# Curriculum Vitae Dr. M.S.N.MURTY Professor

## **CONTACT INFORMATION:**



Department of Chemical Engineering G V P College of Engineering Madhrurawada Visakhapatnam 530041, INDIA

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**Date of Birth**: 29/04/1967

## **EDUCATION**:

Ph. DS V University2010M. TechAndhra University1991B. TechAndhra University1989

## **EMPLOYMENT**:

Organisation Name(s)	Designation	Scale of Pay	From	То
AP PAPER MILLS, RJY	Sr.PROCESS I/C	Consolidated Pay	1991	1999
MVGRCE, VZM	ASST.PROF	8000-275-13500	1999	2000
GMRIT, RAJAM	ASST.PROF	8000-275-13500	2000	2005
GMRIT, RAJAM	ASSOC.PROF	12000-420-18300	2005	2007
GVPCOE, VIZAG	Sr.ASST.PROF	10000-325-15200	2007	2009
GVPCOE, VIZAG	ASSOC.PROF.	15600-39100	2009	2012
GVPCOE, VIZAG	ASSOC.PROF.	37400- 67000	2012	2015
GVPCOE, VIZAG	PROFESSOR	37400- 67000	2015	Till date

## **Details of Doctoral Thesis with Publications**

Item	Description	
Area of thesis work	Mass Transfer in Three phase fluidization	
Title of thesis	Ionic mass transfer studies in three-phase Fluidized beds in the presence of disc Promoters	
Supervisor	Dr. G.Prabhakar, Professor, SV University,	
	Dr. P.Venkateswarlu, Professor, Andhra University	
Year of award of Ph.D	Nov.2010	
No. of papers published	International Journals: 2	
	National Journals : 1	
	1. M.S.N. Murty, K.V. Ramesh, G. Prabhakar, P. Venkateswarlu, Ionic mass transfer studies in three-phase fluidized beds in the presence of disc promoter, Chemical Engineering Communications ,198 (8) 1018-1032 (2011). (Taylor & Francis).	
	2. M.S.N. Murty, K.V. Ramesh, G. Prabhakar, P. Venkateswarlu, Phase holdups in three-phase fluidized beds in the presence of disc promoter, Experimental Thermal and Fluid Science ,35 (2011) 338-346. (Elsevier).	
	3. G.V.S. Sarma, M.S.N. Murty, K.V. Ramesh, G.M.J. Raju, Wall-to-bulk mass transfer in gas-liquid upflow bubble column with disc promoter, Journal of Energy Heat and Mass Transfer, 33, 233-249 (2011). (IITM).	

## **Positions held:**

- ➤ Nodal officer -Procurement -TEQIP-II (Sept-2011- Till date)
- ➤ Dept PG coordinator (2010 to till date)
- > Overall coordinator for GVP Foundation day celebrations Dec 2012
- ➤ In-charge Head, Department of Chemical Engineering, GMR Institute of Technology, Rajam, for a period of Three months during sept 2006- Nov 2006.

## **Lectures/Chaired Sessions/Invited Talks**

➤ Delivered lectures on Unit operations in Chemical Process Industries to Vasudha Pharma / Macred India Ltd., Employees.

### **RESEARCH AREAS:**

Three-phase fluidization, Mass transfer, Process Design

### PH.D GUIDANCE

Recognized as Co-supervisor by Andhra University and JNTU-K Kakinada

### M.TECH DISSERTATIONS

## AWARDED: (4)

- 1. S. Suresh, "Studies of mass transfer in concurrent gas liquid upflow bubble column using hourglass promoters" (Project work AU) (2012). *Paper published in Journal of The Institution of Engineers (India) Series E*.
- 2. J.Divya, "Roll of Talc particle size influence in paint formulations (Project work at R&D", Golcha, Jaipur), A paper presented at CHEMICON-2013, International Chemical Engineering conference held at Institute of Chemical Technology, Mumbai, 27-30, Dec-2013
- 3. P.Satish Kumar, "Study of effective parameters for enrichment of Talc with column floatation" (Project work at R&D, Golcha, Jaipur), A paper presented at CHEMICON-2013, International Chemical Engineering conference held at Institute of Chemical Technology, Mumbai, 27-30,Dec-2013
- 4. M.Siva Prasad, Pilot Plant Studies On Dearomatization Of Kerosene, did project work at Chennai Petroleum Corporation, Chennai

### Registered for the current academic year 2015-16: (1)

 M. Brahmaih, (2014 admitted batch) Pilot Plant Studies On End point reduction of hy LVGO feed stock (Currently doing project work at Chennai Petroleum Corporation Chennai

