# Teacher Profile



## 1. Personal Details:

Name	: Dr. MADHUKAR BABURAO DESHMUKH
Designation	: Professor of Chemistry, Shivaji University,
	Kolhapur
Date of Birth	: 1st April, 1954
E-mail Address	: <u>shubhlaxmi111@gmail.com,&amp;</u>
	m_deshmukh1@rediffmail.com
Permanent Address	: Plot-A/3, 'Shubham', Behind Tara
	Terraces, Chankynagar, Kolhapur-
	416008, Mah. India.
Phone	: +91-231-2609162 (Chem.) +91-231-2609321 (AGPM)
Mobile	: 9860071848

2. Academic Details:

Sr. No.	Examination	Board/University	Class/Marks	Year of passing
1.	H.S.C.	S.S.C. Board, Pune	First class with Dist. (72.5%)	1971
2.	B.Sc. ( with Rank)	Shivaji University, Kop.	First class with Dist (76.5%)	1975
3.	M.Sc.	(Organic Chem.), Shivaji University, Kop.	First Class with Dist. (71.8%)	1977
4.	Ph.D.	Physicoorganic Chemistry	Ref- SU/PG/BUTR /IV/ 1983	1983
5.	Post-Doctoral. Research	Karl-Franzens University of Graz, Austria (Europe)	-	1993

1.	Qualification	M.Sc, Ph.D
2.	Specialization	Organic Chemistry
3.	Position	Professor,

3. Research Specialization	: Synthetic Heterocyclic Chemistry, Natural Product, Chemisrty, Physico: organic Chemistry, Co: ordination Chemistry, Agrochemical Residue,
<b>R.G Score (Research Gate Score)</b>	: 33.67
h Index	: 10
i10 Index	: 10
Citations	: 550
4. Teaching Experiences	: P.G-33 year U.G-02year Total-35year
5. Research Guidance	:
	Ph. D. : <b>33</b> students
	Ph. D. : <b>08</b> working
	M.Phil: <b>11</b> students
	M.Sc. Projects : <b>75</b> students

#### 6. Research Publications:

Publications in National Journals: **105 (Annexure-I)** Publications in International Journals: **82(Annexure-II)** 

#### 7. Research Projects:

Sr. No.	Title of the project	Project expenditure (Rs. In lakh)	Granting agency	Date of start	Date of completion
01	Synthesis and Applications of New Macrocyclic Molecules	Rs- 11,93 ,000/-	UGC, New Delhi.	F.No-41- 211/201 (SR)	1st July,2012 ongoing
02	Synthesis and Applications of some new Macromolecules	Rs-12,08,350/-	DST-,New Delhi,	Major Scheme December 2006	December, 2009
03	Synthesis of some Benzofurans and Benzopyrans as possible Insecticides and Pesticides:	Rs-1,75,120/-	DST, New Delhi (Young Scientist Scheme):	Ref:OY/CO O/91-92 :	April, 1993
04	New Synthetic methods in Aziridines	Rs- 1,75,680/-	CSIR, New Delhi:	EMR- II,2/328/91- 92:	April,1994

## **Details of Ongoing Projects:**

Sr.	Title of the Project	Duration		Budget	Successful by	
No.		From	То	Allocated	Sponsored by	
1.	Synthesis and Applications of New Macrocyclic Molecules(F.No-41- 211/201(SR)dated	1 <sup>st</sup> June uly,2012	31 <sup>st</sup> May, 2015	Rs- 11,93 ,000/-	UGC, New Delhi.	

