Curriculum Vitae: Prof. Vaishali S. Shinde

1. Name of the Dr. Vaishali S. Shinde

faculty:

2. Name of the Department of Chemistry

Department:

3. Educational M. Sc. Ph.D

qualifications:

4. Present position: Professor

5. Address for Department of Chemistry,

correspondence: Savitribai Phule Pune University,

Pune – 411 007, Maharashtra, India.

6. E-mail: <u>vsshinde@chem.unipune.ac.in</u>

vaishali.san@gmail.com

contact number: +91-20-25601395 Extn: 303

Mob.: 9763583089

7. Specialization: Organic Chemistry

8. Total teaching 20 yrs

experience:

9. Courses taught: Reaction Mechanism, Stereochemistry, Spectroscopy (UV, IR, Mass

and NMR including 2D NMR), Photochemistry, Free radicals, Carbenes, Carbohydrate Chemistry, Asymmetric Synthesis, Natural

Product Chemistry, and Polymer Chemistry, etc.

10. Research 24 yrs (including Ph. D.)

experience:

11. Awards /recognitions received:

Sr.No.	Award	Year
1.	Fellow of Maharashtra Academy of Science (FMASc),	Dec.
		2018
2.	Recipient of Young Associate award of Maharashtra Academy of Science	Nov.
	(MASc),	2014
3.	Recipient of Scholarship under Erasmus Mundus INDIA4EU programme of	May,
	European Commission at Alma Mater Studiorum Università di Bologna, Italy	2014
4.	Recipient of Scholarship under Erasmus Mundus EXPERTS III programme of	August
	European Commission at Uppsala University, Sweden	2013
5.	Recipient of Young Scientists Research Award - DAE, Trombay, Mumbai	March
		2009
6.	Recipient of "Better Opportunities for Young Scientists in Chosen Areas of	March
	Science & Technology (BOYSCAST)" fellowship of DST, New Delhi	2006
7	Recipient of Young Scientists Award, DST-SERC, New Delhi	Nov.
		2004
8.	Recipient of Senior Research Fellowship (SRF), CSIR, New Delhi,	June
		1998



12. Research Projects:

Sr. No.	Title	Funding Agency	Period	Grant (Rs. in Lakh)
1.	Design and Synthesis of New Glycopolymers	DST, New Delhi	3 Yrs (2004 - 07)	12.68
2.	Glyco-polymeric Gels: Synthesis and Swelling Studies of Copolymer of Sugar Acrylamide and NIPA	BCUD, UoP	2 Yrs (2006-08)	3.00
3.	Design and Synthesis of Smart Polymers as Extractant For Metals Ions	DAE, Mumbai	3 Yrs (2010-2012)	16.90
4.	Synthesis of some antiviral benzimidazole nucleosides and their analogues	DST, New Delhi	3 Yrs (2010-2012)	20.48
5.	Stereocontrolled synthesis of biologically active six membered lactones	BCUD, UoP	2 Yrs (2009-11)	2.00
6.	Synthesis and Evalution of Novel Extractant for Actinide partitioning	BARC, Mumbai	3 Yrs (2008-11)	0.75
7.	D TIN CPP IMPs 06	Cheminova India Ltd., Mumbai	05 months (Feb. 2011- July 2011)	2.76
8.	Syntheses, structures and properties of metal complexes with 2-substituted benzimidazoles	BCUD, SPPU	2 Yrs (2012-14)	2.70
9.	Synthesis of biologically active polyhydroxylated azetidine and azocane alkaloids	CSIR, New Delhi	3 yrs (2015-2018)	6.0
10.	Hydrogels-metal nanoarchitectures for promising biomedical application	BARC, Mumbai	5 Yrs (2013- 18)	13.36
11.	Design and Synthesis of Smart Polymers as Extractant For Metals Ions	DAE, Mumbai	3 Yrs (2010-2013)	16.90
12.	Nanoparticle embedded biodegradable microgels for potential anticancer drug delivery system	SERB-DST	2015-2018	30.00