### **PUBLICATIONS**

## **International Journals: 11**

- 1. G. V. S. K. Reddy, **M. S. N. Murty**, B. Srinivas, K. V. Ramesh, "Liquid-Wall Mass Transfer in Homogeneous Flow with Coaxially Placed String of Hemispheres" Journal **of The Institution of Engineers (India): Series E Chemical and Textile Engineering**, .95(2) 69–74, DOI 10.1007/s40034-014-0040-2, (2014) (ISSN 2250-2483) (Springer).
- 2. B. Niranjana Rao, B.S.G. Ramaprasad, **M.S.N. Murty**, and K.V. Ramesh "Mass Transfer at the Confining Wall of an Electrochemical Cell in the Presence of Angled Disc Promoter" **American Journal of Heat and Mass Transfer** (**Columbia International Publishing**), 1 (3) 113-129 (2014)

- 3. B.S. Subramanyam, M.S.N. Murty, B. Surendra Babu, K.V. Ramesh, "Wall-to-Bed Mass Transfer in a Three-Phase Fluidized Bed with Twisted Tape as Internal", Journal of The Institution of Engineers (India): Series E Chemical and Textile Engineering, DOI 10.1007/s40034-014-0035-z, 95(1) 49–56 (2014)(Springer).
- 4. S. Suresh, **M.S.N. Murty**, B. Srinivas, K.V. Ramesh, Wall-to-bulk mass transfer in concurrent gas liquid upflow bubble column using hourglass promoters, **Journal of The Institution of Engineers (India) Series E**, 94(2) 91-96 (2013) (ISSN 2250-2483) (Springer).
- 5. B.S. Subramanyam, M.S.N. Murty, B. Surendra Babu, K.V. Ramesh, Wall-to-bed mass transfer in a fluidized bed with twisted tapes, Advanced Chemical Engineering Research, 2(2) 27-34 (2013).
- 6. G.V.S. Sarma, M.S.N. Murty, K.V. Ramesh, G.M.J. Raju, Wall-to-bulk mass transfer in gas-liquid upflow bubble column with disc promoter, **Journal of Energy Heat and Mass Transfer**, 33, 233-249 (2011). (IITM).
- 7. **M.S.N. Murty**, K.V. Ramesh, G. Prabhakar, P. Venkateswarlu, Ionic mass transfer studies in three-phase fluidized beds in the presence of disc promoter, **Chemical Engineering Communications**, 198 (8) 1018-1032 (2011). (Taylor & Francis).
- 8. **M.S.N. Murty,** K.V. Ramesh, G. Prabhakar, P. Venkateswarlu, Phase holdups in three-phase fluidized beds in the presence of disc promoter, **Experimental Thermal and Fluid Science**, 35 (2011) 338-346. (Elsevier).
- 9. K.V. Ramesh, G.M.J. Raju, M.S.N. Murty, C. Bhaskara Sarma, Wall-to-bulk mass transfer in a two-phase up-flow bubble column with a composite promoter, **Indian Chemical Engineer**, 51 (3) 215-227 (2009). (Taylor & Francis).
- K.V. Ramesh, G.M.J. Raju, M.S.N. Murty, C. Bhaskara Sarma, Wall-to-bed mass transfer in three-phase fluidized beds in the absence and presence of a composite promoter, Chemical Engineering Journal, 152 (1) 207-211 (2009). (Elsevier).
- P. Venkateswarlu, S.V. Naidu, D. Subba Rao, M.S.N. Murty, Performance Characteristics Of Ring Promoter In Homogeneous Flow Of The Electrolyte And In Fluidized Beds, Chemical Engineering Communications, 194, 1094–1110(2007) ISSN-0098-6445((Taylor & Francis).

### **National Journals: 09**

- 1. Y.V.S.S.S.Kiran, P.U.R.Vital ,K.Sarat Chandra, **M.S.N.Murty**, K.V.Ramesh, "Water flow split in commercial T-junctions with outlet ends open to atmosphere", **Chemical Technology an Indian Journal (TSI)**, 9(6) 205-211 ( 2014) ISSN: 0974 7443
- 2. A. Thriveni, B. Swathi, K. Sivadhanya, **M.S.N. Murty**, K.V. Ramesh, Gas holdup in a gas-liquid upflow bubble column in the presence of doublecone promoter, **Chem Xpress ( Global Scientific Inc)**, 6(4) 108-115 ( 2014) (ISSN(Print) : 2320 -1967)
- 3. K. Ashok Kumar, M.S.N. Murty, B. Srinivas, K.V. Ramesh, Mass transfer at the confining wall of an electrochemical cell with homogeneous flow in the presence of hourglass promoter, Chemical Technology: An Indian Journal, (In Press)