## 8. Membership/Other Charges

## 1. Details of Experience of Organizing Events:

Sr.	Name of the	Place held	Dur	ation	Position	
No.	Event	Flace lield	From	То	held	
1.	UGC sponsored Refresher Course for College Teachers	Dept. of Chemistry Shivaji University, Kolhapur	2 <sup>nd</sup> Novem- ber,1998	23 <sup>rd</sup> November,1 998	Course Coordinator	
2.	International Conference on Drug Discovery (DDPR-I)	Organized. by Dept. of Chemistry Shivaji University, Kolhapur	23 <sup>rd</sup> Jan., 2003	25 <sup>th</sup> Jan200 3	Chairman Academic Session	
3.	International Conference on nano- materials and Applications	Shivaji University, Kolhapur:	9 <sup>th</sup> Decemb er, 2008	11 <sup>th</sup> Decembe r,2008	Coordinator	
4.	Synthesis of New Materials for Industrial Applications	Dept. of Chemistry, Shivaji Univ. Kolhapur:	Feb.1 <sup>st</sup> , 2008.	2 <sup>nd</sup> ,2008.	Chairman Academic Session	
5.	National Seminar on Advanced Synthetic Methodologie s and Functional Materials	Dept. of Chemistry, Shivaji Univ. Kolhapur: -	23 <sup>rd</sup> Decem ber, 2009	24 <sup>th</sup> December, 2009	<b>Chairman</b> Academic Session	

6.	National Conference on Advances in synthetic methodologie s and New Materials	Dept. of Chemistry , Shivaji Univ. Kolhapur :	21 <sup>st</sup> December, 2011	22 <sup>nd</sup> December, 2011	<b>Chairman</b> Academic Session
7.	One day National workshop on Recent Advances in Agrochemical s	Dept. of Agrochemicals & Pest Management ,Shivaji University, Kolhapur	28 <sup>th</sup> Feb.2011	28 <sup>th</sup> Feb.2011	Convener
8.	One day National Conference on New Trends in Pest Management	Dept. of Agrochemicals & Pest Management ,Shivaji University, Kolhapur	31 <sup>st</sup> Jan.2014	31 <sup>st</sup> Jan.2014	Convener

## 2. Experience in Leadership

Sr.	Name of the		Duratio	n	Area of Leadership	
No.	Institute/University/ College	Post held	From	То	Demonstrated	
1.	Shivaji University, Kolhapur	Member, Senate,( As a student)on the basis of B.Sc merit	1975	1976	Participated in Academic & Administratative discussions	
2.	Shivaji University, Kolhapur	Member, Senate from Heads of Departments	2005	2006	Participated in Academic & Administratative discussions	
3.	Department of Agrochemicals & Pest Management, Shivaji Univ. Kolhapur.	Coordinator	1998	2004	helped farmer in Controlling Sugar Cane White Wolly Aphid in collaboration with VSI, Pune	
4.	Department of Agrochemicals & Pest Management, Shivaji Univ. Kolhapur.	Coordinator	2007	2009	Research work on Food safety in collaboration withNational Research Centre for Grapes Pune.	
5.	Department of Agrochemicals & Pest Management Shivaji Univ. Kolhapur.	Coordinator	2010	2013 till up to date	i)Participated in Organization of Farmer,s Meet.	

					ii)Organization of National Seminar on Recent Advances in Agrochemicals
6.	Department of Chemistry ,Shivaji Univ. Kolhapur.	Chairman, M.Sc Eaxm. (Organic Chemistry)	2003	2008	Revised M.Sc, M.Phil & Ph.D. Syllabi
7.	University Exam. Squad	Chairman, Ad-hoc BOS			University Squad Exam. Committee for Kolhapur District
8.	Agrochemicals & Pest Management ,Shivaji Univ. Kolhapur.	Chairman , Ad-hoc BOS	2008- 2013	2010 till today	Revised M.Sc, M.Phil & Ph.D. Syllabi
9.	Solapur University, Solapur	Member, BOS	2006	2008	Revised M.Sc
10.	SRTM University, Nanded	Member, BOS	2009	2010	Revised M.Sc
11.	Industrial Chemistry, Shivaji University,Kolhapur	Chairman , Presently Working Ad-hoc BOS	2012	till today	Revised M.Sc, M.Phil & Ph.D. Syllabi
12.	Shivaji University,Kolhapur S. U.Kolhapur,	Member of BOS Environmental Sciences,	2006	2008	Revised M.Sc,
13.	Shivaji University,Kolhapur	Member Internal Assessment and Accreditation Committee (IAAC)	2008	2009	helped to Improve the Academic performance
14.	Shivaji University, Kolhapur.	Member of Faculty of Science,	2003-	2008	Recommended Credit System. to Science Depts.
15.	Shivaji University, Kolhapur.	Worked as In- charge Dean of Science	Sept. 2010	Decem. 2010	As Official Member of Selection Committee.

