#### **CURRICULUM – VITAE**

# Prof. Jitendra B. Naik

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#### **Area of Professional Interests:**

Nanotechnology, Biomedical Polymers, Drug Delivery, Taste masking, Chemical Kinetics, Polyelectrolyte, Polymer Composites, etc.

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#### **Details of Professional Academic Record:**

Examination/	University	Year of	% Marks	Major
Degree		Passing		Subjects
Ph. D.	North Maharashtra University, Jalgaon (M.S.)	1999	"Developmen fiber: Polyme	t of Natural r Composites"
P. G.	North Maharashtra University, Jalgaon (M.S.)	1994	63.00 %	Chemical Technology
U. G.	University of Pune, Pune (M.S.)	1992	65.00 %	Chemical

Awards and Scholarships	Year of Awards
<ol> <li>Junior Research Fellowship (Govt. of Maharashtra)</li> </ol>	April 1995
<ol> <li>Senior Research Fellowship (C. S. I. R., New Delhi)</li> </ol>	October 1997
3. Best Research and Development award (North Maharashtra University, Jalgaon)	August 2013
<ol> <li>Best Research Paper Publication award (North Maharashtra University, Jalgaon)</li> </ol>	August 2014
<ol> <li>Best Research Paper Publication award (North Maharashtra University, Jalgaon)</li> </ol>	August 2015
<ol> <li>Best Research Paper Publication award (North Maharashtra University, Jalgaon)</li> </ol>	August 2016

7.	Best Research Paper Publication award (North Maharashtra University, Jalgaon)	August 2017
8.	Materials Research Society of India Prize (MRSI Prize)	February 2018

### **Employment Background:**

Name and Address of the	Position	Tenure	
Employer			
North Maharashtra University,	Professor	22 July 2008	
Jalgaon	Univ. Institute of Chemical Technology	(Till date)	
Dr. Babasaheb Ambedkar	Associate Professor	4 July 2006 -	
Marathwada University, Aurangabad- 431 004	Department of Chemical Technology	21 July 2008	
Dr. Babasaheb Ambedkar	Reader	4 July 2003 -	
Marathwada University, Aurangabad- 431 004	Department of Chemical Technology	3 July 2006	
Dr. Babasaheb Ambedkar	Lecturer	31 January 1998 -	
Marathwada University, Aurangabad- 431 004	Department of Chemical Technology	3 July 2003	

Subjects taught: Momentum Transfer/ Fluid Mechanics, Mechanical Operations, Heat Transfer, Mass Transfer, Chemical Process Industries, Industrial Pollution Control, Modern Methods of Instrumental Analysis.

## About Research Work Carried out at Different Stages of Career:

- Development of sustained released micro particles/nanoparticles of some anti-diabetic, antihypertensive drugs and NSADs
- > Taste masking of bitter drugs
- Formulation development of some herbal drugs
- > Development of some biocompatible polymers and polyelectrolyte (anti scaling agents)
- Development of Value Added Products from Agro-waste
- > Optimization of Process for the Synthesis of some thermoset polymers

#### **Research Guide**

M. Tech. (awarded)	-	40	Ph. D. (awarded)	-	14
Ph. D. (thesis submitted)	-	02	Ph. D. (registered)	-	08

#### **Research Projects**

#### **Completed:**

- i. UGC sponsored Minor Research Project entitled "Studies on sustained released of some Anti-diabetic drugs".
- ii. UGC sponsored Major Research Project entitled "Development of sustained released micro particles of some Anti-diabetic drugs".
- iii. CSIR sponsored Major Research Project "Investigation of scale formation and its mitigation by using different polyelectrolyte in heat exchange equipment's"
- iv. UGC sponsored Major Research Project entitled "Development of site specific drug delivery system for oral formulation of NSAIDs"
- v. DST, Nano mission, sponsored Major research project entitled "Development and formulation of sustained released Nano particles of some Anti-diabetic drugs".
- vi. DRDO sponsored Major research project entitled "Development of drug delivery system for oral formulation of anti-hyperglycemic with anti-hypertensive drugs"
- vii. TEQIP-II sponsored "Influence of Operating Parameters on CaSO<sub>4</sub> Nanoparticle Synthesis Using Micro reactor"
- viii. UGC sponsored Major Research Project entitled "A study on taste masking of some bitter drugs"

#### **Coordinator:**

- i) DRS-I, SAP, UGC, New Delhi
- ii) TEQIP-II, World Bank
- iii) TEQIP-III, World Bank

#### Member of Professional bodies:

- i. Expert committee member, UGC, New Delhi
- ii. Peer Team Member, NAAC, Bangalore
- iii. Peer Team member, NBA, New Delhi
- iv. Senior member, Institute of Research Engineers and Doctors (IRED)
- v. Life member of Indian Institute of Chemical Engineers (IIChE)
- vi. Life member of Indian Society for Technical Education (ISTE)