- 4. K. Sudha Rani, M.S.N. Murty, B. Srinivas, K.V. Ramesh, Wall-to-bed mass transfer and bed porosity in liquid-fluidized beds in the presence of hourglass promoter, International Journal of Futuristic Science Engineering and Technology, 1(4) 303-310 (2013).
- 5. B.S. Subramanyam, **M.S.N. Murty**, B. Surendra Babu, K.V. Ramesh, Studies on pressure drop and bed porosity in liquid fluidized beds with twisted tape internals, **The IUP Journal of Chemical Engineering**, 3(3) 30-43 (2011).
- 6. B.S. Subramanyam, **M.S.N. Murty**, B. Surendra Babu, K.V. Ramesh, Mass transfer at the confining wall of an electrochemical cell in the presence of twisted tapes, **The IUP Journal of Chemical Engineering**, 3(1) 23-34 (2011).
- 7. G.N. Ravi Shankar, M.S.N. Murty, G.M.J. Raju, K.V. Ramesh, Effect of viscosity on wall-to-bed mass transfer in a three-phase fluidized bed, The IUP Journal of Chemical Engineering, 2(4) 7-20 (2010).
- 8. **M.S.N. Murty**, K.V. Ramesh, G.M.J. Raju, Y.S.P. Narayana Rao, A Simplified Correlation for Forced Convective Heat Transfer in Tape Generated Swirl Flow of Air, **The IUP Journal of Chemical Engineering**, 1(2) 7-21 (2009).
- 9. K.V. Ramesh, K. Sarath Chandra, **M.S.N. Murty**, C. Bhaskara Sarma, Parametric effect of a helicoidal tape promoter on gas and liquid holdups of a three-phase fluidized bed, **The IUP Journal of Chemical Engineering**, 1 (1) 22-38 (2009).

#### **International Conferences: 11**

- 1. **M. S. N. Murty**, M. Ramya Sree, V. Kasiviswanatham and M.V.S.Sairam, "Gas Leak Detection and Monitoring System for Process Safety and Hazard Protection using WSN", CHEMCON 2015, 27th 30th December, 2015, IIT Guwahati
- 2. G. Ravi Teja, T. N. S. S. Bhasker, **M. S. N. Murty** and G. Murali Dhar, "FSM-16 Ordered Mesoporous Material Supported Hydrotreating Catalysts: Promotional and Temperature Programmed Desorption Studies", CHEMCON 2015, 27th 30th December, 2015, IIT Guwahati
- 3. L. Udaykiran, A. Kavya, M. Kiran Kumar, V. Sree Kavya and **M. S. N. Murty**, "Facile Recovery and Characterization of Chitin from Crustacean Shells", CHEMCON 2015, 27th 30th December, 2015, IIT Guwahati
- 4. D. Tarun Kumar, P.Vasu, Ch.Sridhar, , **M.S.N.Murty**,' Recovery of Chitin and Chitosan from shirmp shells', CHEMICON-2014, International Chemical Engineering conference held at University Institute of Chemical Engineering & Technology, Panjab University, 27-30 Dec 2014
- 5. B. S. Subramanyam, **M. S. N. Murty**, B. Surendra Babu, K. V. Ramesh, "Wall to Bulk Mass Transfer in a Gas-Liquid upflow Bubble column with loose fit Twisted tapes, Int. Conf. on Advances in Chemical Engineering and Technology, ICACE TKMCE '14, Kollam, Kerala (pp 82–85) 16-18 Oct 2014 (Elsevier). ISBN 9789351072843
- 6. Ch.Sridhar, David Kumar, **M.S.N.Murty**,' Recovery of Chitin and Chitosan from shirmp shells', EBIO-2013, An International conference on Environmental Biotechnology and biodiversity held at AU, Visakhapatnam, 3-4, March, 2014

- 7. P.Sateesh Kumar, **M.S.N.Murty**, Ch.Suresh, J.Divya Lakshimi, 'Beneficiation of talc from pulverized talc mineral by using column flotation' CHEMICON-2013, International Chemical Engineering conference held at Institute of Chemical Technology, Mumbai, 27-30, Dec-2013
- 8. Joga Divya Lakshmi, Ch.Suresh, **M.S.N Murty**, P.Sateesh Kumar, 'Role of the talc particle size influence in paint formulations', CHEMICON-2013, International Chemical Engineering conference held at Institute of Chemical Technology, Mumbai, 27-30,Dec-2013
- 9 Dr M S N Murthy, Dr M V S Sairam, Dr N Bala Subrahmanyam, Prof. G Tirumala Rao, 'Measurement of gaseous quantities for process safety and hazard protection using fuzzy modeling' CHEMICON-2013, International Chemical Engineering conference held at Institute of Chemical Technology, Mumbai, 27-30,Dec-2013
- 10 Prof G. Tirumala Rao, Dr. M.V.S Sairam, Dr. M.S.N Murty, M. Yerranna Babu, "Gas Leak Detection and Monitoring System using WSN", CHEMICON-2012, International Chemical Engineering conference held at NIT, Jalandhar, 27-30, Dec-2012
- N.Usha rani, B.Mohana Sree, M. S. N. Murty, G.Muralidhar, "Nano Structured as supporters for Hydrotrating catalysts-An overview". CHEMICON-2010, International Chemical Engineering conference held at Annamalai Nagar, Tamilnadu, 27-30, Dec-2010