13. Number of students awarded Ph.D. degree: 10

Sr.	Name of the	Topic of research	Date of	Date of
No.	student		registration	Declaration
1	Dr. Vishwas	Synthesis and Bioevaluation of 3-	21 st Oct. 2005	17 th Feb. 2011
	Pawar	Hydroxypiperidines, α-		
		Hydroxylactones and Synthesis of		
		Thermosensitive Glycopolymers		

		from D-Glucose		
2	Dr. Ajay Patil	Synthesis and evaluation of Actinide partitioning Agents	12 th June 2010	15 th Oct. 2013
3.	Dr. Vyankat Sontakke	Synthesis and Bioevaluation of Benzimidazoles, their Nucleosides and Stability Study of Nucleotide Prodrugs	14 th June 2011	9th Sept., 2015
4.	Dr. Deepanjali Gurav	Biopolymer Based Theranostic Agents for Anticancer activity and	13 th March 2012	18th Dec., 2015
5.	Dr. Sashikant Bhorkade	Synthetic Studies towards Aminocyclitol, Polyhydroxy Octahydroindole, Lysidicin A and Mutisianthol	June 2011	5th Feb., 2016
6.	Pravin Lawande	Synthesis and Bioevaluation of Polyhydroxylated Azetidine Iminosugars and Benzimidazole Nucleosides from D- Glucose	23 rd March 2013	27 th Feb. 2017
7.	Anant Kangare	Polymeric composites for extraction of metals and development of the gold nanoparticles for biomedical sensing applications	23 rd March 2013	21 st Dec. 2017
8.	Tukaram Urmode	Synthetic Studies towards Derivatives of Prenostodione, Nostodione A, Carbolines, Azacarbolines and High Energy Materials - TNAD and CL-20	27 th August 2015	1 st June 2018
9.	Anuja Kulkarni	Silver Nanoparticles Containing Glycogels and Curcumin Loaded Microgels, Nanofibers for Biomedical Applications	5 th April 2013	1 st Oct. 2018
10.	Archana Dhumare	Click Chemistry Approach Towards Synthesis of Triazole containing Disaccharides, Glycopolymers and Their Applications	5 th April 2013	21 st Nov. 2018

14. Number of students registered for Ph.D. degree: 04

Sr.	Name of the student	Topic of research	Date of registration
No.			
1	Mr. M. P. Raghav Rao	Phenolic resin	5 th July 2016
2	Mr. Kamlesh Lodha	Synthesis of bioactive molecules	5 th July 2016
3	Mr. Sunil Patil	Synthesis of fluorinated compounds	7 th Sept. 2018
4	Mr. Nilesh Gosavi	Synthesis of organic bioactive molecules	7 th Sept. 2018

15. Number of students awarded M.Phil. degree: 02

Sr. No.	Name of the student	Topic of research	Date of Declaration
1	Ms. Madhavi Girme	Thermoresponsive Polystyrene- <i>b</i> -Poly(<i>N</i> -isopropylacrylamide) Copolymers by Atom Transfer Radical Polymerization	

2.	Ms. Prajkta Tanpure	Molecular Imprinted Polymers	2019
----	---------------------	------------------------------	------

16. Participation in conferences, symposia, seminars and workshops:

Sr. No.	Title of the paper presented	Title of Conference / Seminar	Organized by	Whether internationa l/National
1.	Curcumin loaded gelatin nanofibrous mats for wound healing application	MACRO 2018	IISER, Pune, NCL Pune, SPPU, Pune	International
2.	pH-responsive targeted and controlled doxorubicin delivery using hyaluronic acid nanocarriers	Advanced Polymers for Science and Technology (APST- 2016), 24 th -26 th Oct. 2016	VIT Vellore	International
3.	Biopolymers based Theranostic Agents for anticancer activity	National Conference on Chemical Sciences: An Interdisciplinary Approach 18 th -20 th Jan 2018	(CSIA-2018), Modern College of Arts, Science and Commerce, Ganeshkhind, Pune	National
4.	IR-Spectroscopy and Problem solving on Spectroscopy	"Science Academies Refresher course in Chemistry' 27 th Nov. to 11 th Dec.2017	Modern College of Arts, Science and Commerce, Ganeshkhind, Pune	National
5.	Synthesis of Hetreocycles and Polymers from Carbohydrates	National Seminar on Heterocyclic Chemistry March 27- 28, 2018	Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur	National
6.	1H-NMR: Tool for stereochemistry	State level conference on "Green Chemistry" sponsored by BCUD, Savitribai Phule Pune University 9th and 10th February 2016	Department of Chemistry of Shri Shiv Chhatrapati College of Arts, Commerce and Science, Junnar	State level
7.	Synthesis, Characterization and Thermal studies of New thermo- responsive glycopolymers and their Copolymers with N- isopropyl acrylamide	International symposium on Polymer Science and Technology, MACRO 2015, 23 rd -26 th January 2015	IACS, Kolkata	International