- vii. Life member of Indian Pharmaceutical Association (IPA)
- viii. Life member of Indian Desalination Association Congress (InDACON)
- ix. Fellow member The Council of Engineering and Technology India (CETI)
- x. Life member of Indian Science Congress Association (ISCA)
- xi. Life member of National Safety Council (NSC)
- xii. Life member of Institution of Engineers (IEI)
- xiii. Life member of Chemical Research Society of India (CRSI)

#### **Reviewer for Journals:**

- i) Drug Delivery
- ii) Journal of Microencapsulation
- iii) Powder Technology
- iv) Journal of Pharmaceutical Innovation
- v) Journal of Materials Science & Engineering
- vi) Advance Powder Technology
- vii) American Journal of Pharmaceutical Sciences & Nanotechnology
- viii) Advance Polymer Technology
- ix) Pharmaceutical Development and Technology
- x) African Journal of Pharmacy and Pharmacology
- xi) Journal of Advances in Applied Research

#### **Member of Editorial Board:**

- i. American Journal of Pharmaceutical Sciences & Nanotechnology
- ii. Scholarena Journal of Pharmacy and Pharmacology
- iii. Nano based Drug Delivery

### **Other Activities:**

#### a) Extra work carried out at:

Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (i – iv)

- i. Chairman, Ad-hoc Board in Chemical Technology (2005-2008)
- ii. Member of Ad-hoc Board in Chemical Technology (2000-2005)
- iii. Member of Ad-hoc Board in B. Tech. (P & PE)
- iv. Member of syllabus committee for revision of Chemical Engineering Subjects in Chemical Technology
- v. Member of Ad-hoc Board in Chemical Technology, North Maharashtra University, Jaljaon
- vi. Member of Ad-hoc Board in Cosmetic Technology, North Maharashtra University, Jaljaon

### b) Jury Member/Chairperson/Co- Chairperson/Expert:

- i. National level paper presentation competition for Engineering & Technology Students, Maharashtra Institute of Technology, Aurangabad, 15 17<sup>th</sup> Sept. 2003, 2004, 2005, 2006 and 2007 respectively.
- ii. National conference on emerging trends in Engineering, Technology & Management, COET, Bambhori, 29March 2010.
- iii. National conference on Pharmaceutical Analysis, UDCT, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, 16-17 September 2011.
- iv. International Conference on Advances in Chemical Engineering & Technology on 16<sup>th</sup> – 18<sup>th</sup> October 2014 at Thangal Kunju Musaliar College of Engineering, Kollam.

### c) Lectures delivered:

- i. Short Term Training Program (STTP) organized by UDCT, NMU, Jalgaon during 1-21 April 2010
- ii. Certificate course on Nano Technology, week program, organized by UDCT, NMU, Jalgaon during 11-15, May 2010
- iii. Certificate course on Nano Technology, week program, organized by UDCT, NMU, Jalgaon during 11-15, May 2011
- iv. Staff Development Program, AICTE sponsored program organized by UDCT, NMU Jalgaon during 15-30, June 2011
- v. Refresher Course on Nano Technology and Green Chemistry, UGC- Academic Staff College, Pune University sponsored program organized by UDCT, NMU Jalgaon during 12 September 2011 to 2 October 2011.
- vi. 89<sup>th</sup> Orientation Course, UGC- Academic Staff College, Dr. B. A. M. University, Aurangabad, 3<sup>rd</sup> November 2011.
- vii. National Conference on "Interdisciplinary Approaches in Pharmaceutical Research", organized by Y.B. Chavan College of Pharmacy, Aurangabad 5-6 March 2012

- viii. Staff Development Program, AICTE sponsored program organized by SCT, NMU, Jalgaon during 15-30, June 2012
- ix. Staff Development Program, TEQIP sponsored program organized by UICT, NMU, Jalgaon during 20-25, June 2013
- TEQIP-II sponsored one-week interdisciplinary Faculty Development Program on "Emerging Trends in Nanoscience and Nanotechnology" organized by SGGS college of Engineering, Nanded during 06-10, August 2013
- xi. DST-PURSE Scheme sponsored one-day seminar on recent trends in processed foods and nutraceuticals organized by Department of Food Technology, Shivaji University, Kolhapur on 05<sup>th</sup> October 2013.
- xii. TEQIP-II sponsored one-week Short Term Training Program on "Process Intensification" organized by UICT, NMU, Jalgaon during 27 December – 2 January 2017

