *“Equilibrium studies on adsorption of Cadmium by using coconut husk powder as an adsorbent”*

Vaka Murali Mohan., Rajendra Prasad, P., Sujatha, V and Sarveswara Rao, S  
Int. J Material Research, Electronics & Electrical system, 1 (1), Jan –June 2008, pp57-62

14. *Studies on mass transfer with coaxially placed entry region coil – disc assembly as turbulence promoter in circular conduits*

Vaka Murali Mohan., Rajendra Prasad, P., Sujatha, V and Sarveswara Rao, S  
Experimental Thermal and Fluid Science J, Vol. 32/ 8, Sept 2008, pp1748-1753

15. *“Routing in 2-D and 3-D cyber space models using Genomic based algorithms”*

Md.Yusuf Mulge, Rajan E.G., C.S. Kumar, Vaka Murali Mohan, Rajendra Prasad, P  
Int. J of Nano system tech., Electrical Engg and Electronics, Vol.1/1, June 2008, pp11-15.

16. Vaka Murali Mohan., Srinivasa Kumar, C., Rajendra Prasad, P and Sujatha, V

*“Mass Transfer in circular conduit with coaxially placed disc as turbulence promoter”*  
*Chemical Engineering and Processing Journal* **In Press**

17. Vaka Murali Mohan., Srinivasa Kumar, C., Jhony, A., Rajendra Prasad, P., Sujatha, V

*Hydrodynamics and Energy Consumption in a Three- Phase Liquid Circulating Three Phase Fluid bed Contactor*  
Experimental Thermal and Fluid Science Journal, **In Press**

### List of Research Papers Presented at national and international conferences

1. Thermo- physical properties of synthetic tanning materials.  
Rajendra Prasad. P ., Ayyanna. C., and Jagannadha Raju.G.J.V.J.  
Presented at 34<sup>th</sup> Annual session of IChE held at Pune Dec. 1984.
2. Kinetic Studies on sulfate leaching of ferromanganese slags.  
Gowri sankar, B., Rajendra Prasad. P ., Murthy. C.V.R and Bhaskara Sarma, C  
Presented at 44<sup>th</sup> Annual session of IChE CHEMCON 91 held at Madras.
3. Studies on kinetics of catalytic hydrolysis of ethylbuterate  
Ramesh Babu. ., Rajendra Prasad. P ., Murthy. C.V.R and Bhaskara Sarma, C  
Presented in the semi Annual paper meet of Inst. Of Engineers. Chemical Engineering Div. Held at Manipal, March 1992.



4. Studies on spent anolyte leaching of ferromanganese slags.  
Sarada B.N, Rajendra Prasad. P ., Jagannadha Raju.G.J.V.J. and Sarveswara Rao. S  
Presented at 45<sup>th</sup> Annual Conference of IICChE., CHEMCON 92 held at Manipal,  
December 1992.
5. Effect of mass transfer parameters on leaching of manganese by sulfuric acid from  
ferromanganese slags.  
Gowri sankar, B., Ramesh Babu., Rajendra Prasad. P ., Murthy. C.V.R and Sarma, C.  
Presented at 45<sup>th</sup> Annual Conference of IICChE., CHEMCON 92 held at Manipal,  
December 1992.
6. Equilibrium studies on Extraction of acetic acid in Tributyle amine.  
Rajendra Prasad. P ., Murthy. C.V.R and Sarma, C. B .  
Presented at 45<sup>th</sup> Annual Conference of IICChE., CHEMCON 92 held at Manipal,  
December 1992.
7. Ionic mass transfer in fluidized beds in presence of inert promoters.  
Narayana Rao VSVS., Srinivas Krishna N., Rajendra Prasad. P and P. Venkateswarlu.  
Presented at a seminar on “ Non conventional separation techniques “ held at Dept. of  
Chemical Engg., S. V. University, Tirupathi, held on 7 and 8 January 1995.
8. Studies on ionic MT with spiral coils as turbulence promoters in circular conduits.  
Rajendra Prasad. P ., Bhaskara Sarma, C and Jagannadha Raju.G.J.V.J.  
Presented at a seminar on “ Non conventional separation techniques “ held at Dept. of  
Chemical Engg., S. V. University, Tirupathi, held on 7 and 8 January 1995.
9. New materials and Energy Conservation  
Rajendra Prasad. P ., and Durga Das, P  
Presented at 51st Annual Conference of IICChE., CHEMCON 98 held at Dept. of  
Chemical Engg. Andhra University, Visakhapatnam.
10. Studies on ionic mass transfer on the outer wall of the circular conduits with wall jets  
from the central tube.  
Surya kumari , Rajendra Prasad. P., and V. Sujatha, V.  
Presented at 51st Annual Conference of IICChE., CHEMCON 98 held at Dept. of  
Chemical Engg. Andhra University, Visakhapatnam.
11. Studies on momentum transfer with spiral coils as turbulence promoters in circular  
conduits  
Rajendra Prasad. P., Sarma, C. B ., and Jagannadha Raju.G.J.V.J.  
Presented at 51st Annual Conference of IICChE., CHEMCON 98 held at Dept. of  
Chemical Engg. Andhra University, Visakhapatnam.