8.	Synthesis and anticancer activity of 2,5-disubstituted benzimidazoles	Practical applications of modern tools in Organic synthesis	IISER Pune	National workshop
9.	Synthesis and Stability of Nucleoside 3´,5´-Cyclic Phosphate Triesters Masked with Biodegradable and Thermo- labile Phosphate Protecting Groups	10 th International Symposium on Bio- Organic Chemistry (ISBOC-10)	IISER Pune	International Symposium
10.	Synthesis of Biologically Active Polyhydroxylated Azetidine Alkaloids	27 th International Carbohydrate Symposium – 2014 (12 th – 17 th January 2014)	Indian Institute of Science, Bangalore, India	International Symposium
11.	Fabrication of PNiAM hydrogel Silver Nanocomposite and its antibacterial activity-Poster	MACRO 23 rd -26 th January 2015	IACS Kolkata	International
12.	Designing and synthesis of polyhydroxylated Azocane as glycosidase inhibitors	9 th Junior national organic symposium trust (JNOST)	IISER, Bhopal Dec.6 th to 9 th , 2013; Poster	National Level
13.	Design and Synthesis of Smart Polymers as Extractant for Metals Ions	41 st BSC Meeting YSRAM symposium 26 th - 27 th Nov. 2012.	BARC, Mumbai	Nationa1
14.	Pulse Radiolysis study of Malonic acid diamide analogues for their evaluation as radical scavenging agents	National Symposium on Radiation and Photochemistry (NSRP 2013) March 20 -22 2013	North Eastern Hill Univ., Shillong (Meghalaya)	National
15.	Novel dipicolinamide- dicarbollide synergistic solvent system for actinide extraction	Nuclear and Radiochemistry Symposium (NUCAR- 2013) Feb.19- 23 th , 2013;	Govt. Model Science College, Jabalpur, India	National Level
16.	Extraction Studies of Am(III) using Malonamides Dissolved in Ionic Liquids	Plutonium Futures July, 15 th to 20 th , 2012;	Cambridge Univ. London, UK	International conference
17.	Synthesis, anticancer evalution and QSAR studies of 2-arylbenzimidazoles	Perspectives of organic synthesis, 24 th March 2012	Dept. of Chemistry,UoP	National Symposium
18.	Synthesis of radiation induced hydrogels	Workshop on radiation and photochemistry	Dept. of Chem.,UoP	National level
19.	Synthesis of Glycopolymers, Natural Products and Nucleosides from Carbohydrates	Mini Symposium on Pune University Uppsala University (Sweden) Interactive meeting, on 28 th and 29 th Nov. 2011	Department of Chemistry, UoP	University Level
20.	Glycopolymers-Grafted Polystyrene Nanospheres	Two Day workshop on Carbohydrate based	National Chemical Lab.,	Nationa1

		chemical industry Aug. 17 and 18, 2011.	Pune	
21.	New synthesis for N,N'- dimethyl-N,N'-dioctyl-2,(2'- hexyloxyethyl) malonamide (DMDOHEMA) and its evaluation for actinide partitioning	NUCAR-2011, GITAM University, Visakhapatnam, Andhra Pradesh	BARC, Mumbai	Nationa1
22.	Efficient synthesis of important actinide partitioning agent N,N'-dimethyl-N,N'-dioctyl-2,(2'-hexyloxyethyl) malonamide (DMDOHEMA)	SESTEC-2010, Indira Gandhi Center for Atomic research, Kalpakkam	BARC, Mumbai	National
23.	New synthesis route for N,N'-dimethyl-N,N'-dioctyl-2,(2'-hexyloxyethyl) malonamide (DMDOHEMA)" and its evaluation under simulated high level waste conditions	CRSI Zonal Meeting 13-14th May 2011	National Chemical Laboratory, Pune	Regional Level
24.	Stereocontrolled synthesis of biologically active six membered lactones	Innovation 2010 22 nd , 23 rd March 2011	BCUD, Dept. of Chemistry, UoP, Pune	University level