### d) Conference/Workshop/Seminar organized

- i. Convener, National Conference "Recent Advances in Chemical Engineering", organized at UDCT, NMU, Jalgaon on 20<sup>th</sup> March 2010
- ii. Convener, National Conference "Recent challenges in Pharmaceutical Sciences and Technology", organized at UDCT, NMU, Jalgaon on 19<sup>th</sup> March 2011
- iii. Coordinator, 3<sup>rd</sup> Entrepreneurship Development Program, AICTE sponsored, organized at UDCT, NMU Jalgaon during 11-13, July 2011
- iv. Coordinator, Refresher Course on Nano technology and Green Chemistry, UGC-Academic Staff College, Pune University sponsored program organized at UDCT, NMU Jalgaon during 12 September 2011 to 2 October 2011.
- v. Coordinator, National Conference on Recent Challenges in Pharmaceutical Sciences and Technology, Organized at UDCT, NMU, Jalgaon, 19 March 2012.
- vi. Coordinator, National Conference on Recent Challenges in Pharmaceutical Sciences and Technology, Organized at UICT, NMU, Jalgaon, 16 March 2013.
- vii. Coordinator, National Conference on Recent Advances in Chemical Sciences, Technology and Environment, Organized at UICT, NMU, Jalgaon, 09 March 2015.
- viii. Coordinator, National Conference on Recent Advances in Chemical Engineering, Organized at UICT, NMU, Jalgaon, 30-31 January 2017.
- ix. Coordinator, National Conference on Recent Advances in Chemical Sciences, Technology and Environment, Organized at UICT, NMU, Jalgaon, 30-31 January 2017.
- x. Chairman, National Conference on Recent Advances in Polymer Technology Organized at UICT, NMU, Jalgaon, 16-17 February 2018.

### Patents:

- 1. Fast relief antacid powder composition for oral suspension, J.B. Naik, Vinod Mokale, Trupti Khatal, Shivraj Naik, Gokul Khairnar, 3496/MUM/2013, 2013
- 2. Gel based drug delivery system comprising self-emulsifying formulation, J.B. Naik, Vinod Mokale, Sunil Yadav, Jayesh Patil, 4063/MUM/2013, 2013

- 3. Fast release taste mask dry powder for oral suspension, J. B. Naik Umakant Verma, G. A. Khairnar, V.J. Mokale, J. S. Patil, 3782/MUM/2014, 2014
- Combinatorial Therapeutic Regimen of Antidiabetic with Antihypertensive Drugs, Jitendra B. Naik, Gokul A. Khairnar, Vinod J. Mokale, Pritam B. Patil, 3783/MUM/2014, 2014
- A method for measuring ethanol concentration in ethanol-water binary mixture, G. A. Bathe, A. K. Joshi, B. L. Chaudhari, Pritam B. Patil, and J. B. Naik, 14904/MUM/2016, 2016
- 6. Bioavailability enhancement and development of taste masked drypowder for oral suspension of antiviral agent, Umakant Verma, Gokul A. Khairnar, Rahul Rajput, Rajib Bandopadhyay, Nabarun Bhattacharyya, Jitendra B. Naik, 201721002522/MUM/2017

### **Research Publications:**

### A) Research Papers in International Journals (Selected):

- 1. "Mechanochemical Degradation of EVA-EPDM Blends", S. Mishra and J. B. Naik, 'Polym. Plast. Technol. Eng.' 36 (2), 231-240 (1997)
- 2. "Studies on Mechanical Properties of Polyvinyl Chloride", S. Mishra, G. B. Perumal and J. B. Naik, 'Polym. Plast. Technol. Eng.', 36 (4) 489-500 (1997)
- 3. "Absorption of Steam and Water at ambient temperature in Wood Polymer composites prepared from Agro-waste and Novolac", S. Mishra and J. B. Naik, 'J. Appl. Polym. Sci.', 68 (11), 1417-1421 (1998)
- 4. "Absorption of Water at ambient temperature and Steam in Wood Polymer composites prepared from Agro-waste and Polystyrene", S. Mishra and J. B. Naik, 'J. Appl. Polym. Sci.', 68 (4), 681-686 (1998).
- 5. "Studies on Swelling Behavior of Wood Polymer Composites Based on Agro-waste and HDPE", S. Mishra and J. B. Naik, 'Polym. Plast. Technol. Eng.' 38(5), 1051 1058, (1999)
- 6. "The compatibilising effect of maleic anhydride on swelling and mechanical Properties of plant-fiber-reinforced novolac composites", S. Mishra, J. B. Naik and Y. P. Patil, Composites Science and Technology, 67, 1729 1735 (2000)
- "Swelling Properties of Wood Polymer Composites Based on Agro-waste and Novolac", S. Mishra, J. B. Naik and Y. P. Patil, J. Advances in Polymer Technology 23, 46-50, (2004)
- 8. "Studies on Electrical Properties of Wood Polymer Composites Based on Agro-waste and Novolac", J. B. Naik and S. Mishra, 'Polym. Plast. Technol. Eng., 43 (4), 1085-1091, (2004)
- 9. "Mechanical Properties of Wood Polymer Composites prepared from Agro-waste and HDPE", S. Mishra and J. B. Naik, 'Polym. Plast. Technol. Eng, 44:511-522 (2005)
- "Effect of treatment of Maleic anhydride on Mechanical Properties of Natural fiber: Polystyrene Composites", S. Mishra and J. B. Naik, 'Polym. Plast. Technol. Eng., 44:663-675 (2005)
- 11. "Studies on Electrical Properties of Natural fiber: HDPE Composites", J. B. Naik and S. Mishra, 'Polym. Plast. Technol. Eng., 44:687-693 (2005)