12. Studies on ionic mass transfer with coaxially placed twisted tapes as turbulence promoters.  
Umamaheswara Rao. G., Rajendra Prasad, P., and Sarveswara Rao, S.,  
Presented at 51st Annual Conference of IChE., CHEMCON 98 held at Dept. of Chemical Engg. Andhra University, Visakhapatnam.
13. Energy conservation on batch grinding of quartz with ball clay as additive.  
Murthy, V.V.N., Rajendra Prasad, P., and Sarveswara Rao, S.,  
Presented at 51st Annual Conference of IChE., CHEMCON 98 held at Dept. of Chemical Engg. Andhra University, Visakhapatnam.
14. Studies on batch grinding of flourspar with and without the aid of ball clay additive.  
Arun kumar R., Rajendra Prasad, P., and Sarveswara Rao, S.,  
Presented at 51st Annual Conference of IChE., CHEMCON 98 held at Dept. of Chemical Engg. Andhra University, Visakhapatnam.
15. "Batch drying characteristics of black gram, soyabeans, and wheat grains"  
Vigneswara Rao., Rajendra Prasad, P., and Sarveswara Rao, S., Sujatha. V.,  
Presented at 55<sup>th</sup> Annual Conference of IChE., CHEMCON 2002, 19-23, December
16. "Studies on flotation of Bhelatand (Orissa) Coal Mines  
S.Ramana Babu ,Raju.Ch.A.I., P.Rajendra Prasad and Dr.S.Sarveswara Rao  
NMD ATM, Indian institute of Metals, Trivandrum 17<sup>th</sup>-19<sup>th</sup> Nov,2004.
17. "Studies on ionic mass transfer in circular tubes with tangential entry of fluid  
Through curved nozzles"  
Avinash .G,raju.Ch.A.I.,Rajendra Prasad.P.,Sujatha .V, and Sarveswara Rao .S  
AIChE, Annual meeting, Orlando, Florida,U.S.A, 24-27<sup>th</sup> April,2006.
18. "Studies on ionic mass transfer with Coaxially placed string of spheres as turbulence promoter in homogeneous flow"  
Avinash .B,raju.Ch.A.I.,Rajendra Prasad.P.,Sujatha .V, and Sarveswara Rao .S  
AIChE, Annual meeting, Orlando, Florida,U.S.A, 24-27<sup>th</sup> April,2006.
19. "Studies on ionic mass transfer with Coaxially placed string of spheres as turbulence promoter in fluidized beds"  
Rajesh Kumar,raju.Ch.A.I., Rajendra Prasad.P.,Sujatha .V, and Sarveswara Rao .S  
AIChE, Annual meeting, Orlando, Florida,U.S.A, 24-27<sup>th</sup> April,2006.
20. "Studies on ionic mass transfer with co-axially place tape disc assembly as turbulence Promoter"  
V. Nageswara Rao , Vaka Murali Mohan., Rajendra Prasad.P., and Sarveswara Rao .S  
*AIChE 2007*, Spring national meeting, Texas, USA, April - 2007, pp 56-59.
21. "Flyash disposal and development of low alumina low temperature flyash refractory"  
Rajendra Prasad. P., Vaka Murali Mohan., Srinivasa Rao. B., and Sujatha. V  
*Recent Advances in Chemical Engineering, SVUCE, Tirupathi, 2006, pp: 61-65.*



22. "Kinetics of Controlled Release Fertilizer - Potassium Chloride"  
Rajendra Prasad. P., Vaka Murali Mohan., Srinivasa murthy. B., and Sujatha. V  
Recent Advances in Chemical Engineering, SVUCE, Tirupathi, 2006, pp: 79-87.
23. "Studies on Controlled Release Fertilizer Potassium Chloride made From Fly Ash and Lime inert matrix"  
Rajendra Prasad. P., Vaka Murali Mohan., Srinivasa murthy. B., and Sujatha. V  
Recent Advances in Chemical Engineering, SVUCE, Tirupathi, 2006, pp: 107-116.
24. "Studies on Controlled Release Fertilizer zinc sulfate made From Fly Ash and sand inert matrix"  
Rajendra Prasad. P., Vaka Murali Mohan., Srinivasa murthy. B., and Sujatha. V  
Recent Advances in Chemical Engineering, SVUCE, Tirupathi, 2006, pp: 135-141.
25. "Studies on the Utilization of FlyAsh in the Manufacture of Low Density Red Clay Bricks"  
Rajendra Prasad, P. Vaka Murali Mohan., Durga Das, S and Sarveswarao S  
Presented at international seminar on Ceramics ( CERATEC – 2007 ) held at AUCollege of Engineering, Visakhapatnam during 8-10 January, 2007
26. "Studies on hydrodynamics and energy consumption in a liquid circulating three phase fluid bed contactor"  
Ahmad Jhony, Vaka Murali Mohan., Rajendra Prasad P  
Recent Trends in Mechanical Engineering, SCE, Tiruchirapalli 2007, pp 171-175.
27. "Diffusive model with shrinkage in the drying of fish"  
*Vaka Murali Mohan.,Ch Vindhya Rani, P.Balabharathi and Rajendra Prasad. P*  
CITICOMS 2007, Coimbatore, Aug- 2007, page 19
28. "Studies On Batch Drying Kinetics Of Green Peas, Horse Gram, Red Gram, Red Chillies"  
Vaka Murali Mohan., Sujatha V and Rajendra Prasad. P  
AIChE Annual meeting, Salt Lake City, Utah, Nov. 4 -9, 2007, pp 1056-1059.
29. "Studies On Local Mass Transfer With Orifice-Disc Turbulence Promoter"  
Vaka Murali Mohan.,Sarveswararao S and Rajendra Prasad. P  
AIChE Annual meeting, Salt Lake City, Utah, Nov. 4 -9, 2007, pp 1224-1231.
30. "Mass Transfer Enhancement Of Turbulent Flow In A Circular Conduits"  
Vaka Murali Mohan.,Nageswara Rao V and Rajendra Prasad. P  
AIChE Annual meeting, Salt Lake City, Utah, Nov. 4 -9, 2007, pp 1718-1726.
31. "Studies On Mass Transfer With Coaxially Placed Entry Region Coils As Turbulence Promoter In Circular Conduits"  
Vaka Murali Mohan.,Sarveswararao S and Rajendra Prasad. P  
AIChE Annual meeting, Salt Lake City, Utah, Nov. 4 -9, 2007, pp 2123-2130.