17. Participation as a resource person:

Sr.	Title of Lecture / Academic	Title of Conference /	Organized by
No.	Session	Seminar etc	•
1.	Synthesis, Characterization and	International symposium on	IACS, Kolkata
	Thermal studies of New thermo-	Polymer Science and	
	responsive glycopolymers and	Technology, MACRO 2015,	
	their Copolymers with <i>N</i> -	23 rd -26 th January 2015	
	isopropylacrylamide		
2.	NMR Spectroscopy as a tool	Recent Trends &	SMBST College,
	for structure elucidation	challenges in Chemical	Sangamner, Ahmednagar
	of organic compounds	Scienec & Technology-	
		2014, 28, 29- Dec. 2014	
3.	Synthesis and Bioevaluation of	Emerging Trends in	M. J. Shinde College,
	3-Hydroxypiperidines, α-	Organic Chemistry	Shrigonda, Ahmednagar
	Hydroxylactones and Synthesis	26 th , 27 th Dec. 2014	
	of Glycopolymers from D-		
	Glucose		
4.	Glycopolymer Grafted	Seminar to the students of	Dipartimento di Scienze
	Polystyrene Nanospheres	two different PhD Schools	Farmacologiche e
		of UNIMI,	Biomolecolari (DiSFeB)
		28 th May 2014	Università di Milano
			Milano, Italy
5.	Phase Transitions in	Seminar for Ph. D. students,	Dipartimento di Chimica
	Thermosensitive Polymers and	30 th May 2014	'G. Ciamician'
	Synthesis of Glycopolymers-		Università di Bologna
	Grafted Polystyrene Nanospheres		Bologna Italy
6.	Synthesis of 2-anthryl substituted	Hindi symposium on	National Chemical

	benzimidazole derivatives	organic synthesis	Laboratory,
	and their DNA cleavage, DNA	19 th June 2014	Pune 411008, INDIA
	binding and anticancer activity		
7.	Applications of	Advanced spectral methods	D.P. Bhosale College,
	IR spectroscopy	of analysis on 23 rd Dec.	Koregaon, Satara,
		2013	
8.	Chemical safety	Safety Symposium at IBB	Institute of Bioinformatics
		to be held on 3 rd Nov 2012	& Biotechnology (IBB),
			University of Pune
9.	Ultraviolet spectroscopy	Scope, opportunities,	CIDCO College, Nashik
		applications of Chemical	
		Sciences; 2 nd -3 rd Mar. 2013	
10.	Applications of	Workshop on materials	Banasthali Vidyapith-
	IR spectroscopy	characterization techniques	304 022 (Rajasthan),
		October 03-07, 2012	INDIA
11.	IR-spectroscopy and its	Workshop on "Instrumental	Dept. of Chemistry,
	applications	Techniques in Chemical	BAMU-Aurangabad,
		Sciences" 25 th , 26 th Feb	Sub-campus Osmanabad
		2012	
12.	Polymers and Research	Seminar on Recent Trends	ACS College,
		in Chemistry	Narayangaon
		17 th , Feb. 2012	

18. Participation in curricular development:

• SET Exam.: paper setter

• PET Exam.: paper setter

• Ph. D. Exam.: Referee for Pre-registration, Pre-synopsis, Viva-voce

• M. Phil Exam.: Paper setter, examiner

• M. Sc. Entrance Exam. and admission- Paper setter

Details of Seminars/ Conferences/Workshops organized at university, state, national and international level and the source of funding.

Sr. No	Name of Conference/ Seminars / Workshops	Funding agency	No. of Participants	University/State/National/ International	Dates
1	MACRO 2018	SPSI	600	International	19 th -22 nd Dec. 2018
2	Advanced Perspectives of Organic Synthesis	DST- PURSE	110	National	24 th and 25 th Feb 2018
3	Teaching Pedagogy in Medicinal Chemistry at Post-Graduate level"	BCUD SPPU	30	University	10 th Dec., 2016
4	Prof. N. S. Narasimhan Endowment Lecture Series at the P. C. Ray Hall	Department of Chemistry	100	State	12 th Aug. 2016