- "The compatibilising effect of maleic anhydride on swelling properties of plant-fiberreinforced polystyrene composites", S. Mishra and J. B. Naik, Polym. Plast. Technol. Eng., 45: 923–927 (2006)
- "Esterification effect of maleic anhydride on surface and volume resistivity of natural fiber/Polystyrene composites, J. B. Naik and S. Mishra, Polym. Plast. Technol. Eng., 46: 537–540 (2007)
- 14. "Esterification effect of maleic anhydride on swelling properties of natural fiber: High Density Poly Ethylene composites", S. Mishra and J. B. Naik, J. Applied Polymer Science, 106 (4): 2571 -2574 (2007)
- 15. "Effect of polymer concentration on dissolution of Pioglitazone Hydrochloride", J. B. Naik, Syed Farook Ali and D. N. Muley, Polym. Plast. Technol. Eng., 47: 722–725, (2008)
- Antiinflammatory Activity of Ethanolic and Aqueous Extracts of Caralluma adscendens"
   J. B. Naik and D. R. Jadge, Journal of Pharmacy Research, 2(7), 1228-1229 (2009)
- 17. "Investigation of Scale mitigation and sequestering properties of some polyelectrolytes",J. B. Naik, S. Mishra and D. A. Deore, J. Polym. Plast. Technol. Engg. 49, 69-73 (2010)
- "Effect of polymer concentration on sustained release microparticles of Metformin hydrochloride prepared by using spray dryer", Preeti Subhedar, J. B. Naik and D. N. Muley, J. Polym. Plast. Technol. Engg. 49: 267–271 (2010)
- 19. "UV Spectrophotometric method development and validation for determination of Paroxetine hydrochloride in pharmaceutical dosage form", J. B. Naik and M. R. Syed, International Journal of Pharmacy Pharm. Sci., 2 (2), 43-45 (2010)
- 20. "Fast dispersible tablet of paroxetine hydrochloride: taste masking and administration in depressed patients", J. B. Naik and M. R. Syed, Lat. Am. J. of Pharmacy, 29 (5):667-73 (2010)
- 21. "Synthesis and Pharmacological Evaluation of Novel 1-(2-(Benzoyl- Substituted-2-phenyl-1H-Indol-5-Carbony) Hydrazinyloxy) Vinyl Nitrate Derivatives as Potent Non-Ulcerogenic, Analgesic and Anti-Inflammatory Agents, Vinod J Mokale, Mayuresh K. Raut, Prashant J Burange, Navneet S Dhoot, Shashikant V. Bhandari, Kailash G. Bothara and J. B. Naik, Medicinal Chemistry, 6, 211 218, 2010
- 22. "Ultrasound assisted miniemulsion synthesis of PANI/Ag nanocomposite and its application for ethanol vapor sensing", Shrikant S. Barkade, Jitendra B. Naik, Shirish H. Sonawane, Journal of Colloids & Surfaces Part A, 378, 94 98, 2011
- 23. "Development of sustained Release Micro/Nano particles Using Different Solvent Emulsification Technique: A Review" J. B. Naik, A.B. Lokhande, S. Mishra and R. D. Kulkarni, International Journal of Pharma and Biosciences, 3(4), 573-590, 2012
- 24. Preparation and characterization of biodegradable cefpodoxime proxetil nanocapsules, Dhiraj Muratkar Lakshya Untwal and Jitendra Naik, Asian Journal of Pharmaceutical Sciences, 7(2): 143-148, 2012
- 25. "Ultrasound assisted miniemulsion polymerization for preparation of polypyrrole zinc oxide (PPy/ZnO) functional latex for LPG sensing" S. S Barkade, D V Pinjari, A K Singh, P R Gogate, J.B. Naik, S. H. Sonawane , M Ashokkumar , and A.B. Pandit, Ind. Eng. Chem. Res. 52 (23): 7704–7712, 2013
- 26. "Enhancement of Solubility with Formulation & in-vitro Evaluation of Oral Nateglinide Compacts by Liquisolid Technique", Mokale Vinod, Naik Jitendra, Patil Komal, Chaudhari Rahul, K Gokul, Advances in Diabetes and Metabolism, 1 (3): 57-64 2013