32. "Segregation Of Solids In A Batch Fluidized Bed"  
Vaka Murali Mohan., Nageswara Rao V and Rajendra Prasad. P  
NCCBPE, SVUCE Titupathi, Sec.1/101, 13-14, Dec,2007, pp 1-7.
33. "Momentum transfer with coaxially placed entry region coil as swirl promoter in circular conduits"  
Vaka Murali Mohan., Sujatha, V., Sarveswararao S and Rajendra Prasad. P  
NCCBPE, SVUCE Titupathi, Sec.1/105, 13-14, Dec,2007, pp 30-38.
34. "Drying kinetics of prawn head in a batch dryer"  
Vaka Murali Mohan., Ch. Vindhya., Sujatha, V and Rajendra Prasad. P  
NCCBPE, SVUCE Titupathi, Sec.1/107, 13-14, Dec,2007, pp 45-50.
35. "Biosorption of copper using Cocos Nucifera L as an adsorbent"  
Prasad, A., Vaka Murali Mohan., Kumar, K K., Sarveswararao S and Rajendra Prasad. P  
NCCBPE, SVUCE Titupathi, Sec.2/209, 13-14, Dec,2007, pp 150-155.

#### **Memberships in professional bodies**

1. Life member Indian Institute of Chemical Engineers
2. Member Indian Institute Ceramic Society
3. Founder member in refractory society
4. Member in Institute of mineral Engineers

#### **Memberships in Advisory Bodies**

1. Member Board of Studies, Department of Chemical Engineering, Andhra University
2. Member Board of Studies, S. D. S. Autonomous College, Garividi.
3. Member advisory Board, Ceramic service Society.
4. Ex Member, Board of Research Studies Dept., of Chemical Engineering, Andhra University.
5. Ex Member, Departmental Committee Dept., of Chemical Engineering, Andhra University.

#### **Technical Sessions Chaired**

1. International Conference on Ceramics. CERATEC – 2007, held at A U College of Engineering, Visakhapatnam
2. National conference on BIOPHRMACON – 2007, held at Al-Ameer College of Technology, Visakhapatnam
3. National conference on Current Trends in Chemical and Bio Process Engineering - 2007, held at S V U College of Engineering, Tirupathi.



### Conferences Conducted

1. Worked as an organizing committee member in Ripples2007. , held at A U College of Engineering, Visakhapatnam during 3-5, January, 2007.
2. Worked as an Member in Local Organizing Committee International Conference on Ceramics. CERATEC – 2007, held at A U College of Engineering, Visakhapatnam during 8-10 January, 2007.

### Workshops attended

1. U.G.C sponsored 3 weeks refresher course on down stream processing organized by the department of Chemical Engineering Anna University, Madras, From 21-12-1994 to 11-01-1995
2. AICTE organized 3 weeks Induction training course by academic staff college Andhra University, Visakapatnam from 1-5-1995 to 20-05-1995
3. Ecology and Environment conducted 4 weeks workshop by academic staff college Andhra University, Visakhapatnam from 5-12-1997 to 30-12-1997
4. Refresher Course in Earth science by academic staff college Andhra University, Visakhapatnam from 19-11-2001 to 09-12-2001
5. Short term course in computer control of processes, conducted by I I T., Madras during 20-5-2002 to 25-5-2002
6. Refresher course in chemistry by academic staff college, Andhra University, Visakhapatnam from 03-02-2003 to 23-02-2003
7. National symposium on chemical Engineering Education Present Scenario Held at department of Chemical Engineering on 23 rd August, 2004.
8. Workshop on “*Computational Fluid Dynamics ( CFD )*” organized by Computational Fluid Dynamics Team, centre for Development of Advanced computing ( C- DAC ), Pune, 11- 15 December, 2006.