

# **BIO-DATA**

(Updated 25-Sept-2024)

**1. Name:** Z. V. PANCHAKSHARI MURTHY  
**2. Birth Date:** 26/08/1964  
**3. Address:** Professor (HAG)  
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## **4. Educational Qualifications:**

<i>Degree and Specialization</i>	<i>University/Institute</i>	<i>Year of Completion</i>
B.Tech. (Chemical)	Regional Engineering College, Warangal, Andhra Pradesh (Presently National Institute of Technology, Warangal)	1986
M.Tech. (Chemical)	Indian Institute of Technology, Kharagpur	1991
Ph.D. (Chemical)	Indian Institute of Technology, Delhi, New Delhi	1997
PG Diploma in Computer Science	Central University of Hyderabad, Hyderabad, Andhra Pradesh	2000

## **THESIS TITLES:**

**Ph.D.** : Studies on Reverse Osmosis Membrane Transport Models. (Supervisor: Prof. Dr. S.K. Gupta)

**M.Tech.** : Hydroprocessing of Petroleum Stocks. (Guide: Prof. Dr. T.S. Banerjee)

**5. Industrial Experience:** About 2 years.

Worked in industries at Hyderabad in the production of Monochloro Acetic acid and its derivatives, and Sulfamethoxazole basic drug, about 2 years after B.Tech.

<i>Industry</i>	<i>Post held</i>	<i>Period</i>
MCA Chemicals Limited, Hyderabad	G.E.T.	22/12/1986 - 14/02/1988
Hitesh Chemicals & Drugs (Private) Limited, Hyderabad	Process Engineer	15/02/1988 - 25/08/1988
Reliance Cellulose Products Limited, Hyderabad	Plant-In-Charge	14/02/1989 - 26/06/1989

**6. Teaching and Research Experience:** U.G. and P.G. Teaching: Over 24 years.

<i>Institute</i>	<i>Post held</i>	<i>Period</i>
D. D. Institute of Technology, Nadiad, Gujarat	Lecturer	21/04/1995 - 24/06/1999
	Senior Lecturer	25/06/1999 - 04/09/2000
Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, Gujarat	Assistant Professor	05/09/2000 - 16/10/2006
Sardar Vallabhbhai National Institute of Technology, Surat, Gujarat	Professor (HAG)	15/06/2019 – till date
	Professor	17/10/2006 – 14/06/2019
	(HoD:22/12/2005-22/12/2008)	
	(HoD:05/10/2011 - 8/01/2014)	

**7. Research Fields of Interest:** Wastewater Treatment, Separation Processes (membrane separations, electrocoagulation, adsorption, etc), Nanomaterials.

**8. M.Tech/M.E. Dissertations Guided:** 43 Going-on (including the one which Won ISTE – IPCL National Award for 2<sup>nd</sup> Best M.E. (Chemical) thesis for 2000; another one which Won the Indian National Academy of Engineering-Innovative Student Projects Award–2010; and Won IChE Awards for the Year 2022: Ambuja's Young Researcher's Awards for doing Post-Graduate Studies in India after GATE Examination. (please see *Appendix-I*)

**9. Ph.D. Supervisor:** 22 Completed + 2 Going-on.

(Including **TWO** Theses which successively received “**Dr A V Rama Rao Foundation’s Best Ph.D. Thesis** and Research Award in Chemical Engineering/Technology-IIChE Award” for the Years 2013 & 2014. It is a National Level Award given away by the Indian Institute of Chemical Engineers (IChE) and **another one** received **Gandhian Young Technological Innovation (GYTI) Award-2015**.) (please see *Appendix-II*)

**10. Ph.D. Thesis Examiner:** Till date Examined **22 Ph.D. theses of Indian / Foreign Universities / IITs.**

Ph.D. theses examined for Osmania University, Hyderabad; Dr. Babasaheb Ambedkar Technological University (BATU), Lonere, Maharashtra; Indian Institute of Technology, Bombay; Jawaharlal Nehru Technological University (JNTU), Anantapur; JNTU, Hyderabad; Universiti Putra Malaysia (UPM), Malaysia; Curtin University, Australia; University of Malaya, Malaysia; Uttar Pradesh Technical University, Lucknow; Indian Institute of Technology, Roorkee; University of Madras; Andhra University, Vishakapatnam; National Institute of Technology, Raipur; and CSIR-CSMCRI, Bhavnagar, Indian Institute of Technology, Kharagpur.

**11. Research Projects:** 8 completed

(i). MHRD Thrust Area Research Project (Rs.8.00 Lacs) for “**Removal/recovery of toxic material/trace metals from wastewaters by membrane separation processes**”. (Principal Investigator; Co-Investigator: Dr. M. Mukhopadhyay) (2002-2004).

(ii). A.I.C.T.E. R&D Project (Rs.4.80 Lacs) for “**Multi-component metal extraction from wastewater by liquid surfactant membrane**”. (Co-Investigator; Principal Investigator: Dr. M. Chakraborty) (2003-2006).

(iii) R & D Grant of the Institute (Rs.6.05 Lacs) for “**Studies on shape profile of liquid droplets from nozzle**”. (Principal Investigator) (2007-2008).

(iv) R & D Grant of the Institute (Rs.4.14 Lacs) for “**Evaluate the performance of tertiary treatment in a full scale upflow anaerobic sludge blanket (UASB) based sewage treatment plant (STP)**”. (Co-Investigator; Principal Investigator: Dr. A.K. Mungray) (2007-2008)

(v) R & D Grant of the Institute (Rs.2.25 Lacs) for “**Sonocrystallization for the recovery of valuable products from dairy waste stream**”. (Co-Investigator; Principal Investigator: S.R. Patel) (2007-2008)

(vi) Department of Science & Technology (Rs.5.76 Lacs) for “**Synthesis of alumina supported ruthenium nanocatalyst using microemulsion technique**”. (Co-Investigator; Principal Investigator: Dr. M. Chakraborty) (2009-2012)

(vii) Gujarat Council on Science and Technology (GUJCOST), Department of Science and Technology, Gujarat, (Rs.5.10 Lacs) for “**Studies on interfacial characteristics of liquid - liquid system**”. (Co-Investigator; Principal Investigator: Dr. V. N. Lad) (2016-2018)

(viii) Science & Engineering Research Board (SERB), Department of Science & Technology (Rs.35,04,655/-), for “**Designing of green synthetic approaches for atomically precise nanoclusters for dictating their specific interactions: Development of miniaturized analytical methods**”. (Co-Investigator; Principal Investigator: Dr. Suresh Kumar Kailasa) (2017-2020)

**12. Consulting Experience:** Rendered consultancy work to couple of Industries.

**13. Patents:** 20 Process Patents Granted; 01 Process Patent Under Review; 29 Design Applications Granted. (for details please see *Appendix –III*)

**14. Reviewer:**

Reviewed/reviewing technical papers for 171 International/National Journals (which includes 149 SCI/SCIE; 4 ESCI; 4 SCOPUS Journals) in the fields of Chemical Engineering, Environmental Engineering/Management and Separation Techniques, etc. (for details please see *Appendix-IV*)

**15. Publications:** Total Full Papers Published/Accepted for Publication: 306

Full Papers Published /Accepted for Publication in SCI/SCIE Journals: 216

Full Papers Published in Scopus Journals: 16

Full Papers Published in Miscellaneous Journals/Magazines: 15

Full Papers Published as Chapters in International Books: 21

Full Papers Presented & Published in International Conferences Proceedings: 20

Full Papers Presented & Published in National Conferences Proceedings: 19

(for details of published full papers please see *Appendix-V*)

**16. Memberships in Professional Bodies/Organizations:** 19

(Please see *Appendix-VI*)

**17. Editorial Board Member:**

- (i) "Waste and Biomass Valorization" Journal (Springer, 2009-2019)
- (ii) "Athens Journal of Technology and Engineering" [Athens Institute for Education and Research (ATINER), Greece, since 2016]
- (iii) "Athens Journal of Sciences" (ATINER, Greece, since 2016)
- (iv) One of the Guest Editors for "Separation Science and Technology" (Taylor & Francis Group Publication, USA) Vol.54(No.2) (2019)
- (v) One of the Guest Editors for "Materialstoday: Proceedings" (Elsevier Publication) Vol.72(No.P1) (2023)

**18. Citations Record: 8077** (Source: Google Scholar Citations: as on 25-September-2024)

***h*-index** (Hirsch index): 48                      ***i*10-index**: 155

**19. International Recognition: Oct 2020 (Career Ranking):** Listed in the "World ranking of scientist (2%)", published by the research team from Stanford University, USA, October 2020. Rank:1068; Out of No. of Researchers in Chemical Engineering: 55697

(The full list of top 2% researchers world-wide can be found at <http://shorturl.at/qHIJ4>)

The subject-wise world-ranking of top 2% researchers from India is available at <http://shorturl.at/bdix8> )

**International Recognition: Oct 2021 (Career Ranking):** Listed in the "World ranking of scientist (2%)", published by the research team from Stanford University, USA, October 2021. Career Rank: 1028 (All Citations); 1260 (Excluding Self-Citations); Out of No. of Researchers in Chemical Engineering: 66,189

(The full list of top 2% researchers world-wide can be found at <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/3> )

**International Recognition: Oct 2022 (Career Ranking):** Listed in the "World ranking of scientist (2%)", published by the research team from Stanford University, USA, October 2021. Career Rank: 964 (All Citations); 1086 (Excluding Self-Citations); Out of No. of Researchers in Chemical Engineering: 53,348 (The full list of top 2% researchers world-wide can be found at <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw> )

**International Recognition: Oct 2023 (Career Ranking):** Listed in the "World ranking of scientist (2%)", published by the research team from Stanford University, USA, October 2023. Career Rank: 1098 (All Citations); 1217 (Excluding Self-Citations); Out of No. of Researchers in Chemical Engineering: 72,674 (The full list of top 2% researchers world-wide can be found at <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/6> )

**International Recognition: Sept 2024 (Career Ranking):** Listed in the "World ranking of scientist (2%)", published by the research team from Stanford University, USA, September 2024. Career Rank: 1086 (All Citations); 1205 (Excluding Self-Citations); Out of No. of Researchers in Chemical Engineering: 79,314 (The full list of top 2% researchers world-wide can be found at <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/7>)

**International Recognition: Oct 2021 (2021 Single Year Only Ranking):** Rank: 981 (All Citations); 917 (Excluding Self-Citations); Out of No. of Researchers in Chemical Engineering: 66,189 (The full list of top 2% researchers world-wide can be found at <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/3> )

**International Recognition: Oct 2022 (2022 Single Year Only Ranking):** Rank: 1,003 (All Citations); 930 (Excluding Self-Citations); Out of No. of Researchers in Chemical Engineering: 53,348 (The full list of top 2% researchers world-wide can be found at <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw> )

**International Recognition: Oct 2023 (2023 Single Year Only Ranking):** Rank: 962 (All Citations); 924 (Excluding Self-Citations); Out of No. of Researchers in Chemical Engineering: 72,674 (The full list of top 2% researchers world-wide can be found at <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/6> )