## **3.** Research Funds for the Departments:

a)DST, New Delhi - FIST Programme ( As a Plan Coordinator) : 38 lakh (Phase-I)

b) UGC, New Delhi D.R .S-SAP-1(2007) (As a Plan Coordinator) :50 lakh (Phase-I

#### 9. Memberships of Academic Bodies:

1) A) Member of Research & Recognition

Committee (RR): i) Chemistry, Shivaji University, Kolhapur

ii) AgPM, Shivaji University, Kolhapur

B) Member of BOS in Chemistry, SUK

C) Chairman of AD-hoc Bos in AgPM, SUK since 2013

D) Member of AD-hoc Bos Industrial Chemistry, SUK since 2012

E) Member of faculty of Science, SUK

F) Member of BUTR, Science, SUK

G) Member of AD-hoc Bos in AgPM, Solapur

H) Member of AD-hoc Bos in Environmental Sci.SUK

I) Member of Syllabus Committee Industrial and Applied Chemistry

J) In charge Dean of Science faculty, SUK 2010-11

k) Member of UGC, SAP Proposal Screening Committee 2010-11

2) Member of Senate Shivaji University, kolhapur 2005-06

## 3) State & National Level appreciation:

i) As a member of Syllabi committee of M.P.S.C., Govt. of Maharashtra.

ii) Book reviewer of Board of Higher Secondary Education, Govt. of Maharashtra.

iii) Member of Editorial Board : i)J.Indian J.Chemical Society, Kolkatta since 1985.

ii) Member of Editorial Board: Asian J. Chemistry, New Delhi.

iii) Editorial board Vivek Research Journal, 2011.

iv) Member of book review committee (HSC board)

v) Member of Maharashtra Academy of Sciences since 19th Oct, 2012

vi) SET Coordinator of Shivaji University, Kolhapur since 2006

vii) UGC-NET Coordinator of Shivaji University, Kolhapur during the year 2013-14

viii) DST-PURSE Programme Coordinator sine 2010.

### 4) Research Article Reviewer of the following journals:

i) Indian J.Chemistry, Sec-B, CSIR, New Delhi.

ii)J. Indian Chemical Society, Kolkatta.

iii) Indian J.of Heterocyclic Chemistry, Lucknow.

iv) International j. of Green Chemistry.

### 10. Details of Books published:

Sr. No.	Title of Books	Discipline	Whether referred for study in Higher Education at the National / International level	ISBN No.	Citation Score if available
1.	Quality parameters and standardization of Indian Wines:	by S.H.Patil, D. P. Oulkar& Prof. M.B.Deshmuk h	Lambert Publishing Company, Germany, 2011	ISBN- 13:978- 3-8443-	-

2.	Synthesis and	C.S.Shripannv	Lambert	ISBN:13	
	Insecticidal Activity	ar	Publishing	-	
	of Neonicotinoid	&	Company,	978-	
	compounds	M.B.Deshmuk	Germany,	3659-	
		h	2012-13	34351-3	
3	Publication of Chapter in a Book: Trapping of Organomanganese Generated Enolates with an Aldehydes in the Presence of Cu(NCMe)4[BF4]	Chemistry for sustainable Development	M.G. Bhowon et al. (eds.), <i>Chemistry for</i> <i>Sustainable</i> <i>Development</i> , Springer ,	ISBN: 978-80- 481- 86495	-