- 27. Formulation and Development of Diltiazem Hydrochloride Sustained Release Alginate Beads by Ionotropic External Gelation Technique, Mokale Vinod, Naik Jitendra, Khairnar Gayatri, Khairnar Gokul, Advances in Pharmacology and Pharmacy, 1(3): 139-143, 2013
- Diclofenac Sodium-Loaded Eudragit
   Microspheres: Optimization Using Statistical Experimental Design, Rameshwar K. Deshmukh & Jitendra B. Naik, J Pharm Innov. 8:276-287, 2013
- 29. Removal of Brilliant Green from wastewater using conventional and ultrasonically prepared poly (acrylic acid) hydrogel loaded with kaolin clay: A comparative study, Sachin R. Shirsath, Anup P. Patil, Rohit Patil, Jitendra B. Naik, Parag R. Gogate, Shirish H. Sonawane, Ultrasonics Sonochemistry, 20: 914–923, 2013
- Ultrasound assisted synthesis of Polythiophene/SnO2 Hybrid nanolatex particles for LPG Sensing, S.S. Barkade, D.V. Pinjari, U.T. Nakate, A.K. Singh, P.R. Gogate, J.B. Naik, S.H. Sonawane, A.B. Pandit, Chemical Engineering and Processing: Process Intensification, 74, 115–123, 2013
- 31. Metformin hydrochloride microparticles for oral controlled release: effect of formulation variables Nilesh B. Kulkarni1, Pravin S. Wakte and Jitendra B. Naik, International Journal of Pharmacy and Pharmaceutical Sciences, 5 (3): 135-144, 2013
- 32. Formulation and development of nateglinide loaded sustained release ethyl cellulose microspheres by O/W solvent emulsification technique, Gokul Khairnar Vinod Mokale Jitendra Naik, Journal of Pharmaceutical Investigation, 44 (6): 411-422, 2014
- 33. "Effect of solvents, drug/polymer ratios, surfactant concentration on in vitro characteristics of repaglinide loaded poly (meth) acrylates nanoparticles: a comparative study", Jitendra B. Naik, Amolkumar B. Lokhande, Satyendra Mishra and Ravindra D. Kulkarni, Micro and Nano system, 6 (4): 241 253, 2014
- 34. Study of formulation variables influencing polymeric microparticles by experimental design, Rameshwar K. Deshmukh and Jitendra B. Naik, ADMET & DMPK, 2(1): 63-70, 2014
- 35. Aceclofenac Microspheres: Quality by Design Approach, Deshmukh RK, Naik JB, Material Science and Engineering C, 36 (C): 320-328, 2014
- 36. Enhancement of Solubility with Formulation & in-vitro Evaluation of Oral Nateglinide Compacts by Liquisolid Technique, Mokale Vinod, Naik Jitendra, Patil Komal, Chaudhari Rahul, Khairnar Gokul, Advances in Diabetes and Metabolism, 1(3): 57-64, 2013
- Preparation and Evaluation of Sustained Release Venlafaxine HCl Microspheres, Vinod Mokale, Jitendra Naik, Pankaj Wagh and Gokul Khairnar, Dhaka Univ. J. Pharm. Sci. 13(1): 83-91 2014
- 38. Formulation and development of nanoparticles for quick and complete release of Hydrochlorothiazide by nanonization technique, V. J. Mokale, Bharti Khatumaria, J. B. Naik, U. Verma, Micro and Nano system, 6: 109 -117, 2014
- 39. Chitosan reinforced alginate-controlled release beads of losartan potassium: design, formulation and in vitro evaluation, Vinod Mokale, Naik Jitendra, Sutar Yogesh, Khairnar Gokul, Journal of Pharmaceutical Investigation, 44(4): 243-252, 2014
- 40. Sodium alginate/ HPMC / liquid paraffin emulsified (o/w) gel beads, by factorial design approach; and in vitro analysis, Sunil Kumar Yadava, Jayesh S. Patil, Vinod J. Mokale and J. B. Naik, J Sol-Gel Sci Technol, 71: 60-68, 2014