**International Recognition: Sept 2024 (2024 Single Year Only Ranking):** Listed in the “**World ranking of scientist (2%)**”, published by the research team from Stanford University, USA, September 2024. Career Rank: 1002 (All Citations); 1049 (Excluding Self-Citations); Out of No. of Researchers in Chemical Engineering: 79,314 (The full list of top 2% researchers world-wide can be found at <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/7>)

**Summary of “World ranking of scientist (2%)” Ranks based on career-long citation impact:**

Name	Year Published	Field-Subfield	Rank in the World (All Citations)	Rank in the World (Excluding Self-Citations)	Total number of authors within the category/field
Z.V.P. Murthy	October 2020	Chemical Engineering - Polymers-Engineering	1068	--	55697
Z.V.P. Murthy	October 2021	Chemical Engineering - Polymers-Engineering	1028	1260	66,189
Z.V.P. Murthy	October 2022	Chemical Engineering - Polymers-Engineering	964	1086	53,348
Z.V.P. Murthy	October 2023	Chemical Engineering - Polymers-Engineering	1098	1217	72,674
Z.V.P. Murthy	September 2024	Chemical Engineering - Polymers-Engineering	1086	1205	79,314

**Summary of “World ranking of scientist (2%)” Ranks based on citation impact during the single calendar year:**

Name	Year Published	Field-Subfield	Rank in the World (All Citations)	Rank in the World (Excluding Self-Citations)	Total number of authors within the category/field
Z.V.P. Murthy	October 2021	Chemical Engineering - Polymers-Engineering	981	917	66,189
Z.V.P. Murthy	October 2022	Chemical Engineering - Polymers-Engineering	1,003	930	53,348
Z.V.P. Murthy	October 2023	Chemical Engineering - Polymers-Engineering	962	924	72,674
Z.V.P. Murthy	September 2024	Chemical Engineering - Polymers-Engineering	1002	1049	79,314

**M.E./M.TECH. DISSERTATIONS GUIDED**

Sr. No.	Student Name (Adm. No.)	Month & Year of Completion	Title of Thesis	Co-Guide (if any)
1.	M.S. Bhakhar	1999	An experimental investigation of hydrolysis of acetic anhydride in a spiral tube coil reactor.	Dr. N.S. Jayakumar (Guide)
2.	A.G. Zambad	2000	A kinetic study and dynamics of biosynthesis of dextran in batch fermenter.	Dr. N.S. Jayakumar (Guide)
3.	M.T. Dhotre	2000	Modeling and dynamics of heat transfer cooling of liquid using half-coil jacket. <b>(Won ISTE – IPCL National Award for 2<sup>nd</sup> Best M.E. (Chemical) thesis for 2000)</b>	Dr. N.S. Jayakumar (Guide)
4.	V.D. Karia	2000	Kinetics and modeling of biosynthesis of gibberellic acid in batch fermenter.	Dr. N.S. Jayakumar (Guide)
5.	H.R. Patel	2001	Accessing of inaccessible unsteady-state by use of cascade of non-isothermal CSTR in series.	Dr. N.S. Jayakumar (Guide)
6.	Tejal Patel	2001	Experimental investigation of acid catalyst hydrolysis of acetic anhydride in tubular reactor.	Dr. N.S. Jayakumar (Guide)
7.	Telu Prabhakar	2004	Fluoride removal from industrial wastewater economically.	N.N. Patel (Guide)
8.	Latesh B. Chaudhari (P05CH802)	July 2007	Studies on separation of heavy metals from aqueous solutions by nanofiltration and characterization of the membrane.	-----
9.	Nilam B. Patel (P05CH804)	July 2007	Mercury removal from aqueous solutions by adsorption using zeolites.	Dr. P.A. Parikh
10.	A.K. Agrawal (P06CH801)	July 2008	Pervaporative separation of ethanol/water mixtures and industrial effluent.	-----
11.	Pankaj J. Gandhi (P06CH803)	July 2008	Manufacturing of p-anisic acid.	-----
12.	Konakala Prakash (P06CH808)	July 2008	Evaluation of performance of post treatment in a full-scale up-flow anaerobic sludge blanket (UASB) based sewage treatment for anionic surfactants.	Dr. A.K. Mungray
13.	N.L. Chauhan (P07CH806)	July 2009	Catalytic cracking of naphtha over zeolites.	Dr. P.A. Parikh (Guide)
14.	Vishal Jadav (P07CH812)	July 2009	Organics separation by pervaporation.	Dr. M. Mukhopadhyay (Guide)
15.	V.N. Lad (R07CH801)	August 2009	Studies on profile of liquid jet.	-----
16.	Swati Sharma (RS07CH807)	May 2010	Degradation of 4-Chlorophenol in waste water by organic oxidants. <b>(Won the Indian National Academy of Engineering-Innovative Student Projects Award – 2010)</b>	Dr. M. Mukhopadhyay (Guide)
17.	Dainik D. Patel (P08CH802)	July 2010	Preparation of novel thin film composite membranes for desalination.	-----
18.	Jayant Singh (P08CH808)	July 2010	Preparation, characterization and performance of polymeric membranes for nanofiltration and pervaporation.	Dr. Alka A. Mungray
19.	Rahul V. Matte (P08CH810)	July 2010	Studies on submersible membrane based water purification systems.	-----
20.	Snehal R. Parmar (P08CH812)	July 2010	Treatment of metal containing aqueous wastewater by electrocoagulation.	-----
21.	Smitha Rajesh (RS07CH811)	October 2010	Polymeric support catalyst system – Ethylene polymerization.	Dr. P.A. Parikh
22.	Harshad R. Patil (RS07CH809)	April 2011	Studies on synthesis of chemical compounds for nucleation of polypropylene.	Dr. P.A. Parikh
23.	Saurabh Singh (RS07CH810)	April 2011	Microwave assisted synthesis of polyethersulfone.	Dr. M. Chakraborty
24.	Anshul Choudhary (P09CH804)	August 2011	Removal of lanthanides by nanofiltration.	-----
25.	Kartik R. Desai	August 2011	Studies on separation of heavy metals from	-----

	(P09CH820)		aqueous solutions by complexation-ultrafiltration.	
26.	Mrigash Kumar Shah (P09CH810)	August 2011	Pervaporation separation of alcohols using poly(vinyl alcohol) membrane.	-----
27.	Anshika Rani (P09CH812)	August 2011	Wastewater treatment by electrocoagulation.	-----
28.	Mahendra S. Gaikwad (P10CH826)	June 2012	Studies on separation of metal ions from aqueous solutions by nanofiltration.	-----
29.	Ashishkumar D. Modi (P10CH828)	June 2012	Microwave assisted synthesis of Sn-ZSM-5 zeolite membrane and its application in pervaporation.	-----
30.	Kaushal R. Parmar (P11CH021)	June 2013	Wastewater treatment by graphene-TiO <sub>2</sub> nanocomposite and clay materials.	Dr. Shaik Basha
31.	Preeti Mishra (P11CH030)	June 2013	A study on synthesis of nanoparticles, proton exchange membranes and membrane electrode assembly for direct methanol fuel cell.	Dr. Jignasa N. Solanki
32.	Hemang R. Mehta (P11CH031)	June 2013	Preparation and application of sodium montmorillonite clay loaded poly(vinyl alcohol)-chitosan composite matrix pervaporation membranes.	-----
33.	Meesala Sitharam (P12CH007)	July 2014	Removal of pharmaceutical compounds from aqueous solutions by adsorption and photodegradation.	Dr. Shaik Basha
34.	Harshal A. Gulhane (P12CH015)	July 2014	Study on pervaporative separation of benzene-isooctane mixture by using poly(vinyl)alcohol/graphene composite membranes.	-----
35.	Ganesh B. Thorat (P13CH010)	July 2015	Study on separation of isopropanol - water mixtures by using poly(vinyl) alcohol composite membranes by pervaporation.	Dr. Smita Gupta
36.	Jainesh H. Jhaveri (P13CH015)	July 2015	Preparation, modification, characterization and application of polymeric membranes for anti-fouling and enhanced performance.	Dr. C.M. Patel
37.	Jibin Babu (P14CH003)	June 2016	Preparation, characterization and application of poly(vinyl alcohol) thin-film composite nanofiltration membranes in synthetic wastewater treatment.	-----
38.	Mene Nikhil R. (P16CH005)	July 2018	Membrane distillation- crystallization.	-----
39.	Nikita Gupta (P17CH002)	July 2019	Effect of tetramethylurea (TMU) and ZIF-67 on the performance of polysulfone membrane.	-----
40.	Srivastava Ashish Vijaylal (P18CH008)	August 2020	Hexagonal boron nitride/PEG200/PVDF blend membrane: Preparation, characterization and performance for membrane distillation-crystallization	-----
41.	Appanu Sushvanth Reddy (P19CH006)	July 2021	Mathematical modelling and experimental study of direct contact membrane distillation for textile effluent treatment. <b>(Won IChE Awards for the Year 2022: Ambuja's Young Researcher's Awards for doing Post-Graduate Studies in India after GATE Examination)</b>	Dr. Sarita Kalla
42.	Shubham R. Sawant (P20CH007)	July 2022	Taguchi optimization study for desalination using nanomaterial enhanced polymeric membrane via membrane distillation.	Dr. Sarita Kalla (Guide)
43.	Disha H. Gajipara (P21CH003)	June 2023	Wastewater treatment by metal-organic frameworks (MOFs) incorporated hollow fiber membranes.	Dr. Sarita Kalla