19. Research Publications:

- 45. Biginelli Reaction: Polymer Supported Catalytic Approaches Rajendra Patil, Jagdish Chavan, Dipak S Dalal, **Vaishali S. Shinde**, and Anil Beldar *ACS Comb. Sci.*, **2019**, Just Accepted Manuscript DOI: 10.1021/acscombsci.8b00120.
- 44. Platanus orientalis Leaf Mediated Rapid Synthesis of Catalytic Gold and Silver Nanoparticles Shriya Shende, Komal A Joshi, Anuja S Kulkarni, Chaitanya Charolkar, **Vaishali S Shinde**, Vijay Singh Parihar, Rohini Kitture, Kaushik Banerjee, Narayan Kamble, Jayesh Bellare, and Sougata Ghosh Journal of Nanomedicine & Nanotechnology, **2018**, 9, 2, 2157-7439
- 43. Litchi chinensis Peel: A Novel Source for Synthesis of Gold and Silver Nanocatalysts Shriya Shende, Komal A Joshi, Anuja S Kulkarni, **Vaishali S Shinde**, Vijay Singh Parihar, Rohini Kitture ,Kaushik Banerjee, Narayan Kamble, Jayesh Bellare and Sougata Ghosh Glob J Nanomed , **2017**, 3, 1.
- 42. Polyhydroxylated azetidine iminosugars: Synthesis, glycosidase inhibitory activity and molecular docking studies
 Pravin P. Lawande, Vyankat A. Sontakke, Navanath M. Kumbhar, Tanay R. Bhagwat,

Vaishali S. Shinde

Bioorganic & Medicinal Chemistry Letters, 2017, 27, 5291–5295

41. Synthesis of Ionically Crosslinked N-Succinyl Chitosan Hydrogel Beads for Recovery of Palladium from Acidic Aqueous Solution.

Anant B. Kanagare, J. K. Ajish, K. K. Singh, **V. S. Shinde**, M. Kumar *AJMC* **2017**, 2, 60-68

40. Synthesis of D2EHPA Impregnated Polymeric Beads for Extraction of Zinc from Zinc-rich Waste Liquor

Anant B. Kanagare, K.K. Singh, M. Kumar, M. Yadav, R. Ruhela, A.K. Singh, A. Kumar, V. S. Shinde

Current Applied Polymer Science, 2017, 1, 1-12

- 39. Synthesis of spiroindolone scaffolds by Pictet-Spengler spirocyclisation using β-cyclodextrin-SO 3 H as a recyclable catalyst TD Urmode, MA Dawange, VS Shinde, RS Kusurkar Tetrahedron, **2017**, *73*, 4348-4354.
- 38. DTDGA Impregnated XAD-16 Beads for Separation of Gold from Electronic Waste Solutions Anant B. Kanagare, Krishan Kant Singh, Manmohan Kumar, Manoj Yadav, Ritesh Ruhela, Ajoy K. Singh, Asheesh Kumar, and Vaishali S. Shinde*
 Industrial & Engineering Chemistry Research, **2016**, *55* (49), 12644–12654
- 37. Dioscorea oppositifolia Mediated Synthesis of Gold and Silver Nanoparticles with Catalytic Activity

Sougata Ghosh*, Sonal P Gurav, Ashwini N Harke, Maliyackal Jini Chacko, Komal A Joshi, Aarti Dhepe, Chaitanya Charolkar, **Vaishali Shinde**, Rohini Kitture, Vijay Singh Parihar, Kaushik Banerjee, Narayan Kamble, Jayesh Bellare and Balu A Chopade *J. Nanomed. Nanotechnol.*, **2016**, *7*(*5*), 1000398.

- 36. Barleria prionitis Leaf Mediated Synthesis of Silver and Gold Nanocatalysts Sougata Ghosh*, Maliyackal Jini Chacko, Ashwini N. Harke, Sonal P. Gurav, Komal A. Joshi, Aarti Dhepe, Anuja S. Kulkarni, **Vaishali S. Shinde,** Vijay Singh Parihar, Adersh Asok, Kaushik Banerjee, Narayan Kamble, Jayesh Bellare and Balu A. Chopade *J. Nanomed. Nanotechnol.*, **2016**, *7*(2), 1000394
- 35. Dithiodiglycolamide Impregnated XAD-16 Beads for Separation and Recovery of Palladium from Acidic Waste
 - A. B. Kanagare, K.K. Singh, K. K. Bairwa, R. Ruhela*, V. S. Shinde, M. Kumar*, A. K. Singh *Journal of Environmental Chemical Engineering*, **2016**, 4 (3), 3357-3363.
- 34. 5-Mercuricytosine: An Organometallic Janus Nucleobase Dattatraya Ukale, **Vaishali S. Shinde**, and Tuomas Lonnberg* *Chem. Eur. J.*, **2016**, *22*, 7917 7923.
- 33. *In situ* formation of silver nanoparticles in thermosensitive glycogels and evaluation of its antibacterial activity

Anuja S Kulkarni, Vaishali P Dhanwe, Archana B Dhumure, Ayesha Khan, **Vaishali S Shinde***, Pawan Kumar Khanna

Indian Journal of Chemistry A, 2016, 55, 441-446.