## 11. Honors /Rewards:

## Other credential and significant contributions, awards received from academic Institutions

Sr. No.	Details (Year, value etc.)	Name and status	Agency	Value in terms of medal/ cash/ citation/ certificate etc.
1.	1975	Mahalaxmi Prize	Shivaji University,	Certificate + Cash Prize( <b>Rs-500/- equally</b>
		11120	Kolhapur	divided)
2.	1975-1977	National Merit Scholarship	Govt. of India	Rs-125 per month
3.	1993	Research Scholarship Award	Govt. of Austria, (Under North South Dialogue Programme)	Fellowship 8040 Shillings /month
4.	2003	Best paper presentation	International Conference on Drug Discovery and Process	Certificate +Cash Prize-1000/-
			research (DDPR-1)	

5.	2004	Best paper presentation	Deccan Sugar Institute Technologists Association DSTA Conference 53 <sup>th</sup> Session held at Pune in Sept.2004.	Certificate + cash Prize Rs-2000/-
6.	2009	Best poster Presentation	National Seminar on Advanced Synthetic Methodologies and Functional Materials organized by Dept. of Chemistry, Shivaji Univ. Kolhapur	Certificate + Cash Prize Rs-500/-
7.	2008	Best Teacher award (Foundation Day)	Shivaji University, Kolhapur	Certificates +Silver Medal of 350 gms. +Cash Prize Rs-1000/- Citation
8.	March 1 <sup>st</sup> - June, 2010.	Visiting Professor	Hanyang University, Seoul, Korea	_
9.	21 <sup>st</sup> & 22 <sup>nd</sup> January, 2011	Best paper poster presentation in National Symposium Chemistry Dept.	Shivaji Univ. Kolhapur	Certificate +Cash Prize Rs-500/-Citation
10.	2011	Best Teacher award	Govt. of Maharashtra,	Certificate + Cash Prize Rs-5000/+Increment
11.	19 <sup>th</sup> November, 2012	Fellow of Maharashtra Academy of Sciences	Govt. of Maharashtra,	Fellowship Certificate

### **12. Publications:**

## **International Research Publications (82):**

1. Synthesis and X-ray crystal structure of (3, 4-dimethoxybenzylidene) propane dinitrile, D. Kour, D.R. Patil, D. R. Kumbhar, V. K. Gupta, M. B. Deshmukh and Rajni Kant **International Journal of Chemistry and Application**, **6**(1), 33-38,2014.

2. Novel Brønsted Acidic Ionic Liquid ([CMIM][CF3COO]) Prompted Multicomponent Hantzsch Reaction for the Eco-Friendly Synthesis of Acridine diones: An Efficient and Recyclable Catalyst, D. Patil, D. Chandam, A. Mulik, P. Patil, S. Jagadale, Rajni Kant, Vivek Gupta and Madhukar Deshmukh Catalysis Letters ,144 (5), 949-958,2014.

3. One pot four component sequential synthesis of hexahydroquinoline derivatives in aqueous media via enaminone intermediates: A green protocol. D Patil, D Chandam, A Mulik, S Jagdale, P Patil, and M Deshmukh, **Journal of Saudi Chemical Society** (Accepted), 2014.

4. Synthesis and Crystal Structure of Ethyl-1-(4-methyl phenyl)-4-(4-methyl phenyl amino)-2, 6-bis (4-nitro phenyl)-1, 2, 5, 6-tetrahydropyridine-3-carboxylateS. A. Anthal, D. R. Patil , R Kant and M .B. Deshmukh , **European Chemical Bulletin, 3** (7), 699-702, 2014.

5. Synthesis and X-Ray Crystal Structure of Two Acridinedione Derivatives Dalbir Kour, D. R. Patil, Vivek K. Gupta, and Rajni Kant and M. B. Deshmukh, Journal of Crystallography, 2014.

6. Synthesis and x-ray structure of 2-amino-4-(4-fluorophenyl)-7, 7-dimethyl-5-oxo-5, 6, 7, 8-tetrahydro-4h-chromene-3-carbonitrile D. Kour, D. R. Patil, VK Gupta, M. B. Deshmukh, and R. Kant **European Chemical Bulletin, 3 (3),** 224-226, 2014.

7. In-silico, in-vitro antibacterial activity and toxicity profile of new quinoline derivatives PP Sambavekar, MM Aitawade, D. R. Patil, G. B. Kolekar, M. B. Deshmukh, P.V.Anbhule **Indian Journal of Chemistry**, **52B**, 1521-1526,2014.