**DOCTORAL THESES SUPERVISED (22)**

Sr. No.	Name of Student (Admission No.) (Registration Date)	Month & Year of Completion (Ref & Notification Date & Notification No.)	Title of Thesis	Co-Supervisor (if any)	Remarks
1.	Shaik Bhasha (D05CH404) (25/07/2005)	November 2008 (Acad/Ph.D/698/2008-09 dated 12/11/2008) Ph.D. Notification No. 6	Studies on removal of heavy metals from wastewaters by novel biosorbents.	-----	-----
2.	Alka G. Boricha (D06CH401) (20/07/2006)	October 2009 (Acad/Ph.D/384/2009-10 dated 01/10/2009) Ph.D. Notification No.13	Nanofiltration membranes: preparation, characterization and applications in heavy metals removal from wastewaters.	-----	-----
3.	John U. Kennedy Oubagaranadin (D05CH401) (22/07/2005)	March 2010 (Acad/Ph.D/662/2009-10 dated 25/03/2010) Ph.D. Notification No.16	Removal of heavy metals from aqueous solutions using different adsorbents.	-----	-----
4.	Lateshkumar B. Chaudhari (DS07CH405) (18/01/2008)	August 2011 (Acad/Ph.D/340/2011-12 dated 09/08/2011) Ph.D. Notification No.34	Studies on removal of heavy metals by nanofiltration. <b>(Received "IICHe Award for the Year 2013: Dr A V Rama Rao Foundation's Best Ph.D. Thesis and Research Award in Chemical Engineering/Technology"). It is a National Level Award given away by the Indian Institute of Chemical Engineers (IICHe).</b>	-----	-----
5.	Sanjaykumar R. Patel (DS07CH403) (18/01/2008)	August 2011 (Acad/Ph.D/358/2011-12 dated 12/08/2011) Ph.D. Notification No.35	Recovery of lactose from dairy waste streams by sonocrystallization.	-----	-----
6.	Jignasa N. Solanki (DS07CH404) (18/01/2008)	June 2012 (Acad/Ph.D/168/2011-12 dated 28/06/2012) Ph.D. Notification No.49	Synthesis and applications of metallic nanoparticles. <b>(Received "IICHe Award for the Year 2014: Dr A V Rama Rao Foundation's Best Ph.D. Thesis and Research Award in Chemical Engineering/Technology"). It is a National Level Award given away by the Indian Institute of Chemical Engineers (IICHe).</b>	-----	-----
7.	Jyoti V. Tolia (DS08CH405) (23/01/2009)	September 2012 (Acad/Ph.D/365/2012-13 dated 11/09/2012) Ph.D. Notification No.57	Preparation, characterization and applications of group II-VI semiconductor nanomaterials.	Dr. Mousumi Chakraborty (Main Supervisor)	-----
8.	M.V. Karkare (D08CH401) (24/07/2008)	October 2012 (Acad/Ph.D/405/2012-13 dated 01/10/2012) Ph.D. Notification No.62	Studies on kinetics of aerobic biological oxidation of complex organic waste.	-----	-----
9.	Pankaj J. Gandhi (D08CH404) (24/07/2008)	April 2013 (Acad/Ph.D/86/2012-13 dated 25/04/2013) Ph.D. Notification No.86	Synthesis of nanoparticles and their release kinetics in simulated conditions of cardiovascular and dermal diseases.	-----	-----
10.	Virang N. Lad (D10CH401) (16/07/2010)	October 2013 (Acad/Ph.D/464/2013-14 dated 01/10/2013) Ph.D. Notification No.109	Studies on effects of interfacial interactions of some natural materials on oil-in-water emulsions and rheology of selected complex fluids. <b>(Received "Gandhian Young Technological Innovation (GYTI) Award-2015", under the aegis of "Society for Research and Initiatives for Sustainable Technologies and Institutions" (SRISTI) for the work "Use of High Nutrient, Low Cost Natural Materials for Preparation of Well-Engineered Emulsions for Variety of Applications" which is based on his Ph.D. work.)</b>	-----	-----

11.	Swati Sharma (D10CH406) (19/07/2010)	January 2014 (Acad/Ph.D/115/ 2013-14 dated 01/01/2014) Ph.D. Notification No.115	Degradation of chlorophenols from wastewaters.	Dr. Mausumi Mukhopadhyay <b>(Main Supervisor)</b>	-----
12.	Chetan M. Patel (D09CH404) (23/07/2009)	July 2014 (Acad/Ph.D/185/ 2013-14 dated 01/07/2014) Ph.D. Notification No.141	Processing nanomaterials in stirred media mills.	Dr. Mousumi Chakraborty	-----
13.	Smita Gupta (D09CH403) (23/07/2009)	July 2014 (Acad/Ph.D/253/ 2014-15 dated 30/07/2014) Ph.D. Notification No.148	Application of liquid membranes for the removal of mercury and bisphenol A from aqueous solutions.	Dr. Mousumi Chakraborty	-----
14.	Amiben H. Vyas (DS09AS301) (31/12/2009)	February 2015 (Acad/Ph.D/737/ 2014-15 dated 26/02/2015) Ph.D. Notification No.186	Adsorptive studies on palladium(II) and platinum(IV) using rice husk and its derivatives.	Dr. Smita Jauhari <b>(Main Supervisor)</b>	-----
15.	Nalin H. Maniya (DS11CH002) (09/01/2012)	August 2015 (Acad/Ph.D/217/ 2015-16 dated 04/08/2015) Ph.D. Notification No.217	Nanostructured porous silicon materials for drug delivery applications.	Dr. S.R. Patel	-----
16.	Harshad R. Patil (D11CH002) (21/07/2011)	January 2018 (Acad/Ph.D./375/ 2017-18 dated 23/01/2018) Ph.D. Notification No.375	Application of ionic liquids for nanoparticles synthesis and separation studies.	-----	-----
17.	Smitha Rajesh (DS10CH402) (31/01/2011)	January 2018 (Acad/Ph.D./376/ 2017-18 dated 25/01/2018) Ph.D. Notification No.376	Synthesis, characterization and application of <i>in situ</i> antioxidant incorporated polymeric membranes.	-----	-----
18.	Saurabh C. Singh (DS11CH001) (09/01/2012)	January 2020 (Acad/Ph.D./548/ 2019-20 dated 04/02/2020) Ph.D. Notification No.548	Effect of hemicelluloses on viscose process and application of membranes for their removal from process stream.	-----	-----
19.	Ashwin R. Kamble (DS16CH002) (20/12/2016)	October 2020 (Acad/Ph.D./605/ 2020-21 dated 19/10/2020) Ph.D. Notification No.605	Studies on mixed matrix membranes with 2D materials for different gas mixtures separation	Dr.C.M. Patel	-----
20.	Shraddha K. Borse (D18CY004) (24/07/2018)	February 2023 (Acad/Ph.D./808/ 2022-23 dated 27/02/2023) Ph.D. Notification No.808	Design and synthesis of metal nanoclusters for detection of drugs and biomarkers	Dr. K. Suresh Kumar (ACD) <b>(Main Supervisor)</b>	-----
21.	Amol V. Sonawane (D18CH003) (23/07/2018)	March 2023 (Acad/Ph.D./818/ 2022-23 dated 20/03/2023) Ph.D. Notification No.818	Studies on membrane bioreactor system for different wastewaters treatment	-----	-----
22.	Dipeshkumar D. Kachhadiya (DS18CH004) (21/12/2018)	November 2023 (Acad/Ph.D./889/ 2023-24 dated 23/11/2023) Ph.D. Notification No.889	Studies on metal-organic frameworks and 2D nanomaterials functionalized polymeric mixed-matrix membranes for pervaporative separation of various systems	-----	-----



PATENTSProcess Patents Granted: 20Process Patents Under Review: 1Design Applications Granted: 29**1. South African Patent: ZA Patent No. 2011/09415**

**Title:** Re-establishment of blood flow in blocked human arteries by transferring nano-encapsulated drug through medical devices, designed for the same and releasing the nano-encapsulated drug in human artery with body pH.

**Inventors:** Doshi Manish; Sherdiwala Divyesh; Sojitra Prakash; Vyas Ashwin; Gandhi Pankaj; **Murthy Zagabathuni Venkata Panchakshari**

**Patent Granted Date: 29-August-2012**

**2. United States of America Patent: Patent No. US 8778013B2**

**Title:** Re-establishment of blood flow in blocked human arteries by transferring nano-encapsulated drug through medical devices, designed for the same and releasing the nano-encapsulated drug in human artery with body pH.

**Inventors:** Doshi Manish; Sherdiwala Divyesh; Sojitra Prakash; Vyas Ashwin; Gandhi Pankaj; **Murthy Zagabathuni Venkata Panchakshari**

**Patent Granted Date: 15-July-2014**

**3. New Zealand Patent: Patent No. 597308**

**Title:** Re-establishment of blood flow in blocked human arteries by transferring nano-encapsulated drug through medical devices, designed for the same and releasing the nano-encapsulated drug in human artery with body pH.

**Inventors:** Doshi Manish; Sherdiwala Divyesh; Sojitra Prakash; Vyas Ashwin; Gandhi Pankaj; **Murthy Zagabathuni Venkata Panchakshari**

**Patent Granted Date: 30-October-2014**

(Patent Journal, Vol.45(No.8) (August 2012) Part II of II, Pages 226-227. ISSN 2223-4837. Companies and Intellectual Property Commission, Government of the Republic of South Africa) (<http://www.zaip.org/node/359>)

**4. Australia Patent: Patent No. 2010252545**

**Title:** Re-establishment of blood flow in blocked human arteries by transferring nano-encapsulated drug through medical devices, designed for the same and releasing the nano-encapsulated drug in human artery with body pH.

**Inventors:** Doshi Manish; Sherdiwala Divyesh; Sojitra Prakash; Vyas Ashwin; Gandhi Pankaj; **Murthy Zagabathuni Venkata Panchakshari**

**Patent Granted Date: 13-November-2014**

**5. Indian Patent: Patent No. 263852**

**Application Published** in "The Patent Office Journal" (Journal No. 30/2010. Page 21300).

**Title:** A process for the preparation of p-anisic acid.

**Inventors:** Dr. Pankaj J. Gandhi, Dr. Yogen H. Talia and **Dr. Z.V.P. Murthy**

**Patent Granted Date: 25-November-2014**

**6. China Patent: Patent No. CN102481196B**

**Title:** *Nano – carrier – coated implanted drug delivery medical equipment*

**Inventors:** *M. Doshi; D. Sherdiwala; P. Sojitra; A. Vyas; P. Gandhi; Z.V.P. Murthy*

**Patent Granted Date: 27-May-2015**

**7. Japan Patent: Patent No. JP5861632B2**

**Title:** Resuscitation of blood flow in a blocked human artery by delivering nano-encapsulated drug through a medical device designed for it and releasing nano-encapsulated drug in human artery using body pH.

**Inventors:** Doshi Manish; Sherdiwala Divyesh; Sojitra Prakash; Vyas Ashwin; Gandhi Pankaj;

**Zagabathuni Venkata Panchakshari Murthy**

**Patent Granted Date: 16-February-2016**

**8. Russia Patent: Patent No. RU2605793C2**

**Title:** Resumption of blood flow in human blocked arteries by transferring nano-encapsulated drug by means of nano-encapsulated drug within designed there for and release of nano-encapsulated drug within human artery at physiologic pH level.

**Inventors:** Doshi Manish; Sherdiwala Divyesh; Sojitra Prakash; Vyas Ashwin; Gandhi Pankaj;

**Zagabathuni Venkata Panchakshari Murthy**

**Patent Granted Date: 27-December-2016**

**9. Israel Patent: Patent No. 216446**

**Title:** Re-establishment of blood flow in blocked human arteries by transferring nanoencapsulated drug through medical devices, designed for the same and releasing the nanoencapsulated drug in human artery with body pH.

**Inventors:** Doshi Manish; Sherdiwala Divyesh; Sojitra Prakash; Vyas Ashwin; Gandhi Pankaj; **Murthy**

**Zagabathuni Venkata Panchakshari.**

**Patent Granted Date: 21-April-2016**

**10. European Patent: Patent No. EP2434994**

**Title:** Re-establishment of blood flow in blocked human arteries by transferring nano-encapsulated drug through medical devices, designed for the same and releasing the nano-encapsulated drug in human artery with body pH.