32. Antiproliferative activity of bicyclic benzimidazole nucleosides: synthesis, DNA-binding and cell cycle analysis

Vyankat A. Sontakke, Pravin P. Lawande, Anup N. Kate, Ayesha Khan, Rakesh Joshi, Anupa A. Kumbhar and **Vaishali S. Shinde***

Org. Biomol. Chem., 2016, 14, 4136-4145.

31. pH-responsive targeted and controlled doxorubicin delivery using hyaluronic acid nanocarriers

Deepanjali D. Gurav, Anuja S. Kulkarni, Ayesha Khan, **Vaishali S. Shinde*** *Colloids and Surfaces B: Biointerfaces*, **2016**, *143*, 352–358.

30. Gnidia glauca Leaf and Stem Extract Mediated Synthesis of Gold Nanocatalysts with Free Radical Scavenging Potential

Sougata Ghosh, Sumersing Patil, Niraja B. Chopade, Soching Luikham, Rohini Kitture, Deepanjali D. Gurav, Ajay B. Patil, Suvarna D. Phadatare, Vyankat Sontakke, Sangeeta Kale, **Vaishali Shinde**, Jayesh Bellare and Balu A. Chopade1*

J. Nanomed. Nanotechnol., 2016, 7(2), 1000358.

29. Synthesis of Potassium Nickel Hexacyanoferrate Encapsulated Polymeric Beads for Extraction of Cesium

Anant B. Kanagare, Krishan Kant Singh, G. Kiran Kumar, Vaishali S. Shinde, M. Kumar *International Journal of Innovative Research in Science, Engineering and Technology*, **2016**, *5*(1), 265-273.

28. Total synthesis of (±) mutisianthol and (±) epi-mutisianthol via intramolecular oxidative Heck cyclization approach

Shashikant B. Bhorkade *, Kishor B. Gavhane, **Vaishali S. Shinde** *Tetrahedron*, **2016**, *72*, 1954-1959.

27. Thermoresponsive copolymers with pendant D-galactosyl 1,2,3-triazole groups: synthesis, characterization and thermal behavior

Archana B. Dhumure, Ajay B. Patil, Anuja S. Kulkarni, Irina Voevodina, Mariastella Scandolab and **Vaishali S. Shinde***

New J. Chem, 2015, 39, 8179-8187.

26. Synthesis of polyhydroxylated azetidine iminosugars and 3-hydroxy-*N*-methylazetidine-2-carboxylic acid from D-glucose

Pravin P. Lawande, Vyankat A. Sontakke, Roopa J. Nair, Ayesha Khan, Sushma G. Sabharwal, **Vaishali S. Shinde***

Tetrahedron, 2015, 71, 5085-5090.

25. Synthesis, DNA interaction and anticancer activity of 2-anthryl substituted benzimidazole derivatives

Vyankat A. Sontakke, Anup N. Kate, Sougata Ghosh, Piyush More, Rajesh Gonnade, Navanath M. Kumbhar, Anupa A. Kumbhar, Balu A. Chopade and **Vaishali S. Shinde*** *New J. Chem*, **2015**, 39, 4882-4890.

24. A Novel Solvent System Containing a Dipicolinamide in Room Temperature Ionic Liquids for Actinide Ion Extraction

Ajay B. Patil, P. N. Pathak, V. S. Shinde, M. Yu. Alyapyshev, V. A. Babain, P. K. Mohapatra *Journal of Radioanalytical & Nuclear Chemistry (JRNC)*, **2015**, 1-8.

23. New extractant N,N'-dimethyl-N,N'-dicyclohexyl-2,(2'-dodecyloxyethyl) malonamide (DMDCDDEMA) for radiotoxic acidic wastes remediation: synthesis, extraction and supported liquid membrane transport studies

Ajay B. Patil, **Vaishali S. Shinde***, P. N. Pathak, P. K. Mohapatra *Separation and Purification Technology*, **2015**, 145, 83–91.