- 41. The impact of preparation parameters on sustained release aceclofenac microspheres: a design of experiments, Jitendra B. Naik and Rameshwar K. Deshmukh, Advanced Powder Technology 26: 244–252 2015
- 42. Development and Evaluation of Nateglinide Loaded Polycaprolactone Nanoparticles, A. Lokhande, S. Mishra, R. Kulkarni and Jitendra Naik, Micro and Nanosystems, 7(1): 43-48, 2015
- 43. Optimization of sustained release aceclofenac microspheres using response surface methodology, Rameshwar K. Deshmukh and Jitendra B. Naik, Materials Science and Engineering C 48: 197–204, 2015
- 44. Nilesh Kulkarni, Pravin Wakte, Jitendra Naik, Development of floating chitosan-xanthan beads for oral controlled release of glipizide, International Journal of Pharmaceutical Investigation, 5 (2): 73-80, 2015
- 45. Amol S. Gawali, Rameshwar K. Deshmukh Jitendra B. Naik, Development and optimization of sustained release polymeric microparticles by screening design Journal of Pharmaceutical Investigation, 45: 349–358, 2015
- 46. Gokul Khairnar, Pritam Patil, Mokale Vinod, Jitendra Naik, Investigation on the development of Losartan Potassium sustained release microspheres by solvent evaporation methods, Micro and Nanosystems, 7(3): 190-196, 2015
- 47. S. K. Yadava, J. B. Naik, Jayesh S. Patil, V. J. Mokale, Ruby Singh, Enhanced solubility and bioavailability of lovastatin using stabilized form of self-emulsifying drug delivery system, Colloids and Surfaces A: Physicochem. Eng. Aspects, 481: 63–71, 2015
- 48. Pritam Patil, Gokul Khairnar, Jitendra Naik, Preparation and statistical optimization of Losartan Potassium loaded nanoparticles using Box Behnken factorial design: Micro reactor precipitation, chemical engineering research and design, 104, 98–109, 2015
- 49. V. J. Mokale, Harshada Patil, Ajit P. Patil, P. Shirude and Jitendra Naik, Formulation and optimization of famotidine proniosomes: an in vitro and ex vivo study, Journal of Experimental Nanoscience, 11 (2): 97-110, 2016
- 50. Pankaj Wagh, Jitendra Naik, Development of Mefenamic acid loaded polymeric microparticles using solvent evaporation and spray drying technique, Drying Technology 34 (5): 608-617, 2016
- Pritam Patil, Ganesh Gaikwad, Devidas Patil, Jitendra Naik, Gas Sensitivity Study of Polypyrrole Decorated Graphene Oxide Thick Film J. Inst. Eng. India Ser. D, 97 (1): 47-53, 2016
- 52. Pritam Patil, Ganesh Gaikwad, D.R.Patil, Jitendra Naik, Synthesis of 1-D ZnO nanorods and polypyrrole/1-D ZnO nanocomposites for photocatalysis and gas sensor applications Bulletin of material science, 39 (3): 655- 665, 2016
- 53. Mokale Vinod, Rajput Rahul, Patil Jayesh, Yadava Sunil, Naik Jitendra, Formulation of Metformin Hydrochloride nanoparticles by using spray drying technique and in-vitro evaluation of sustained release with 32-level factorial design approach, Drying Technology 34 (12): 1455- 1461, 2016
- Rameshwar K. Deshmukh and Jitendra B. Naik, Optimization of spray dried diclofenac sodium-loaded microspheres by screening design, Drying Technology, 34 (13): 1593-1609, 2016
- 55. Mrunal Waghulde and Jitendra Naik Poly-e-caprolactone loaded miglitol microspheres for treatment of Type-2 diabetes mellitus by using response surface methodology Journal of Taibah University Medical Sciences, 11(4): 364-373, 2016