**Inventors:** Manish Doshi; Divyesh Sherdiwala; Prakash Sojitra; Ashwin Vyas; Pankaj Gandhi; **Zagabathuni Murthy**

**Inventors:** Doshi Manish; Sherdiwala Divyesh; Sojitra Prakash; Vyas Ashwin; Gandhi Pankaj;

**Zagabathuni Venkata Panchakshari Murthy**

**Patent Granted Date: 24.11.2017** (Communication of intention to grant a patent)

Sr. No.	Title	Application Number	Submission Date	Applicant Name	Application Status
11.	Method for fabrication of ZIF-8/Ag <sub>3</sub> PO <sub>4</sub> /PVDF photocatalytic mixed matrix membrane for drimaren orange P2R dye degradation.	202121045074	05 October 2021	1. SVNIT, Surat 2. Amol V. Sonawane 3. Dipesh Kachhadiya 4. Dr. C. M. Patel <b>5. Dr. Z.V.P. Murthy</b>	Patent Granted. <b>Patent No. 415007</b> (Date: 20-Dec-2022)
12.	Method for photocatalytic degradation of drimaren orange P2R dye using h-BN/Ag <sub>3</sub> PO <sub>4</sub> /PVDF photocatalytic mixed matrix membrane	202121051855	11 November 2021	1. SVNIT, Surat 2. Amol V. Sonawane 3. Dr. C. M. Patel <b>4. Dr. Z.V.P. Murthy</b>	Patent Granted. <b>Patent No. 425664</b> (Date: 17-March-2023)
13.	MoS <sub>2</sub> /Ag <sub>3</sub> PO <sub>4</sub> /PVDF photocatalytic mixed matrix membrane and degradation of drimaren orange P2R dye using the same	202121052076	12 November 2021	1. SVNIT, Surat 2. Amol V. Sonawane 3. Dr. C. M. Patel <b>4. Dr. Z.V.P. Murthy</b>	Patent Granted. <b>Patent No. 429315</b> (Date: 19-April-2023)
14.	Method for synthesis and fabrication of MWCNT@ZIF-8-67/PVDF nanocomposite mixed matrix membrane for pervaporative saltwater desalination.	202121054127	24 November 2021	1. SVNIT, Surat 2. Dipesh Kachhadiya 3. Amol V. Sonawane 4. Dr. C. M. Patel <b>5. Dr. Z.V.P. Murthy</b>	Patent Granted. <b>Patent No. 413558</b> (Date: 02-Dec-2022)
15.	Method for preparation of curcumin nanoparticles.	202121060112	22 December 2021	1. SVNIT, Surat 2. Amol V. Sonawane 3. Kanika Meena 4. Dr. C. M. Patel <b>5. Dr. Z.V.P. Murthy</b>	Patent Granted. <b>Patent No. 412886</b> (Date: 29-Nov-2022)
16.	Zeolitic imidazolate framework-67 based concrete composition and method of its Preparation	202221042874	26 July 2022	1. SVNIT, Surat 2. M.M. Hulagabali 3. Amol V. Sonawane 4. Dr. G.R. Vesmawala <b>5. Dr. Z.V.P. Murthy</b>	Patent Granted. <b>Patent No. 431286</b> (Date: 09-May-2023)
17.	h-BN@MIL-101(Cr)/PVDF photocatalytic mix matrix membrane for degradation of reactive dye from textile industry.	202221072399	14 December 2022	1. SVNIT, Surat 2. Amol V. Sonawane <b>3. Dr. Z.V.P. Murthy</b>	Patent Granted. <b>Patent No. 475401</b> (Date: 30-Nov-2023)
18.	Method of fabricating TiO <sub>2</sub> @MIL-101(Cr)/PVDF photocatalytic mix	202221073749	20 December	1. SVNIT, Surat 2. Amol V. Sonawane	Patent Granted. Patent No.

	matrix membrane and reactive dyes degradation using the same		2022	<b>3. Dr. Z.V.P. Murthy</b>	<b>496940</b> (Date: 10-Jan-2024)
19.	Fabrication of deep eutectic solvent encapsulated MIL-53(Fe) based Chitosan bio-polymeric membrane for organic solvent separation.	202321000038	01 January 2023	1. SVNIT, Surat 2. Dipesh Kachhadiya 3. Amol V. Sonawane <b>4. Dr. Z.V.P. Murthy</b>	Patent Granted. <b>Patent No. 483114</b> (Date: 15-Dec-2023)
20.	A metal-organic framework incorporated hollow fiber membrane for rubber processing wastewater treatment	202321041180	16 June 2023	1. SVNIT, Surat 2. D.H.Gajipara 3. Dr. SaritaKalla <b>4. Dr. Z.V.P. Murthy</b> 5. A.V. Sonawane 6. D.D. Kachhadiya	Patent Granted. <b>Patent No. 549292</b> (Date: 30-Aug-2024)
21.	DES encapsulated MIL-101(Cr)/PVDF mixed matrix membrane for dye degradation from industrial wastewater	202321045898	07 July 2023	1. SVNIT, Surat 2. A.V. Sonawane 3. D.D. Kachhadiya 4. Dr. SaritaKalla <b>5. Dr. Z.V.P. Murthy</b>	Published on 29/03/2024 FER Issued 29-April-2024 <b>(ASHINE Funded)</b>

### Design Registrations Granted (29)

Sr. No.	Title	Application Number	Submission Date	Applicant Name	Application Status
1.	Flat sheet membrane module for wastewater treatment	341280-001	23 Mar 2021	1. Amol V. Sonawane 2. Dr. Sarita Kalla 3. Dr. C. M. Patel <b>4. Dr. Z. V. P. Murthy</b>	Design Accepted
2.	Apparatus for testing of antifouling properties of filtration membranes	347903-001	14 Aug 2021	1. SVNIT, Surat 2. Amol V. Sonawane 3. Dipesh Kachhadiya 4. Dr. C. M. Patel <b>5. Dr. Z.V.P. Murthy</b>	Design Accepted
3.	Universal face mask	347918-001	14 Aug 2021	1. SVNIT, Surat 2. Amol V. Sonawane 3. Dr. C. M. Patel <b>4. Dr. Z.V.P. Murthy</b>	Design Accepted
4.	Agitated ball mill	348601-001	30 Aug 2021	1. SVNIT, Surat 2. Amol V. Sonawane 3. Dr. C. M. Patel <b>4. Dr. Z.V.P. Murthy</b>	Design Accepted
5.	Electrochemical sensor apparatus	348930-001	5 Sept 2021	1. SVNIT, Surat 2. Amol V. Sonawane 3. Vijay Kumar Singh <b>4. Dr. Z.V.P. Murthy</b> 5. Dr. C. M. Patel	Design Accepted
6.	Flat sheet membrane module for liquid mixture separation	351911-001	23 Oct 2021	1. SVNIT, Surat 2. Amol V. Sonawane 3. Dipesh Kachhadiya 4. Dr. C. M. Patel <b>5. Dr. Z.V.P. Murthy</b>	Design Accepted
7.	Electromagnetic field induced flat sheet membrane module for wastewater treatment	352180-001	28 Oct 2021	1. SVNIT, Surat 2. Amol V. Sonawane 3. Dr. C. M. Patel <b>4. Dr. Z.V.P. Murthy</b>	Design Accepted
8.	Ultrasonication induced filtration cell for water and wastewater treatment	352182-001	28 Oct 2021	1. SVNIT, Surat 2. Amol V. Sonawane 3. Dr. C. M. Patel <b>4. Dr. Z.V.P. Murthy</b>	Design Accepted
9.	Submerged type flat sheet membrane filtration module for wastewater treatment	352581-001	03 Nov 2021	1. SVNIT, Surat 2. Amol V. Sonawane 3. Dr. C. M. Patel <b>4. Dr. Z.V.P. Murthy</b>	Design Accepted
10.	Rotary ball cleaning system for industrial tanks	352582-001	03 Nov 2021	1. SVNIT, Surat 2. Amol V. Sonawane 3. Dr. C. M. Patel <b>4. Dr. Z.V.P. Murthy</b>	Design Accepted
11.	Microreactor for nanoparticles synthesis	353522-001	22 Nov 2021	1. SVNIT, Surat 2. Amol V. Sonawane 3. Dr. C. M. Patel <b>4. Dr. Z.V.P. Murthy</b>	Design Accepted

12.	Membrane Bioreactor System for Water and Wastewater Treatment	354237-001	03 Dec20 21	1. SVNIT, Surat 2. Amol V. Sonawane 3. Dr. C. M. Patel <b>4. Dr. Z.V.P. Murthy</b>	Design Accepted
13.	Wavy flow channel membrane module for oil-water separation	357326-001	25 Jan 2022	1. SVNIT, Surat 2. Amol V. Sonawane <b>3. Dr. Z.V.P. Murthy</b>	Design Accepted
14.	Shell-Shell-Tube Type Heat Exchanger	355977-001	31 Dec 2021	1. SVNIT, Surat 2. Amol V. Sonawane 3. Dr. C. M. Patel <b>4. Dr. Z.V.P. Murthy</b>	Design Accepted
15.	Dynamic pervaporation module	357581-001	30 Jan 2022	1. SVNIT, Surat 2. Amol V. Sonawane <b>3. Dr. Z.V.P. Murthy</b>	Design Accepted
16.	Advanced CO <sub>2</sub> capture membrane module	360573-001	14 Mar 2022	1. SVNIT, Surat 2. Amol V. Sonawane <b>3. Dr. Z.V.P. Murthy</b>	Design Accepted
17.	Flat sheet membrane casting unit	360649-001	15 Mar 2022	1. SVNIT, Surat 2. Amol V. Sonawane <b>3. Dr. Z.V.P. Murthy</b>	Design Accepted
18.	Direct contact membrane distillation module for desalination	360754-001	15 Mar 2022	1. SVNIT, Surat 2. Amol V. Sonawane 3. Dr. SaritaKalla <b>4. Dr. Z.V.P. Murthy</b>	Design Accepted
19.	Reverse Osmosis (RO) Membrane Module Regeneration System	363896-001	8 May 2022	1. SVNIT, Surat 2. Amol V. Sonawane <b>3. Dr. Z.V.P. Murthy</b>	Design Accepted
20.	Hollow Fiber Membrane Module Regeneration System	363895-001	8 May 2022	1. SVNIT, Surat 2. Amol V. Sonawane <b>3. Dr. Z.V.P. Murthy</b>	Design Accepted
21.	Water pH Control System	363900-001	9 May 2022	1. SVNIT, Surat 2. Amol V. Sonawane <b>3. Dr. Z.V.P. Murthy</b>	Design Accepted
22.	Ultrasonication assisted agitated ball mill	366064-001	15 June 2022	1. Amol V. Sonawane 2. Dr. C. M. Patel 3. Dr. I. Sreedhar <b>4. Dr. Z.V.P. Murthy</b>	Design Accepted
23.	Dynamic forward osmosis integrated membrane bioreactor system	357320-001	25 Jan 2022	1. SVNIT, Surat 2. Amol V. Sonawane <b>3. Dr. Z.V.P. Murthy</b>	Design Accepted
24.	Dynamic FO membrane module for water and wastewater treatment	357493-001	30 Jan 2022	1. SVNIT, Surat 2. Amol V. Sonawane <b>3. Dr. Z.V.P. Murthy</b>	Design Accepted
25.	Electro-fermentation System	363792-001	6 May 2022	1. SVNIT, Surat 2. Amol V. Sonawane <b>3. Dr. Z.V.P. Murthy</b>	Design Accepted
26.	Pervaporation module	357327-001	25 Jan 2022	1. SVNIT, Surat 2. A.V. Sonawane <b>3. Dr. Z.V.P. Murthy</b>	Design Accepted
27.	Ultrasonication assisted MBR system for water and wastewater treatment	364672-001	25 May 2022	1. SVNIT, Surat 2. Amol V. Sonawane <b>3. Dr. Z.V.P. Murthy</b>	Design Accepted
28.	Solar Powered Water Filtration and Cooling System	363887-001	7 May 2022	1. SVNIT, Surat 2. A.V. Sonawane <b>3. Dr. Z.V.P. Murthy</b>	Design Accepted
29.	Gas Separation Module	357583-001	30 Jan 2022	1. SVNIT, Surat 2. A.V. Sonawane <b>3. Dr. Z.V.P. Murthy</b>	Design Accepted