8. Eco-friendly and economic method for Knoevenagel condensation by employing natural catalyst M.B Deshmukh, SD Jadhav S Patil, **Indian Journal of Chemistry, Section B 52** (8), 1172-1175,2014.

9. Calcined eggshell (CES): An efficient natural catalyst for Knoevenagel condensation under aqueous condition S.S. Patil, S. D. JADHAV, M. B. Deshmukh, **Journal of Chemical Sciences 125 (4)**, 851-857, 2013.

10.Synthesis and X-ray Crystal Structure OF 3, 3, 6, 6-Tetramethyl-9-(3, 4-Dimethylphenyl)-3, 4, 6, 7, 9, 10-Hexahydroacridine-1, 8-Dione D Kour, DR Patil, VK Gupta, R Kant and Madhukar B. Deshmukh, **European Chemical Bulletin,3** (2) ,173-175, (2014-2013).

11. Synthesis and Crystal Structure of 2-amino-7, 7-dimethyl-4-(4-nitrophenyl)-5-oxo-1, 4, 5, 6, 7, 8-hexahydroquinoline-3-carbonitrile R Kant, VK Gupta, S Anthal, P Sharma, DR Patil, AG Mulik and M.B. Deshmukh, **European Chemical Bulletin,3** (3),296-299, 2014.

12. 9-(4-Hydroxy-3-methoxyphenyl) - 3, 3, 6, 6-tetramethyl - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10decahydroacridine-1,8-dione Kant, R., Gupta, V.K., Kapoor, K.,Patil, D.R., Patil, P.P., and M.B. Deshmukh, Acta Crystallographica Section E: Structure Reports Online, 69 (1),100, 2013.

13.(2Z)-3-(2,4-Dichlorophenyl)-3-hydroxy-N-phenylprop-2-enethioamide Dalbir Kour, Kuldeep Singh, Mayur M. Aitawade, ,Vivek K. Guptaa Rajni Kanta and, Madhukar B. Deshmukh, Prashant V. Anbhule **Acta Cryst. E69**, 01173–01174, 2013. 14. An Efficient One-Pot Multicomponent Synthesis of Dihydropyridines by using Succinic Acid as Mild Organocatalyst M. B. Deshmukh P.B. Pawar, S.D. Jadhav, S. Patil, Asian journal of chemistry 25 (17), 9442-9446, 2013.

15. Dissipation kinetics, safety evaluation, and assessment of pre-harvest interval (PHI) and processing factor for kresoxim & methyl residues in grape, Madhukar B. Deshmukh ,Rupali Sabale & T. P. Ahammed Shabeer & Sagar C. Utture Manjusha R. Jadhav , Dasharath P. Oulkar & Pandurang G. Adsule & Kaushik Banerjee ,**Environmental Monitoring** Assessment, 186, 2369–2374, 2014.

16. Proficient synthesis of quinoxaline and phthalazinetrione derivatives using [C8dabco]Br ionic liquid as catalyst in aqueous media Abhijeet Mulik , Dattatraya Chandam , Prasad Patil , Dayanand Patil ,Suryabala Jagdale and Madhukar B. Deshmukh, **Journal of Molecular Liquids,179**,104–109,2013.

17. 9-(3-Fluorophenyl)-3,3,6,6-tetramethyl-1,2,3,4,5,6,7,8,9, 10-decahydroacridine-1,8dione Kant, R., Gupta, V.K., Kapoor, K.,Patil, D.R., Jagadale, S.D. and Deshmukh, M.B., **Acta Crystallographica Section E: Structure Reports Online, 201369 (1)**, 69 (1),2013.

18. Synthesis and X-ray Structure of 2-amino-4-(4-fluorophenyl)-7, 7-dimethyl-5-oxo-5, 6, 7, 8-tetrahydro-4h-chromene-3-carbonitrile D. Kour, D. R. Patil, V. K. ,Gupta, R. Kant and M. B. Deshmukh, **European Chemical Bulletin, 3 (3)**, 224-226,2014.