- 56. P. S. Khobragade, D. P. Hansora, J. B. Naik, A. Chatterjee Flame retarding performance of elastomeric nanocomposites: A review, Polymer Degradation and Stability, 130: 194–244, 2016
- 57. Sunil Yadava, Jitendra Naik, Jayesh Patil and Vinod Mokale, Development of Encapsulated Self Healed Microparticles: Evaluation by RSM, Micro and Nanosystems, 8 (1): 31-40, 2016
- 58. R. K. Deshmukh, P. S. Wagh and J. B. Naik, Solvent evaporation and spray drying technique for micro-and nanospheres/ particles preparation: A review, Drying Technology 34 (15): 1758-1772, 2016
- 59. PS Khobragade, DP Hansora, JB Naik, J Njuguna, S Mishra, Preparation and analysis of multi-layered hybrid nanostructures, Applied Clay Science 132-133: 668-674, 2016
- 60. Pankaj Wagh, Amol Gawali and Jitendra Naik, Development of Ketoprofen Loaded Micro-/nanospheres Using Different Polymers, Current Nanomaterials, 1(3): 207-214 2016
- 61. Gokul Khairnar, Jitendra Naik and Vinod Mokale A statistical study on the development of micro particulate sustained drug delivery system for Losartan Potassium by 32 factorial design approach, Bulletin of Faculty of Pharmacy, Cairo University, 55:19-29 2017
- 62. J. S. Patil, P. B. Patil, P. Sonawane and J. B. Naik Design and development of sustained-release glyburide-loaded silica nanoparticles, Bull. Mater. Sci.,40(2): 263–270, 2017
- 63. M. R. Waghulde and J. B. Naik, Comparative study of encapsulated vildagliptin microparticles produced by spray drying and solvent evaporation technique, Drying Technology, 35(13): 1645–1655, 2017
- 64. Aniruddha Chatterjee, Prashant Khobragade, Satyendra Mishra, Jitendra Naik, Advanced Microemulsion Synthesis and Characterization of Wollastonite (CaSiO3) /Polystyrene (PS) One Dimensional (1D) Nano-rods with Core-Shell Structures, Particuology, 30: 118-128 2017
- 65. Prashant S. Khobragade, D. P. Hansora, Jitendra B. Naik, James Njuguna, Satyendra Mishra Core–double shell hybrid nanocomposites as multi-functional advanced materials, Polym. Bull., 74: 4681–4700, 2017
- 66. Amol Lokhande, S. Mishra, R. Kulkarni and Jitendra Naik, Preparation and characterization of Nateglinide loaded hydrophobic biocompatible polymer nanoparticles J. Inst. Eng. India Ser. D, 98 (2): 269-277 2017
- 67. Ganesh Gaikwad, Pritam Patil, Devidas Patil, Jitendra Naik Synthesis and evaluation of gas sensing properties of PANI based graphene oxide nanocomposites, Materials Science and Engineering: B, 218: 14–22, 2017
- RK Deshmukh, JB Naik, Formulation of Diclofenac Sodium-Loaded Ethylcellulose Microparticles Using 23 Factorial Design Approach Micro and Nanosystems, 9 (1) 7-15, 2017
- 69. Umakant Verma, Jitendra B. Naik, Jayesh S. Patil, Sunil K. Yadava, Screening of process variables to enhance the solubility of famotidine with 2-HydroxyPropyl–β-Cyclodextrin & PVP K-30 by using Plackett–Burman design approach, Materials Science and Engineering: C, 77: 282–292, 2017
- R Deshmukh, A Mujumdar, J Naik, Production of aceclofenac-loaded sustained release micro/nanoparticles using pressure homogenization and spray drying, Drying Technology 36(4): 459–467, 2018

- 71. P. S. Khobragade, J. B. Naik and A. Chatterjee, Polystyrene-grafted wollastonite nanofiller for styrene butadiene rubber nanocomposite: rheological, thermal and mechanical studies Polym. Bull. Online 2017
- 72. Prashant S. Khobragade, D. P. Hansora, Jitendra B. Naik, James Njuguna, Satyendra Mishra Effect of Multilayered Nanostructures on the Physico-Mechanical Properties of Ethylene Vinyl Acetate-Based Hybrid Nanocomposites, Polymer Composites, Online 2017
- 73. PS Khobragade, DP Hansora, JB Naik, J Njuguna, S Mishra, Physico-mechanical properties of nano polystyrene (nPS) decorated graphene oxide (GO)-epoxy composites Polymer International Online 2017
- 74. JB Naik, MR Waghulde, Development of vildagliptin loaded Eudragit® microspheres by screening design: in vitro evaluation Journal of Pharmaceutical Investigation, Online 2017
- 75. Mrunal Waghulde, Arun Mujumdar and Jitendra Naik, Preparation and characterization of miglitol-loaded Poly (d, l-lactide-coglycolide) microparticles using high pressure homogenization-solvent evaporation method, International Journal of Polymeric Materials and Polymeric Biomaterials, Online 2018
- 76. Pankaj Wagh, Arun Mujumdar and Jitendra B. Naik, Preparation and characterization of ketorolac tromethamine-loaded ethyl cellulose micro-/ nanospheres using different techniques, Particulate Science and Technology, Online 2018

# B) Conferences/Seminars/Workshops/Symposiums Attended:

- 1. National symposium on "Newer concepts in organic synthesis" Dr. B. A. M. University, Aurangabad, 20 21 March 1998
- 2. Workshop on "Needs of technology education" Dr. B. A. M. University, Aurangabad, 13th February 1999
- 3. Workshop on "Intellectual property right: Patent awareness" Dr. B. A. M. University, Aurangabad, 23rd June 2000
- 4. AICTE awareness workshop on Accreditation, Vishwakarma Institute of Technology, Pune, 8 – 9th April 2001
- 5. National conference on "Emerging Trends in Engineering Education" Govt. Engineering College, Aurangabad, 25-26 October 2002
- 6. Regional Seminar on Paryavaran Saurakshan ani Parikshan, Dept. of Environmental Science, Dr. B. A. M. University, Aurangabad, 12 March 2003
- 7. National seminar on "Effects of different chemical reactions and chemical processes on the imbalance of the environment" Devgiri College, Aurangabad, 24th January 2004
- 8. International conference on "Electroactive Polymers: Materials and Devices" Dalhousie (Himachal Pradesh) 1-5 Nov. 2004
- 9. State level workshop on Ph. D. programme, University of Pune, Pune, 14-15th January 2005.
- 10. One-day awareness programme on ISO 22000:2005, Mumbai 18th October 2005
- 11. 1st Indo-Japanese International conference on "Advances in Pharmaceutical Research and Technology" Mumbai, November 25-29, 2005
- 12. Chemcon 2007, Kolkatta, 27-30 December 2007