**RECOGNITION AND CITATIONS****Reviewed/reviewing technical papers for the following Journals: 171**

1. **ACS Applied Materials & Interfaces** (American Chemical Society, USA) (SCI/SCIE Journal)
2. **ACS Applied Polymer Materials** (American Chemical Society, USA) (SCI/SCIE Journal)
3. **ACS Sustainable Chemistry & Engineering** (American Chemical Society, USA) (SCIE Journal)
4. **Advanced Powder Technology** (Elsevier Scientific Publication, The Netherlands) (SCIE Journal)
5. **Advances in Polymer Technology** (Wiley-Blackwell, USA) (SCIE Journal)
6. **African Journal of Biotechnology** (Academic Journals, Kenya) (SCIE Journal)
7. **African Journal of Environmental Science and Technology** (Academic Journals, Kenya)
8. **African Journal of Microbiology Research** (Academic Journals, Kenya) (SCIE Journal)
9. **African Journal of Pure and Applied Chemistry** (Academic Journals, Kenya)
10. **AIChE Journal** (American Institute of Chemical Engineers, USA) (SCI/SCIE Journal)
11. **Ambiente & Água (Revista Ambiente & Água)** (University of Taubaté, Brazil) (SCOPUS listed)
12. **Analytical Methods** (Royal Society of Chemistry, UK) (SCIE Journal)
13. **Applied Clay Science** (Elsevier Scientific Publication, The Netherlands) (SCI/SCIE Journal)
14. **Applied Geochemistry** (Elsevier) (SCI/SCIE Journal)
15. **Applied Nanoscience** (Springer, USA) (SCIE Journal)
16. **Applied Surface Science** (Elsevier Scientific Publication, The Netherlands) (SCI/SCIE Journal)
17. **Applied Water Science** (Springer, USA) (ESCI Journal)
18. **Arabian Journal for Science and Engineering** (Springer Heidelberg, Germany) (SCIE Journal)
19. **Arabian Journal of Chemistry** (Elsevier Scientific Publication, The Netherlands) (SCIE Journal)
20. **ASABE, Transactions of the** (American Society of Agricultural and Biological Engineers) (SCI/SCIE Journal)
21. **Asia-Pacific Journal of Chemical Engineering** (John Wiley & Sons, USA) (SCIE Journal)
22. **Athens Journal of Sciences** (Athens Institute for Education and Research, Greece)
23. **Atmospheric Research** (Elsevier Scientific Publication, USA) (SCI/SCIE Journal)
24. **Biochemical Engineering Journal** (Elsevier Scientific Publication, Switzerland) (SCIE Journal)
25. **Biomass Conversion and Biorefinery** (Springer, Germany) (SCIE Journal)
26. **Biodegradation** (Springer, USA) (SCI/SCIE Journal)
27. **Bioinorganic Chemistry and Applications** (Hindawi Publishing, USA) (SCIE Journal)
28. **Bioremediation Journal** (Taylor & Francis Group Publication, USA) (SCIE Journal)
29. **Bioresource Technology** (Elsevier Scientific Publication, UK) (SCIE Journal)
30. **Bulgarian Chemical Communications** (Bulgarian Academy of Sciences, Bulgaria) (SCIE Journal)
31. **Canadian Journal of Chemistry** (Canadian Science Publishing) (SCI/SCIE Journal)
32. **Carbohydrate Polymers** (Elsevier Scientific Publication) (SCI/SCIE Journal)
33. **Catalysis Letters** (Springer, USA) (SCI/SCIE Journal)
34. **Cellulose** (Springer, The Netherlands) (SCI/SCIE Journal)
35. **Chemical Communications** (Royal Society of Chemistry, UK) (SCI/SCIE Journal)
36. **Chemical Engineering Communications** (Taylor & Francis Group Publication, USA) (SCI/SCIE Journal)
37. **Chemical Engineering & Technology** (Wiley-Blackwell, USA) (SCIE Journal)
38. **Chemical Engineering Journal** (Elsevier Scientific Publication, Switzerland) (SCI/SCIE Journal)
39. **Chemical Engineering Research & Design** (Elsevier Scientific Publication, UK) (SCI/SCIE Journal)

40. **Chemical Industry & Chemical Engineering Quarterly** (Association of Chemical Engineers, Serbia) (SCIE Journal)
41. **Chemical Papers** (Springer) (SCI/SCIE Journal)
42. **Chemical Product and Process Modeling** (The Berkeley Electronic Press, USA) (ESCI Journal)
43. **Chemistry and Ecology** (Taylor & Francis Group Publication, UK) (SCIE Journal)
44. **Chemosphere** (Pergamon-Elsevier Scientific Publication, UK) (SCI/SCIE Journal)
45. **Chiang Mai Journal of Science** (Thailand) (SCIE Journal)
46. **Clean-Soil Air Water** (Wiley-Blackwell, USA) (SCIE Journal)
47. **Colloids and Surfaces A: Physicochemical and Engineering Aspects** (Elsevier Scientific Publication, The Netherlands) (SCI/SCIE Journal)
48. **Comptes Rendus Chimie** (Elsevier) (SCI/SCIE Journal)
49. **Computers & Chemical Engineering** (Pergamon-Elsevier Scientific Publication, UK) (SCI/SCIE Journal)
50. **Colloid and Polymer Science** (Springer, New York) (SCI/SCIE Journal)
51. **Critical Reviews in Environmental Science and Technology** (Taylor & Francis Group Publication, USA) (SCI/SCIE Journal)
52. **CrystEngComm** (Royal Society of Chemistry, UK) (SCI/SCIE Journal)
53. **Crystal Growth & Design** (American Chemical Society, USA) (SCI/SCIE Journal)
54. **Crystal Research and Technology** (Wiley-Blackwell, USA) (SCI/SCIE Journal)
55. **Current Nanoscience** (Bentham Science Publishers, UAE) (SCIE Journal)
56. **Current Pharmaceutical Analysis** (Bentham Science Publishers, UAE) (SCIE Journal)
57. **Current Science** (Indian Academy of Sciences, INDIA) (SCI/SCIE Journal)
58. **Dairy Science & Technology** (Springer, France) (SCI/SCIE Journal)
59. **Desalination** (Elsevier Scientific Publication, The Netherlands) (SCI/SCIE Journal)
60. **Desalination and Water Treatment** (Taylor & Francis Group Publication, USA) (SCIE Journal)
61. **Diamond & Related Materials** (Elsevier) (SCI/SCIE Journal)
62. **Drug Development and Industrial Pharmacy** (Informa Healthcare (Taylor & Francis Group) Publication, UK) (SCI/SCIE Journal)
63. **Dyes and Pigments** (Elsevier Scientific Publication, UK) (SCI/SCIE Journal)
64. **Environmental Engineering and Management Journal** ("Gheorghe Asachi" Technical University of Iasi, Romania) (SCIE Journal)
65. **Energy & Fuels** (American Chemical Society, USA) (SCI/SCIE Journal)
66. **Environmental Engineering Science** (Mary Ann Liebert, Inc., USA) (SCI/SCIE Journal)
67. **Environmental Justice** (Mary Ann Liebert, Inc., USA) (ESCI Journal)
68. **Environmental Monitoring and Assessment** (Springer, The Netherlands) (SCIE Journal)
69. **Environmental Science and Pollution Research** (Springer, The Netherlands) (SCI/SCIE Journal)
70. **Environmental Science: Nano** (Royal Society of Chemistry, UK) (SCIE Journal)
71. **Environmental Science & Technology** (American Chemical Society, USA) (SCI/SCIE Journal)
72. **Environmental Science & Technology Letters** (American Chemical Society, USA) (SCIE Journal)
73. **Environmental Technology** (Taylor & Francis Group Publication, UK) (SCI/SCIE Journal)
74. **Express Polymer Letters** (Budapest Univ Technol & Econ, Hungary) (SCIE Journal)
75. **Fluid Phase Equilibria** (Elsevier Scientific Publication, The Netherlands) (SCI/SCIE Journal)
76. **Frontiers of Environmental Science & Engineering in China** (Springer-Verlag, Germany) (SCIE Journal)
77. **Fuel** (Elsevier Scientific Publication, UK) (SCI/SCIE Journal)
78. **Global NEST Journal** (University of the Aegean, Greece) (SCIE Journal)
79. **Green Chemistry Letters and Reviews** (Taylor & Francis Group Publication, UK) (SCIE Journal)
80. **Heliyon** (Elsevier Scientific Publication) (SCOPUS listed)