19. Synthesis of Novel Dibenzo-18-crown -6 ether functionalized benzimidazole and its applications in colorimetric Recignition to Hg+2 and as anti-fungal agent, S.D Jagadale, A. D. Sawant, PP Patil, DR Patil, AG Mulik, D R Chandam, SA Sankpal and M. B. Deshmukh, **J.Heterocyclic Chemistry**, 2013 (Inpress).

20. Synthesis of some novel quinine diimine Derivatives of benzo-15-crown-5 for application in Hg+ recognition S.D Jagadale, A.D.Sawant, P. P. Patil, D. R. Patil, A. G. Mulik, D. R. Chandam, S. A. Sankpal and M. B. Deshmukh, **Luminescence**, 2014(In press).

21. Synthesis and Crystal Structure of Ethyl-1-(4-methyl phenyl)-4-(4-methyl phenyl amino)-2, 6-bis (4-nitro phenyl)-1, 2, 5, 6-tetrahydropyridine-3-carboxylate. S. A. Anthal, D. R. Patil, M. B. Deshmukh, R. Kant, **European Chemical Bulletin 3 (7)**, 699-702, 2014.

**22.** Proficient synthesis of quinoxaline and phthalazinone derivatives using [C8dabco]Brionic liquid as catalyst in aqueous media ,Abhijeet Mulik, Dattatraya Chandam, Prasad Patil, Dayanand Patil, Suryabala Jagdale and Madhukar Deshmukh, **Journal of Molecular Liquid**, **179**, 104-109(2013).

**23.** Synthesis of novel dibenzo-18-crown 6 ether functionalized Benzimidazole and its applications in Colorimetric Recognition to Hg++ and as anti-fungal agents, S. D. Jagdale, A. D.Sawant, P. P. Patil, D. R. Patil, A. G. Mlik, D. R. Chandam ,S. A. Sankpal and M. B. Deshmukh, **J.Heterocyclic Chemistry**, 2013(In press).

**24.** 2-Amino-7,7-dimethyl-5-oxo-4-[3-(trifluoromethyl)phenyl]-1, 4, 5, 6, 7, 8 – hexahydroquinoline – 3 - carbonitrile,Rajni Kant, Vivek K. Gupta, Kamini Kapoor , D. R. Patil, A.G. Mulik and Madhukar B. Deshmukh ,**Acta Cryst. E69**, 105 (2013).

**25.** 9-(4-Hydroxy-3-methoxyphenyl)-3,3,6,6-tetramethyl 1, 2, 3, 4, 5, 6, 7, 8, 9, 10-decahydroacridine-1,8-dione, Rajni Kant, Kamini Kapoor, D. R. Patil, P. P. Patil and Madhukar B. Deshmukh, **Acta Cryst. E69**, 100(2013).

**26**.(2Z)-3-(2,4-Dichlorophenyl)-3-hydroxy-n-phenylprop-2-enethioamide ,Dalbir Kour, Kuldeep Singh, Mayur M.Aitwade, Madhukar Deshmukh, Prashant Anbhule, Vivek K. Gupta and Rajni Kant, and Madhukar B. Deshmukh , **Acta Cryst. E69**,1173-1174(2013).

**27.** 9-(3,4-Dimethoxyphenyl)-3,3,6,6-tetramethyl -1,2,3,4,5,6,7,8,9,10decahydroacridine-1,8-dione Rajni Kant, Vivek K. Gupta, Kamini Kapoor, D. R. Patil, S. D. Jagadale and Madhukar B. Deshmukh , **Acta Cryst. E69**, 297-298 (2013).

**28.** Ethyl 2-{3-[(6-chloropyridin-3-yl)methyl]-2-(nitroimino)imidazolidin-1-yl}acetate Kapoor, Kamini; Deshmukh, Madhukar B.; Shripanavar, Chetan S.; Gupta, Vivek K.; Kant, Rajni, Acta Crystallographica, Section E: Structure Reports Online, E68(4), (2012), 1987.