22. Synthesis and Stability of Nucleoside 3',5'-Cyclic Phosphate Triesters Masked with Enzymatically and Thermally Labile Phosphate Protecting Groups Vyankat A. Sontakke, **Vaishali S. Shinde**, Harri Lönnberg, and Mikko Ora* *Eur. J. Org. Chem.* **2015**, 389–394.

Evaluation of Malonic acid diamide analogues as radical scavenging agents
 Ajay B. Patil, Sougata Ghosh, Suvarna D. Phadatare, Priyanath N. Pathak, Geeta K. Sharma,
 Balu. A. Chopade, Vaishali S. Shinde*
 New J. Chem, 2015, 39, 1267-1273.

20. Diosgenin from Dioscorea bulbifera: Novel Hit for Treatment of Type II Diabetes Mellitus with Inhibitory Activity against α-Amylase and α-Glucosidase Sougata Ghosh; Piyush More; Abhishek Derle; Ajay B. Patil; Pramod Markad; Adersh Asok;

Sougata Ghosh; Piyush More; Abhishek Derle; Ajay B. Patil; Pramod Markad; Adersh Asok; Navanath Kumbhar; Mahemud L. Shaikh; Boppana Ramanamurthy; **Vaishali S. Shinde**; Dilip D. Dhavale; Balu A. Chopade*

PLOS ONE, 2014, 9, 1-9.

19. Synthesis and evaluation of N, N'-dimethyl-N, N'-dicyclohexyl-malonamide (DMDCMA) as an extractant for actinides

Ajay B. Patil, **Vaishali S. Shinde**, P. N. Pathak, P. K. Mohapatra *Separation Science and Technology*, **2014**, 49 (18), 2927-2932.

18. A Novel Dipicolinamide-Dicarbollide Synergistic Solvent System for Actinide Extraction Ajay B. Patil, Priyanath Pathak, **Vaishali S. Shinde***, M. Yu. Alyapyshev, Vasiliy A. Babain, and Prasanta K. Mohapatra* *Radiochim. Acta* **2014**, 102 (6), 481-487.

17. Phytochemical Analysis and Free Radical Scavenging Activity of Medicinal Plants Gnidia glauca and Dioscorea bulbifera

Sougata Ghosh, Abhishek Derle, Mehul Ahire, Piyush More, Soham Jagtap, Suvarna D. Phadatare, Ajay B. Patil, Amit M. Jabgunde, Geeta K. Sharma. **Vaishali S. Shinde,** Karishma Pardesi, Dilip D. Dhavale, Balu A. Chopade *PLOS ONE*, **2013**, *8*, 1-18.

16. A simple, efficient synthesis of 2-arylbenzimidazoles using silica supported periodic acid catalyst and evaluation of anticancer activity

Vyankat A. Sontakke, Sougata Ghosh, Pravin P. Lawande, Balu A. Chopade, **Vaishali S. Shinde***

ISRN Org. chem., 2013, 1-7.

15. Evaluation of DMDOHEMA based supported liquid membrane system for high level waste remediation under simulated conditions;

Ajay B. Patil, Pankaj Kandwal, **V. S. Shinde***, P. N. Pathak, P. K. Mohapatra; *J. Membra. Sci.*, **2013**, *442*, 48–56.

- 14. Modified Synthesis Scheme for *N*,*N*'-dimethyl-*N*,*N*'-dioctyl-2,(2'-hexyloxyethyl) malonamide (DMDOHEMA) and its Comparison with Proposed Solvents for Actinide Partitioning; Ajay B. Patil, **Vaishali. S. Shinde**, P. N. Pathak, P. K. Mohapatra, V. K. Manchanda; *Radiochim. Acta*, **2013**, *101*, 93-100.
- 13. Efficient solvent system containing Malonamides in Room Temperature Ionic Liquids: Actinide extraction, Fluorescence and Radiolytic Degradation Studies;

Ajay B. Patil, Priyanath Pathak, **Vaishali S. Shinde***, Shrikant V. Godbole, Prasanta K. Mohapatra;

Dalton Trans; 2013, 42 (5), 1519 - 1529.