81. **Journal of The Chemical Society of Pakistan** (Pakistan) (SCIE Journal)
82. **Journal of the Institution of Engineers (India) Chemical Engineering Division** (SCOPUS listed)
83. **Indian Journal of Chemical Technology** (NISCAIR, India) (SCIE Journal)
84. **Industrial & Engineering Chemistry Research** (American Chemical Society, USA) (SCI/SCIE Journal)
85. **International Journal of Energy Research** (Wiley-Blackwell, USA) (SCIE Journal)
86. **International Journal of Environmental Science and Technology** (Springer, USA) (SCIE Journal)
87. **International Journal of Environment and Waste Management** (Inderscience Publishers, UK) (SCOPUS listed)
88. **International Journal of Industrial Chemistry** (Springer) (SCIE Journal)
89. **International Journal of Nanoscience and Nanotechnology** (Iranian Nanotechnology Society, Iran)
90. **International Journal of Phytoremediation** (Taylor & Francis Group Publication, USA) (SCIE Journal)
91. **International Research Journal of Biochemistry and Bioinformatics** (International Research Journals Publishing House, Nigeria)
92. **Ionics** (Springer-Heidelberg, Germany) (SCIE Journal)
93. **Iranian Journal of Chemistry & Chemical Engineering** (Iranian Institute of Research and Development in Chemical Industries, Tehran, Iran) (SCIE Journal)
94. **Iranian Polymer Journal** (Springer) (SCIE Journal)
95. **Journal of Advanced oxidation Technologies** (Science & Technology Network, Canada) (SCIE Journal)
96. **Journal of Agricultural Biotechnology and Sustainable Development** (Academic Journals, Kenya)
97. **Journal of Alloys and Compounds** (Elsevier Scientific Publication, Switzerland) (SCI/SCIE Journal)
98. **Journal of Applied Polymer Science** (John Wiley & Sons, USA) (SCI/SCIE Journal)
99. **Journal of Chemical and Engineering Data** (American Chemical Society, USA) (SCI/SCIE Journal)
100. **Journal of Chemical Engineering and Materials Science** (Academic Journals, Kenya)
101. **Journal of Chemical Technology and Biotechnology** (John Wiley & Sons, UK) (SCI/SCIE Journal)
102. **Journal of Chemistry** (Hindawi Publishing, USA) (SCIE Journal)
103. **Journal of Cluster Science** (Springer/Plenum Publishers, USA) (SCI/SCIE Journal)
104. **Journal of Colloid and Interface Science** (Elsevier Scientific Publication, USA) (SCI/SCIE Journal)
105. **Journal of Crystal Growth** (Elsevier Scientific Publication, The Netherlands) (SCI/SCIE Journal)
106. **Journal of Dispersion Science and Technology** (Taylor & Francis Group Publication, USA) (SCI/SCIE Journal)
107. **Journal of Environmental Chemistry and Ecotoxicology** (Academic Journals, Kenya)
108. **Journal of Environmental Chemical Engineering** (Elsevier Scientific Publication, The Netherlands) (SCIE Journal)
109. **Journal of Environmental Management** (Elsevier Scientific Publication, UK) (SCI/SCIE Journal)
110. **Journal of Environmental Protection Science** (Peking University, China)
111. **Journal of Environmental Science and Health Part A-Toxic/Hazardous Substances & Environmental Engineering** (Taylor & Francis) (SCI/SCIE Journal)
112. **Journal of Environmental Sciences** (Elsevier Scientific Publication, P.R. China) (SCIE Journal)
113. **Journal of Food Engineering** (Elsevier Scientific Publication, UK) (SCI/SCIE Journal)

114. **Journal of Hazardous Materials** (Elsevier Scientific Publication, The Netherlands) (SCI/SCIE Journal)
115. **Journal of Industrial and Engineering Chemistry** (Elsevier Scientific Publication, USA) (SCIE Journal)
116. **Journal of Materials Engineering and Performance** (Springer, USA) (SCIE Journal)
117. **Journal of Membrane Science** (Elsevier Scientific Publication, The Netherlands) (SCI/SCIE Journal)
118. **Journal of Membrane Science and Research** (Amirkabir University of Technology, Iran)
119. **Journal of Molecular Liquids** (Elsevier Scientific Publication, The Netherlands) (SCI/SCIE Journal)
120. **Journal of Nanomaterials** (Hindawi Publishing Corporation, USA) (SCIE Journal)
121. **Journal of Polymer Engineering** (Walter De Gruyter GMBH, Germany) (SCIE Journal)
122. **Journal of Polymer Materials: An International Journal** (M.D. Publications, India) (SCIE Journal)
123. **Journal of Polymer Research** (Springer, The Netherlands) (SCIE Journal)
124. **Journal of Porous Materials** (Springer, The Netherlands ) (SCI/SCIE Journal)
125. **Journal of Pulp and Paper Science** (Pulp and Paper Technical Association of Canada) (SCI/SCIE Journal)
126. **Journal of Scientific Research** (Rajshahi University, Bangladesh)
127. **Journal of the Chemical Society of Pakistan** (Pakistan) (SCIE Journal)
128. **Journal of the Chilean Chemical Society** (Sociedad Chilena de Química, Chile) (SCI/SCIE Journal)
129. **Journal of the Chinese Advanced Materials Society** (Taylor & Francis)
130. **Journal of the Indian Chemical Society** (Indian Chemical Society, India) (SCIE Journal)
131. **Journal of the Taiwan Institute of Chemical Engineers** (Elsevier Scientific Publication, The Netherlands) (SCI/SCIE Journal)
132. **Journal of Toxicology and Environmental Health Sciences** (Academic Journals, Kenya)
133. **Journal of Water Process Engineering** (Elsevier Scientific Publication) (SCIE Journal)
134. **Journal of Water Supply Research and Technology-Aqua** (IWA Publishing, UK) (SCIE Journal)
135. **JoVE-Journal of Visualized Experiments** (MyJove Corp, USA) (SCIE Journal)
136. **Korean Journal Of Chemical Engineering** (Springer, USA) (SCIE Journal)
137. **Materials Chemistry and Physics** (Elsevier Scientific Publication, Switzerland) (SCI/SCIE Journal)
138. **Materials Letters** (Elsevier Scientific Publication, The Netherlands) (SCI/SCIE Journal)
139. **Materials Research - Ibero-american Journal of Materials** (Brazil) (SCIE Journal)
140. **Materials Research Bulletin** (Pergamon-Elsevier Scientific Publication, UK) (SCI/SCIE Journal)
141. **Materials Science and Engineering B-Advanced Functional Solid-State Materials** (Elsevier Scientific Publication, The Netherlands) (SCI/SCIE Journal)
142. **Membrane Water Treatment** (Techno-Press, Korea) (SCIE Journal)
143. **Microporous and Mesoporous Materials** (Elsevier Scientific Publication, The Netherlands) (SCI/SCIE Journal)
144. **Nano** (World Scientific Publishing, Singapore) (SCIE Journal)
145. **Nanoscale** (Royal Society of Chemistry, UK) (SCIE Journal)
146. **npj Clean Water** (Nature Partner Journal) (SCIE Journal)
147. **Optik** (Elsevier) (SCI/SCIE Journal)
148. **Optics and Lasers in Engineering** (Elsevier Scientific Publication, UK) (SCIE Journal)
149. **Particulate Science and Technology** (Taylor & Francis Group Publication, USA)
150. **Polish Journal of Chemical Technology** (Versita Publishing, Poland) (SCIE Journal)
151. **Polymer** (Elsevier) (SCI/SCIE Journal)
152. **Polymer Composites** (Wiley-Blackwell, USA) (SCI/SCIE Journal)
153. **Polymer Engineering and Science** (Wiley-Blackwell, USA) (SCI/SCIE Journal)
154. **Powder Technology** (Elsevier Scientific Publication, Switzerland) (SCI/SCIE Journal)



155. **Process Biochemistry** (Elsevier Scientific Publication, UK) (SCI/SCIE Journal)
156. **Process Safety and Environmental Protection** (Elsevier Scientific Publication, UK) (SCIE Journal)
157. **Research on Chemical Intermediates** (Springer, The Netherlands) (SCI/SCIE Journal)
158. **Resources, Conservation & Recycling** (Elsevier Scientific Publication, The Netherlands) (SCIE Journal)
159. **RSC Advances** (Royal Society of Chemistry, UK) (SCIE Journal)
160. **Science of the Total Environment** (Elsevier Scientific Publication, The Netherlands) (SCI/SCIE Journal)
161. **Separation and Purification Technology** (Elsevier Scientific Publication, USA) (SCIE Journal)
162. **Separation Science and Technology** (Taylor & Francis Group Publication, USA) (SCI/SCIE Journal)
163. **SN Applied Sciences** (Springer-Nature Publication) (ESCI Journal)
164. **Solid State Sciences** (Elsevier Scientific Publication, The Netherlands) (SCI/SCIE Journal)
165. **Thermal Science** (Society of Thermal Engineers of Serbia) (SCIE Journal)
166. **Thermochimica Acta** (Elsevier Scientific Publication, The Netherlands) (SCI/SCIE Journal)
167. **Waste and Biomass Valorization** (Springer, The Netherlands) (SCIE Journal)
168. **Water Air and Soil Pollution** (Springer, The Netherlands) (SCI/SCIE Journal)
169. **Water and Environment Journal** (Wiley-Blackwell, USA) (SCI/SCIE Journal)
170. **Water Environment Research** (Water Environment Federation, USA) (SCI/SCIE Journal)
171. **Water Research** (Elsevier Scientific Publication, UK) (SCI/SCIE Journal)

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SCI: Science Citation Index; SCIE: Science Citation Index Expanded; Emerging Sources Citation Index (ESCI)

**SCI/SCIE Journals: 151; ESCI: 4; SCOPUS only: 4; Others: 12; Total = 171**

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**Book Proposals Reviewed for the following Publishers:**

1. Universities Press (India), Hyderabad
2. McGraw-Hill Education (India), Noida

**National Mission Project on Education through ICT, MHRD, Government of India:**

**Reviewer** to “Fluid and Particle Mechanics” subject, under the program of “Developing suitable pedagogical methods for various classes, intellectual calibers and research in e-learning”, A National Mission Project on Education through ICT, MHRD, Government of India, anchored by Indian Institute of Technology, Kharagpur.

**Principal Course Developer of “Mechanical Operations” core subject (2016): National Mission Project on Education through ICT, MHRD, Government of India. (Co-Developers: Dr. V.N. Lad & Dr. C.M. Patel)**

**Scientific Committee Member:** The 3<sup>rd</sup> International Conference on Engineering for Waste Valorisation (WasteEng10), May 17-19, 2010, Beijing, China.

**Scientific Committee Member:** The 4<sup>th</sup> International Conference on Engineering for Waste Valorisation (WasteEng12), September 10-13, 2012, Porto, Portugal.

**Scientific Committee Member:** The 5<sup>th</sup> International Conference on Engineering for Waste Valorisation (WasteEng2014), August 25-28, 2014, Rio de Janeiro, Brazil.

**High Value Project Proposals Reviewed for:**

- i) AICTE, New Delhi
- ii) Indo French Centre for the Promotion of Advanced Research (CEFIPRA)
- iii) Ministry of Science and Technology, ISRAEL.