**29.** An efficient synthesis of bis(indolyl) methanes under solvent free condition using silica supported chloroacetic acid as reusable catalyst Chandam, D. R.; Deshmukh, M. B.;Mulik, A. G.; Patil, P. P.; Patil, D. R.; Jagdale, S. D.; Anbhule, P. V.; Sankpal S. A., **Pharmacia** Lettre **4(1)**, 54-60(2012).

**30.** Crown ether complex cation like ionic liquids: synthesis and catalytic applications in organic reaction Jagadale, S. D.; Deshmukh, M. B.; Mulik, A. G.; Chandam, D. R.; Patil, P. P.; Patil, D. R.; Sankpal, S. A. **Pharma Chemica 4(1)**, 202-207, (2012).

**31.** Green approach for Knoevenagel condensation of aromatic aldehydes with active methylene group Deshmukh, M. B.; Patil, Suresh S.; Jadhav, S. D.; Pawar, P. B. **Synthetic Communications 42(8),** 1177-1183, (2012).

**32.** Synthesis and insecticidal activity of some nicotinic acid derivatives Full Text Deshmukh, Madhukar B.; Patil, Sangram H.; Shripanavar, Chetan S, Journal of Chemical and Pharmaceutical Research 4(1), (2012), 326-332.

**33.** Microwave-assisted cyclocondensation for the synthesis of 3-aryl-2-thioquinazolin-4(3H)-ones Patil, Suresh; Jadhav, S. D.; Shejwal, R. V.; Deshmukh, M. B. Asian Journal of Chemistry 24(4), (2012).

**34.** 1-[(6-Chloro7pyridin-3-yl)meth-yl]imidazolidin-2-iminium chloride Kant, Rajni; Gupta, Vivek K.; Kapoor, Kamini; Deshmukh, Madhukar B.; Shripanavar, Chetan S., Acta Crystallographica, Section E: Structure Reports Online, E68(1), 147 ,(2012).

**35.** 2E -3-(Dimethylamino)-1-(4-fluorophenyl)prop-2-en-1-one Rajni Kant, Vivek K. Gupta, Kamini Kapoor, Madhukar B. Deshmukh, D. R. Patil and P. V. Anbhule, Acta Crystallographica, Section E: Structure Reports Online E68(1), 3110, (2012).

**36.** Methyl (2E)-2-cyano-3-(dimethylamino)prop-2-enoate Rajni Kant, Vivek K. Gupta, Kamini Kapoor, D. R. Patil, D. K. Salunkhe and Madhukar B. Deshmukh, Acta Crystallographica, Section E: Structure Reports Online E68(1), 3121, (2012).

**37.** 3-Methoxy 2-[2-({[6-trifluoromethyl)-pyridin-2-yl]oxy}methyl)phenyl]prop-2-enoic acid Rajni Kant, Vivek K. Gupta, Kamini Kapoor, Chetan Shripanavar , Madhukar B. Deshmukh and Kaushik Banerjee ,**Acta Crystallographica, Section E: Structure Reports Online E68,** 3163, (2012).

**38.** Synthesis of N'-Carbomyl-N-[(6-chloropyridin-3-yl) methyl] ethanimidamide(2011) Deshmukh, M.B. Shripanavar, C. , **Journal of Chemical and Pharmaceutical Research 3(5)**, 636-637, 2011.

**39.** An Efficient, Greener synthesis of 2-Aryl-1-Arylmethyl-1-H Benzimidazoles using Polystyrene Sulfonic acid as a Catalyst. Prasad P. Patil, Madhukar B. Deshmukh, Abhijeet G. Mulik,Dattatraya R.Chandam, Dayanand R. Patil, Suryabala D. Jagdale, Prashant V. Anbhule, Dadasaheb K. Salunkhe, Sandeep A. Sankpal., **Der Pharma Chemica, Vol 3 (6)**, 599-605, 2011.

**40.** Synthesis of 1-[(6-chloropyridin-3-yl)methyl]imidazolidin-2-imine Madhukar B. Deshmukh, Prasad P. Patil, Chetan S. Shripanavar, **Archives of Applied Science Research**, **Vol. 3(4)**, 218-221, (2011).