# C) Book Chapters:

- 1. J. B. Naik, V. J. Mokale, R. K. Deshmukh, S. V. Gawai, "Microencapsulation study by double emulsion solvent diffusion technique", Synthesis and Characterization of Nanostructured Materials, 393-398 (2010), Macmillan Publishers India Limited.
- 2. J. B. Naik and S. H. Pandav, "Preparation and Evaluation of Micro/nano Particles of Propranolol Hydrochloride within Ethyl cellulose using Solvent Evaporation Method", Emerging Trends in Nanotechnology and their Applications, 427-434 (2013), Pearson India
- 3. S. S. Barkade, G. R. Gajare, S. Mishra, J. B. Naik, P. R. Gogate, D. V. Pinjari, and S. H. Sonawane, Recent Trends in Carbon Nanotubes / Graphene Functionalization for Gas/Vapor Sensing: A Review, Chemical Functionalization of Nano Materials: Chemistry and Applications, Taylor & Francis Group, CRC Press, 869-891, 2015
- 4. Mrunal R. Waghulde, Jitendra B. Naik, Microencapsulation Techniques: Drug Delivery. A review, Encyclopedia of Polymer Applications, (Accepted) (Taylor & Francis).

# **D)** Conference proceedings:

- 1. "Influence of Operating Parameters on CaSO4 Nanoparticle Synthesis using Micro reactor", Pritam B. Patil and Jitendra B. Naik, Procedia Engineering (2013)
- 2. V. J. Mokale, Jitendra B. Naik, Sunil Kumar Yadava, Jayesh S. Patil and Umakant Verma, Glibenclamide Loaded PLA Nanoparticles Using Single Emulsion O/W Solvent Evaporation Method: A Factorial Design Approach Advances in Chemical Engineering and Technology, ELSEVIER, 51-54, 2014
- 3. Pritam Patil and Jitendra B. Naik, Microreactor Assisted Synthesis of Calcium Sulfate Nanostructures, Advances in Chemical Engineering and Technology, ELSEVIER, 55-58, 2014
- 4. Jayesh Patil, Sunil Kumar Yadava, Vinod J. Mokale and Jitendra B. Naik Preparation and Characterization of Single Pulse Sustained Release Ketorolac Nanoparticles to Reduce their Side-Effects at Gastrointestinal Tract Advances in Chemical Engineering and Technology, ELSEVIER, 59-62, 2014
- Umakant Verma, J. B. Naik and V. J. Mokale, Preparation and Characterization of the Inclusion Complex of Famotidine with (2-Hydroxy Propyl) –B-Cyclodextrin & PVP K-30: Effects on Solubility and Bitter Taste Mask, Advances in Chemical Engineering and Technology, ELSEVIER, 63-67 2014,
- 6. Gokul Khairnar, Pritam Patil, Jayesh Patil, Vinod Mokale and Jitendra Naik Development of Sustained Release Nanoparticles of Repaglinide By Using Micro Reactor Anti- solvent Precipitation Method, Advances in Chemical Engineering and Technology, ELSEVIER, 211-214, 2014
- 7. Swapnil Ghungrud, S Mayadevi and Jitendra B. Naik, Liquid Phase Acylation of Mesitylene over H-Beta Zeolite: A Kinetic Study, Advances in Chemical Engineering and Technology, ELSEVIER, 278-282, 2014
- 8. U Verma, R Rajput, JB Naik Development and characterization of Fast Dissolving Film of Chitosan Embedded Famotidine Using 32 Full Factorial Design Approach, Materials Today: Proceedings ELSEVIER, 5: 408-414, 2018

 M Waghulde, J Naik, Development and validation of analytical method for vildagliptin encapsulated poly-ε-caprolactone microparticles, Materials Today: Proceedings 5, 958– 964, 2018

## E) Visit Abroad: South Korea, China, Croatia, Malaysia

# **Additional Strengths:**

- ➢ Knowledge of operations of plants in Industry
- Well Conversant with Principles, Applications and Operations of Modern Instruments and Equipment's.

Sd/-Prof. Jitendra B. Naik