#### **National Conferences: 03**

- K.Aneesha, Ch.Sai Vams, K.Sundeep, M.S.N.Murty, G.Murali Dhar "Environmental friendly catalyst based on Sulfated Nano Zirconia inside ordered mesoporous SBA-15, presented paper at National Symposium on nvironment(NSE-19), Mahatma Gandhi University, Kottayam, 11-13, Dec 2014
- Ravali Sree Boppana, B. Sreenivasulu, M.S.N.Murty, K.V.Ramesh, Control of mixed convection in Lid driven enclosures using conductive rectangular fins, Presented paper at National conference on Noval process Developments for Sustainable Industrial Practice, (NDSIP-14), SVU, Tirupati, 12-13 Dec 2014
- 3. Prof G. Tirumala Rao, Dr. M.V.S Sairam, **Dr. M.S.N Murty**, M. Yerranna Babu, "Gas Leak Detection System with remote communication to centralized location", Accepted paper at National Symposium on Environment(NSE-18), JNTU Anatapur, March11-13, 2013

# Details of Workshops, Seminars, Training Programmes Attended / Organized:

- 1. Attended a International conference CHEMCON-2009 at AU during 26-30 Dec 2009
- 2. Attended Mission 10X- Faculty Development Program by WIPRO at GVPCOE 21st 25th June 2010
- 3. Attended a Training programme on PMSS under TEQIP-II at Nagpur during 29-30 Aug 2011
- 4. Attended a workshop on PMSS under TEQIP-II at Hyderabad on 26 Mar 2012
- 5. Attended a workshop on MIS under TEQIP-II at Hyderabad during 14-15 Feb 2012
- 6. Organized a National workshop on "Advances in Separation Processes" at Dept. of Chemical Engineering, GVPCOE(A) under TEQIP-II, during 12-16 March 2012
- 7. Attended a FDP programme by TCS on Leadership skills at GVPCOE on 21 Jun 2012

- 8. Organized a FDP programme on "Finite Element Analysis" at Dept. of Chemical Engineering, GVPCOE(A) under TEQIP-II, during 31 Oct- 3 Nov 2012
- 9. Attended a Training programme on PMSS under TEQIP-II at OUCE, Hyd, May 2013
- 10. Organized A Guest lecture on **Fuel Cells** by Dr. Ch.Satyanarayana, Principal Scientist, NCL, Pune at GVPCOE under TEQIP-II, on 25-11-2013
- 11. Organized A guest lecture on **Bio-fuels** by Dr.Meenakhi Sundaram, Head, R&D, Chennai Petroleum, at GVPCOE under TEOIP-II on 14-12-2013
- 12. Organized A guest lecture on **Computational techniques for simulation of suspension flow** by Dr.Anugrah Singh, Professor, IITG at GVPCOE (RAMSA) under TEQIP-II on 24-12-2013
- 13. A guest lecture was organized on **Membrane Technology: Solving Industrial Problems** by the Dept. of Chemical Engg under TEQIP-II( S.C.1.2) on 27-08-2014
- 14. A Guest lecture on **Steam reforming of hydrocarbons an industrial perspective** by Dr. K.K.A. Rashid, Advisor, R&D (formerly Vice President, R & D) Sud Chemie India Ltd, Cochin at GVPCOE under TEQIP-II on 2-3-2015.
- 15. Attended a work shop on **Academic leadership programme** for TEQIP Institutions (under TEQIP-II, Management capacity enhancement) IIM, Kozhikode, 22-27 June 2015
- 16. Attended a Guest lecture on **Chemical Engineering Industry- Their process trouble shooting guidance**, by Mr. Norman Lieberman (USA) at HPCL, Visakhapatnam, on 30-10-2015.

## **Memberships Associated:**

- 1. Life Member of Indian Institute of Chemical Engineers (LM-11003)
- 2. Life Member of Indian Society of Technical Education (LM-40309)
- 3. Fellow of Institution of Engineers (India) (F-112713-2)
- 4. Life member in membrane society (LM-202)
- 5. Life member in IQAC

## **COURSES TAUGHT**

**Post Graduate Level**: Chemical Process Equipment design, Membrane Technology, Chemical Process safety, Petroleum refining & petro chemicals.

**Undergraduate Level**: Mass Transfer I and II, Chemical Pprocess Equipment Design I and II, Membrane Technology.

#### **SERVICES**

### PROFESSIONAL SERVICE:

# **Reviewed articles for the following Journals and Conferences**

1. Chemical Engineering Communications (Taylor & Francis)

Journal of The Institution of Engineers (India) Series E (Springer). 2.