## PUBLICATIONS AND PRESENTATIONS

### PAPERS PUBLISHED/ACCEPTED FOR PUBLICATION IN SCIENCE CITATION INDEX (SCI) / SCIENCE CITATION INDEX EXPANDED (SCIE) JOURNALS: 216

#### 1996

1. **Z.V.P. Murthy** and Sharad K. Gupta\*, Simple graphical method to estimate membrane transport parameters and mass transfer coefficient in a membrane cell. *Separation Science and Technology*, Vol.31(No.1)(1996)77-94. DOI: 10.1080/01496399608000682 (Taylor & Francis Group Publication, USA) (Impact Factor: 0.737)

#### 1997

2. **Z.V.P. Murthy** and Sharad K. Gupta\*, Estimation of mass transfer coefficient using a combined nonlinear membrane transport and film theory model. *Desalination*, Vol.109(No.1)(1997)39-49. DOI: 10.1016/S0011-9164(97)00051-9 (Elsevier Scientific Publication, The Netherlands) (Impact Factor: 0.278)

#### 1998

3. **Z.V.P. Murthy** and Sharad K. Gupta\*, Thin film composite polyamide membrane parameters estimation for the phenol-water system by reverse osmosis. *Separation Science and Technology*, Vol.33(No.16)(1998)2541-2557. DOI: 10.1080/01496399808545318 (Taylor & Francis Group Publication, USA) (Impact Factor: 0.695)

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4. **Z.V.P. Murthy** and Sharad K. Gupta\*, Sodium cyanide separation and parameters estimation for reverse osmosis thin film composite polyamide membrane, *Journal of Membrane Science*, Vol.154(No.1)(1999)89-103. DOI: 10.1016/S0376-7388(98)00280-4 (Elsevier Scientific Publication, USA) (Impact Factor: 1.581)

#### 2001

5. Samir Y. Vaidya, Amit V. Simaria, and **Z.V.P. Murthy\***, Reverse osmosis transport models evaluation: a new approach. *Indian Journal of Chemical Technology*, Vol.8(No.5)(September2001)335-343. (National Institute of Science Communication and Information Resources (NISCAIR), CSIR, India) (Impact Factor: 0.197)

#### 2002

6. Nipun Lamba, **Z.V.P. Murthy**, and Raj Kumar\*, Membrane processing of an aqueous waste stream from catalyst manufacturing plant. *Separation Science and Technology*, Vol.37(No.1) (2002)191-202. DOI: 10.1081/SS-120000328 (Taylor & Francis Group Publication, USA) (Impact Factor: 0.862)

#### 2004

7. **Z.V.P. Murthy\*** and M.M. Vora, Prediction of reverse osmosis performance using artificial neural network. *Indian Journal of Chemical Technology*, Vol.11(No.1)(January2004)108-115. (National Institute of Science Communication and Information Resources (NISCAIR), CSIR, India) (Impact Factor: 0.235)
8. **Z.V.P. Murthy\***, Gautam Kaushik and Ritesh Suratwala, Treatment of oily water with human hair as a medium: a preliminary study. *Indian Journal of Chemical Technology*, Vol.11(No.2) (March2004)220-226. (National Institute of Science Communication and Information Resources (NISCAIR), CSIR, India) (Impact Factor: 0.235)

## 2005

9. Mousumi Chakraborty\*, **Z.V.P. Murthy**, Chiranjib Bhattacharya, and Siddhartha Datta, Process intensification: extraction of chromium(VI) by emulsion liquid membrane. *Separation Science and Technology*, Vol.40(No.11)(2005)2353-2364. DOI: 10.1080/01496390500202555 (Taylor & Francis Group Publication, USA) (Impact Factor: 0.834)

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11. **Z.V.P. Murthy\*** and Jiju Cherian Vengal, Optimization of a reverse osmosis system using genetic algorithm. *Separation Science and Technology*, Vol.41(No.4)(2006)647-663. DOI: 10.1080/01496390500526854 (Taylor & Francis Group Publication, USA) (Impact Factor: 0.824)

## 2007

12. John U. Kennedy Oubagaranadin, N. Sathyamurthy, and **Z.V.P. Murthy\***, Evaluation of Fuller's earth for the adsorption of mercury from aqueous solutions: A comparative study with activated carbon. *Journal of Hazardous Materials*, Vol.142(No.1-2)(2007)165-174. DOI: 10.1016/j.jhazmat.2006.08.001 (Elsevier Scientific Publication, USA) (Impact Factor: 2.337)
13. **Z.V.P. Murthy\***, C. Nancy, and Akash Kant, Separation of pollutants from restaurant wastewater by electrocoagulation. *Separation Science and Technology*, Vol.42(No.4) (2007)819-833. DOI: 10.1080/01496390601120557 (Taylor & Francis Group Publication, USA) (Impact Factor: 1.048)
14. **Z.V.P. Murthy\*** and Dhruv Joshi, Fluidized bed drying of aonla (*Emblica officinalis*). *Drying Technology*, Vol.25(No.5)(2007)883-889. DOI: 10.1080/07373930701370290 (Taylor & Francis Group Publication, USA) (Impact Factor: 1.171)
15. Shaik Basha and **Z.V.P. Murthy\***, Kinetic and equilibrium models for biosorption of Cr(VI) on chemically modified seaweed, *Cystoseira indica*. *Process Biochemistry*, Vol.42(No.11)(2007) 1521-1529. DOI: 10.1016/j.procbio.2007.08.004 (Elsevier Scientific Publication, UK) (Impact Factor: 2.336)

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16. Shaik Basha, **Z.V.P. Murthy\***, and B. Jha, Sorption of Hg(II) from aqueous solutions onto *Carica papaya*: Application of isotherms. *Industrial & Engineering Chemistry Research*, Vol.47(No.3)(2008)980-986. DOI: 10.1021/ie071210o (American Chemical Society Publication, USA) (Impact Factor: 1.895)
17. **Z.V.P. Murthy\*** and Latesh B. Chaudhari, Separation of cadmium ions and estimation of membrane transport parameters of a nanofiltration membrane. *Indian Journal of Chemical Technology*, Vol.15(No.2)(March2008)107-112. (National Institute of Science Communication and Information Resources (NISCAIR), CSIR, India) (Impact Factor: 0.353).
18. Shaik Basha, **Z.V.P. Murthy\***, and B. Jha, Biosorption of hexavalent chromium by chemically modified seaweed, *Cystoseira indica*. *Chemical Engineering Journal*, Vol.137(No.3)(2008) 480-488. DOI: 10.1016/j.cej.2007.04.038 (Elsevier Scientific Publication, USA) (Impact Factor: 2.813)
19. Shaik Basha, **Z.V.P. Murthy\***, and B. Jha, Isotherm modeling for biosorption of Cu(II) and Ni(II) from wastewater onto brown seaweed, *Cystoseira indica*. *AIChE Journal*, Vol.54(No.12) (2008)3291-3302. DOI: 10.1002/aic.11606 (Wiley-Blackwell, USA; American Institute of Chemical Engineers, USA) (Impact Factor: 1.883)
20. **Z.V.P. Murthy\*** and Latesh B. Chaudhari, Application of nanofiltration for the rejection of nickel ions from aqueous solutions and estimation of membrane transport parameters. *Journal of Hazardous Materials*, Vol.160(No.1)(2008)70-77. DOI:10.1016/j.jhazmat.2008.02.085 (Elsevier Scientific Publication, USA) (Impact Factor: 2.975)

21. Alka G. Boricha and **Z.V.P. Murthy\***, Preparation and performance of *N,O*-carboxymethyl chitosan-polyether sulfone composite nanofiltration membrane in the separation of nickel ions from aqueous solutions. *Journal of Applied Polymer Science*, Vol.110(No.6)(2008)3596-3605. DOI: 10.1002/app.28970 (Wiley-Blackwell, USA) (Impact Factor: 1.187)
22. **Z.V.P. Murthy\*** and Anant Raina, Treatment of wastewater of Navy Blue-3G by electrocoagulation. *International Journal of Chemical Reactor Engineering*, Vol.6(2008) Note S2. DOI: 10.2202/1542-6580.1631 (The Berkeley Electronic Press, USA / Walter de Gruyter & Co., Germany) (Impact Factor: 0.531)

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27. **Z.V.P. Murthy\*** and Latesh B. Chaudhari, Treatment of distillery spent wash by combined UF and RO processes. *Global NEST Journal*, Vol.11(No.2)(2009)235-240. (University of the Aegean, Greece) (Impact Factor: 0.565)
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29. S.R. Patel and **Z.V.P. Murthy\***, Ultrasound assisted crystallization for the recovery of lactose in an anti-solvent acetone. *Crystal Research and Technology*, Vol.44(No.8)(2009)889-896. DOI: 10.1002/crat.200900227 (Wiley-Blackwell, USA) (Impact Factor: 0.896)
30. Alka G. Boricha and **Z.V.P. Murthy\***, Acrylonitrile butadiene styrene/chitosan blend membranes: Preparation, characterization and performance in the separation of metal ions. *Journal of Membrane Science*, Vol.339(No.1-2)(2009)239-249. DOI: 10.1016/j.memsci.2009.04.057 (Elsevier Scientific Publication, USA) (Impact Factor: 3.203)
31. **Z.V.P. Murthy\*** and Latesh B. Chaudhari, Rejection behavior of nickel ions from synthetic wastewater containing Na<sub>2</sub>SO<sub>4</sub>, NiSO<sub>4</sub>, MgCl<sub>2</sub> and CaCl<sub>2</sub> salts by nanofiltration and characterization of the membrane. *Desalination*, Vol.247(No.1-3)(2009)610-622. DOI: 10.1016/j.desal.2008.10.009 (Elsevier Scientific Publication, The Netherlands) (Impact Factor: 2.034)
32. John U. Kennedy Oubagaranadin and **Z.V.P. Murthy\***, Adsorption of divalent lead on a montmorillonite-illite type of clay. *Industrial & Engineering Chemistry Research*, Vol.48(No.23)(2009)10627-10636. DOI: 10.1021/ie9005047 (American Chemical Society Publication, USA) (Impact Factor: 1.758)

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33. Alka G. Boricha and **Z.V.P. Murthy\***, Preparation of *N,O*-carboxymethyl chitosan/cellulose acetate blend nanofiltration membrane and testing its performance in treating industrial