12. Gnidia glauca flower extract mediated synthesis of gold nanopartcles and evalution of its chemocatalytic potential.

Ghosh S., Patil S., Ahire M., Kitture R., Gurav D. D., Jabgunde A. M., Kale S., Pardesi K., **Shinde V. S.**, Bellare J., Dhavale D. D., Chopade B. A. *Journal of Nanobiotechnology* **2012**, 10-17.

11. Thermoresponsive Polystyrene-*b*-Poly(*N*-isopropylacrylamide) Copolymers by Atom Transfer Radical Polymerization.

Vaishali S. Shinde*, Madhavi R. Girme and Vishwas U. Pawar, *Indian Journal of Chemistry A*, **2011**, *50A*(*6*), 781-787.

10. Chiron approach to the synthesis of (–)—Yashabushidiol B, (3*S*,5*S*)-1-(4'-hydroxyphenyl)-7-phenyl-3,5-heptanediol and its 4'-methoxy analogue.

Vishwas Pawar and Vaishali Shinde*

Tetrahedron: Asymmetry, **2011**, 22, 8-11.

9. Glycopolymer-Grafted Polystyrene Nanospheres.

Andre Pfaff; **Vaishali Shinde**; Yan Lu,.; Alexander Wittemann, ; Matthias Ballauff, and Axel Müller.

Macromol. Biosci., 2011, 11, 199-210.

8. Intramolecular Reductive Cyclization Strategy to the Synthesis of \$\Boxed{10} \Boxed{10} \Boxed{16}\$-Methyl-3-hydroxy-piperidine-2-carboxylic acid, \$\Boxed{10} \Boxed{10}\$-6-Methyl-(2-hydroxymethyl)-piperidine-3-ol and Their Glycosidase Inhibitory Activity.

Vishwas Pawar, Sanjay Chavan, Sushma Sabharwal and Vaishali Shinde*.

Bioorg. Med. Chem. 2010, 18, 7799-7803.

7. Design and Synthesis of Harzialactone Analogues: Promising Anticancer Agents.

Vishwas Pawar, Sougato Ghosh, Balu Chopade and Vaishali Shinde*.

Bioorg. Med. Chem. Lett. 2010, 20, 7243-7245.

6. Synthesis of Thermosensitive glycopolymers Containing D-glucose Residue: Copolymers with *N*-isopropylacrylamide.

Vaishali S. Shinde* and Vishwas U. Pawar,

J. App. Polym Sci. 2009, 111, 2607-2615.

5. Intramolecular 5-endo-Trig Aminomercuration of α -Hydroxy- \mathbb{V} -alkenyl amines: Efficient Route to a Pyrrolidine Ring and Its Application for the Synthesis of (+)-Castanospermine and Analogues.

N. S. Karanjule, S. D. Markad; V. S. Shinde, D. D. Dhavale,

J. Org. Chem.; 2006, 71, 4667-4670.

4. Core-Shell morphology in Poly(*N*-isopropyl acrylamide) copolymer gels induced by restricted diffusion of surfactant.

V. S. Shinde, M. V. Badiger, A. K. Lele and R. A. Mashelkar,

Langmuir, 2001, 17, 2585-2588.

3. Mesoscopic morphologies in stimuli-responsive gels: Coupling between phase separation and gelation .

A. K. Lele, M. V. Badiger, V. S. Bhalerao (Mrs. V. S. Shinde), S. N. Sainkar and R. A. Mashelkar in "Structure and Dynamics of Materials in the Mesoscopic Domain", M. Lal, R. A. Mashelkar, B. D. Kulkarni, V. M. Naik, (Eds.), Proceedings of the fourth Royal Society-Unilever Indo-UK forum in materials Science and Engineering, Pune, India, Dec. 8-12, 1997, Imperial College Press and the Royal Society, London, 1999, 119-138.

2. Thermoreversible Hydrogel based on Radiation Induced Copolymerisation of Poly(*N*-isopropyl acrylamide and Poly(ethylene oxide).

V. S. Bhalerao (**Mrs. V. S. Shinde**), S. Varghese, A. K. Lele and M. V. Badiger, *Polymer*, **1998**, *39*, 2255-2260.

Molecular Tailoring of Thermoreversible Copolymer Gels: Some New Mechanistic Insights.
 M. V. Badiger, A. K. Lele, V. S. Bhalerao (Mrs. V. S. Shinde), S. Varghese and R. A. Mashelkar,

J. Chem. Phys. 1998, 109, 1175-1184