- wastewater. *Chemical Engineering Journal*, Vol.157(No.2-3)(2010)393-400. DOI: 10.1016/j.cej.2009.11.025 (Elsevier Scientific Publication, USA) (Impact Factor: 3.074)
34. P.J. Gandhi and **Z.V.P. Murthy\***, Kinetic study of ultrasonic antisolvent crystallization of sirolimus. *Crystal Research and Technology*, Vol.45(No.3)(2010)321-327. DOI: 10.1002/crat.200900717 (Wiley-Blackwell, USA) (Impact Factor: 0.946)
  35. Swati Sharma, Mausumi Mukhopadhyay, and **Z.V.P. Murthy\***, Degradation of 4-chlorophenol in wastewater by organic oxidants. *Industrial & Engineering Chemistry Research*, Vol.49(No.7)(2010)3094-3098. DOI: 10.1021/ie9018066 (American Chemical Society Publication, USA) (Impact Factor: 2.071)
  36. Jignasa N. Solanki and **Z.V.P. Murthy\***, Highly monodisperse and sub-nano silver particles synthesis via microemulsion technique. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, Vol.359(No.1-3)(2010)31-38. DOI: 10.1016/j.colsurfa.2010.01.058 (Elsevier Scientific Publication, The Netherlands) (Impact Factor: 2.130)
  37. Latesh B. Chaudhari and **Z.V.P. Murthy\***, Treatment of landfill leachates by nanofiltration. *Journal of Environmental Management*, Vol.91(No.5)(2010)1209-1217. DOI: 10.1016/j.jenvman.2010.01.007 (Elsevier Scientific Publication, UK) (Impact Factor: 2.596)
  38. S.R. Patel and **Z.V.P. Murthy\***, Optimization of process parameters by Taguchi method in the recovery of lactose from whey using sonocrystallization. *Crystal Research and Technology*, Vol.45(No.7)(2010)747-752. DOI: 10.1002/crat.201000139 (Wiley-Blackwell, USA) (Impact Factor: 0.946)
  39. Latesh B. Chaudhari and **Z.V.P. Murthy\***, Separation of Cd and Ni from multicomponent aqueous solutions by nanofiltration and characterization of membrane using IT model. *Journal of Hazardous Materials*, Vol.180(No.1-3)(2010)309-315. DOI: 10.1016/j.jhazmat.2010.04.032 (Elsevier Scientific Publication, USA) (Impact Factor: 3.723)
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  42. Arvind Kumar Mungray\*, **Z.V.P. Murthy** and Ashwin J. Tirpude, Post treatment of up-flow anaerobic sludge blanket based sewage treatment plant effluents: A review. *Desalination and Water Treatment*, Vol.22(No.1-3)(2010)220-237. DOI: 10.5004/dwt.2010.1788 (Desalination Publications, USA) (Impact Factor: 0.752)
  43. John U. Kennedy Oubagaranadin, **Z.V.P. Murthy\***, and Veeresh P. Mallapur, Removal of Cu(II) and Zn(II) from industrial wastewater by acid activated montmorillonite-illite type of clay. *Comptes Rendus Chimie*, Vol.13(No.11)(2010)1359-1363. DOI: 10.1016/j.crci.2010.05.024 (Elsevier Scientific Publication, France) (Impact Factor: 1.600)
  44. John U. Kennedy Oubagaranadin, and **Z.V.P. Murthy\***, Isotherm modeling and batch adsorber design for the adsorption of Cu(II) on a clay containing montmorillonite. *Applied Clay Science*, Vol.50(No.3)(2010)409-413. DOI: 10.1016/j.clay.2010.09.008 (Elsevier Scientific Publication, The Netherlands) (Impact Factor: 2.303)
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48. Saurabh Singh, Mousumi Chakraborty, and **Z.V.P. Murthy\***, Microwave-assisted synthesis of poly(ethersulfone)-advantages over conventional synthesis. *Journal of Polymer Materials: An International Journal*, Vol.28(No.2)(2011)231-243. (M.D. Publications, India) (Impact Factor: 0.319)
49. Sanjay R. Patel and **Z.V.P. Murthy\***, Waste valorization: recovery of lactose from partially deproteinated whey by using acetone as anti-solvent. *Dairy Science & Technology*, Vol.91(No.1)(2011)53-63. DOI 10.1051/dst/2010036 (Springer, France) (Impact Factor: 1.183)
50. S.R. Patel and **Z.V.P. Murthy\***, Effect of process parameters on crystal size and morphology of lactose in ultrasound-assisted crystallization. *Crystal Research and Technology*, Vol.46(No.3)(2011)243–248. DOI: 10.1002/crat.201000694 (Wiley-Blackwell, USA) (Impact Factor: 0.946)
51. Smitha Rajesh, Parimal A. Parikh, and **Z.V.P. Murthy\***, *In situ* synthesis of inorganic filler filled polyethylene using polyethersulfone supported TiCl<sub>4</sub> catalyst system. *Journal of Applied Polymer Science*, Vol.119(No.5)(2011)2611-2619. DOI: 10.1002/app.32768 (Wiley-Blackwell, USA) (Impact Factor: 1.289)
52. Jignasa N. Solanki and **Z.V.P. Murthy\***, Preparation of silver nanofluids with high electrical conductivity. *Journal of Dispersion Science and Technology*, Vol.32(No.5)(2011)724-730. DOI: 10.1080/01932691.2010.480863 (Taylor & Francis Group Publication, USA) (Impact Factor: 0.560)
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54. J. Tolia\*, **Z.V.P. Murthy**, and M. Chakraborty, Application of mechanochemically synthesised zns nanoaprticles in photo-catalytic oxidation of phenol. *Research Journal of Chemistry and Environment*, Vol.15(No.2)(2011)223-228 (Research Journal of Chemistry and Environment, India) (Impact Factor: 0.379)

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55. Alka G. Boricha and **Z.V.P. Murthy\***, Dilute solution viscometry study on the miscibility of *n,o*-carboxymethyl chitosan-cellulose acetate blends. *Journal of Polymer Engineering*, Vol.31(No.4)(2011)333-340. DOI: 10.1515/POLYENG.2011.070 (Walter de Gruyter, Germany) (Impact Factor: 0.397)
56. Latesh B. Chaudhari and **Z.V.P. Murthy\***, Post-treatment of biologically treated wastewater of agrochemical industry by sulfated chitosan composite nanofiltration membrane. *Water Science & Technology*, Vol.64(No.4)(2011)796-802. DOI: 10.2166/wst.2011.596 (International Water Association (IWA) Publishing, UK) (Impact Factor: 1.122)
57. **Z.V.P. Murthy\***, Parimal A. Parikh, and Smitha Rajesh, *In situ* synthesis of nanoclay filled polyethylene using polymer supported metallocene catalyst system. *Quimica Nova*, Vol.34(No.7)(2011)1157-1162 (Sociedade Brasileira de Química, Brazil) (Impact Factor: 0.763)
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59. Sachin U. Nandanwar, Mousumi Chakraborty\*, and **Z.V.P. Murthy**, Study of formation of ruthenium nanoparticles by mixing of two reactive microemulsions. *Industrial & Engineering Chemistry Research*, Vol.50(No.19)(2011)11445-11451. DOI: 10.1021/ie201043v (American Chemical Society Publication, USA) (Impact Factor: 2.237)

60. N.L. Chauhan, **Z.V.P. Murthy**, Jagannath Das\*, and Parimal A. Parikh\*, Synthesis of zeolite ferrierite: Role of emulsifiers. *Indian Journal of Chemical Technology*, Vol.18(No.5) (September 2011) 335-342. (National Institute of Science Communication and Information Resources (NISCAIR), CSIR, India) (Impact Factor: 0.606).
61. **Z.V.P. Murthy\*** and Anshul Choudhary, Application of nanofiltration to treat rare earth element (neodymium) containing water. *Journal of Rare Earths*, Vol.29(No.10)(2011)974-978. DOI: 10.1016/S1002-0721(10)60581-9 (Elsevier Scientific Publication, The Netherlands) (Impact Factor: 0.901)
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2. N.S. Jayakumar, M.S. Bhakhar and **Z.V.P. Murthy**, An Experimental Investigation of Hydrolysis of Acetic anhydride in a Spiral Tube Coil Reactor, *Proceedings* of CHEMCON-2000 (The 53<sup>rd</sup> Annual Convention of the Indian Institute of Chemical Engineers), December 18-21, 2000, Calcutta, Vol.1 Pp TRE 9-12.
3. M.T. Dhotre, **Z.V.P. Murthy** and N.S. Jayakumar, Dynamics of Cooling of Liquid using Half-Coil Jackets, *Proceedings* of CHEMCON-2000 (The 53<sup>rd</sup> Annual Convention of the Indian Institute of Chemical Engineers), December 18-21, 2000, Calcutta, Vol.1 Pp TREP 9-12.
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10. **Z.V.P. Murthy** and Atul Purohit, Nanotechnology: Applications in Air Pollution Control, *Proceedings* of the National Conference on Urban Air Pollution Issues and Management (UAPIM-2003), December 11-13, 2003, S.V. National Institute of Technology, Surat, India, pp. 5-9 to 5-16.
11. **Z.V.P. Murthy**, Amit Kamat and Chiradeep Acharya, Electrocoagulation Treatment of Textile Effluent, *Proceedings* of the 1<sup>st</sup> National Conference of Research Scholars and Young Scientists in Chemical Engineering (CRSYS-2004), 25<sup>th</sup> – 27<sup>th</sup>, September 2004, Indian Institute of Technology, Kharagpur, pp393-399. (Edited by S. De, S. Ray, K. Mohanty, and D.P. Chakraborty).
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15. **Z.V.P. Murthy** and Mragang Sheakhar, Microwave Heating in Waste Treatment: An Emerging Technique, *Proceedings* of the National Conference of on “Sustainable Urban Environment: Issues and Management Strategies, S.V. National Institute of Technology, Surat, Gujarat, 27<sup>th</sup> – 29<sup>th</sup> February, 2008, pp.III-105-110. (Eds: R.A. Christian, M.M. Ahammed, N.D. Jariwala and K.D. Yadav)
16. **Z.V.P. Murthy**, Debraj Ghosh and Mragang Sheakhar, Application of Pervaporation in Wastewater Treatment. *Proceedings* of the National Conference of on Emerging Trends in Chemical Engineering – Global Scenario (ETCE-08), S.V. National Institute of Technology, Surat, Gujarat, 7<sup>th</sup> – 8<sup>th</sup> May, 2008, pp72-79. (Eds: M. Mukhopadhyay, Z.V.P. Murthy, V.N. Lad and S.R. Patel)
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18. Jainesh H. Jhaveri, Z. V. P. Murthy, Nanocomposite Membranes, *Proceedings* of Trombay Symposium on Desalination and Water Reuse (TSDWR 2015), 22-23 January 2015, Organized by Board of Research in Nuclear Sciences (BRNS) Government of India & Indian Desalination Association, at Bhabha Atomic Research Centre (BARC), Mumbai. (Eds: P.K. Tewari, R.C. Bindal, H.S. Sodaye, S.A. Tiwari, Saurabh, Saikiran Kaza, Vijay Mamtani, Nitesh Goswami), Pp.223-240.
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**MEMBERSHIPS IN PROFESSIONAL BODIES / ORGANIZATIONS**

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1. American Chemical Society (ACS) M. [since 2011]
2. American Nano Society (ANS), M. [since 2011]
3. Catalysis Society of India (CatSI), LM. [since 2001]
4. Computer Society of India (CSI), LM. [since 2001]
5. Electrochemical Society of India (ECSI), LF. [since 2001]
6. Indian Desalination Association (InDA), LM. [since 2001]
7. Indian Institute of Chemical Engineers (IChE), LM. [since 1993]
8. Indian Institute of Metals (IIM), LM. [since 2001]
9. Indian Membrane Society (IMS), LM. [since 1996]
10. Indian Society for Technical Education (ISTE), LM. [since 1992]
11. Indian Water Works Association (IWWA), LM. [since 2007]
12. Institution of Engineers (India) (IE(I)), M. [since 1997]
13. International Conference on Chemistry and Environment (ICCE), .LF. [since 2011]
14. Journal of Environmental Research and Development (JERAD), LF. [since 2011]
15. Society for Advancement of Electrochemical Science and Technology (SAEST), LF. [2000]
16. Systems Society of India (SSI), LM. [since 1992]
17. SVP School, run by S.V. National Institute of Technology, Surat, Gujarat, Life Trustee [since 2004]
18. Association of Separation Scientists and Technologists (ASSET), LM. [since 2014]
19. Academic Member, Athens Institute for Education and Research (ATINER), Athens, Greece [6/3/2015]
20. Fellow of The Royal Society of Chemistry, FRSC-2022 (01-March-2022)