**41.** Single Crystal structure of 8-[(6-Chloropyridin-3-yl)methyl]-2,6,7,8-Tetrahydroimidazo [2,1c][1,2,4]triazin 3(4H)-one Kapoor K., Gupta, V. K. Rajnikant, Deshmukh M. B., and C. S.Sripanavar, **X-ray Structure Analysis Online, 27,** 55-56, (2011).

**42.** Phenolic composition and antioxidant activity of Indian Wines, Deshmukh, M., Patil, S., Banerjee, K., Oulkar, D., Le Bulletin De L'OIV, 84, 517-541 (2011).

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#### 13. Conferences/Symposium attended:

#### Participation in Conferences/Seminars/Workshops/Proceedings:

1. Oxidation of nicotinic acid hydrazide by peroxydisulphate catalysed by Ag(I):Abstracted in Indian Council of Chemists held at Shrinagar, Nov.6 to 8 (1982).

2. The oxidation of isonicotinic acid hydrazide by peroxydisulphate catalysed by Ag(I).:Paper accepted for presentation in Indian Science Congress Association held at Tirupati during June 3rd-8th 1983.

3. Oxidation of phenylacetic acid hydrazide by peroxydisulphate: Paper accepted for presentation in the national Symposium on Kinetics and Mechanism of reaction in solution held at Mysore, July 23-25 (1983).

4. Kinetic analysis of consecutive irreversible first order reaction :Oxidation of imides by potassium permanganate. Phy (p)-78. Paper accepted for presentation in 22nd Annual Convention of Chemists held at Raipur, Nov. 4-8, (1985).

5. Chemical analysis of distillery effluent. Paper accepted for poster display in the 73rd Session of Indian Science Congress Association held at New Delhi, Jan, 3rd-8th, (1986).

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17. Synthesis of some substituted new benzofuro(2,3-c)pyrazoles and pyrano-(3,2-b) benzofurans, Ref-OP-14.Paper accepted for presentation in the 9th Session, Indian Council of Chemists held at Gulbarga (1990).

18. Synthesis and Characterization of Ni(II), Cu(II) and Cu(II) of 1-aroyl-3- Paper accepted for presentation in the Silver Jub. Celebration Conference of Nat.Acad.Of Sci. held at Allahabad in May, (1991).

19. Synthesis of some new N1-substituted quinoline derivative Ref.-(00-79). Paper accepted for the presentation in 10th Annual Conference of ICC, held at Goa From 28th-30th Oct., (1991).

20. Synthesis and Biological activity of 1-(N1 –arylidenehydrazidomethyl)-4-oxoquinazolin 2-thione, Azetidinone and 4-Thiazolidinone. The paper presented in the 5th National Symposium on Bio-organic Chemistry, eld at Dept. of Chemistry, Kolhapur on 24th and 25th February, 1995. (Poster session, P-32).

21. Synthesis and Biological activity of some new N1-substituted quinoline derivatives. The paper presented in the 5th National Symposium held at Dept. of Chemistry, Kolhapur on 24th and 25th February 1995

22. Synthesis of new N1 substituted 4, 6- dimethyl quinoline-2 (1H) one derivatives. Paper accepted in the Council of Chemist for poster presentation at Manglore University, Mangalgangotri, Karnataka, 1997.

23. Synthesis of some new 7-chloro-4-phenyl-3-substituted 4-quinolin-2(1H)-one Derivatives. 33rd Annual Convention of Chemists held at Coimbatore, Tamil Nadu,1997.

24. Synthesis of some new N1-substituted 4-phenylquinolin-2(1H)-one derivatives. Paper accepted for poster presentation in the National Symposium on Newer concepts on Organic Synthesis held at Aurangabad, March 20-21st, 1998.

25. Synthesis and Biological activity of 2-(N-arylidenehydrazidoethylthio)-4(3H)-quinolinone.

Paper accepted for the oral presentation in the National Symposium on Newer Vistas in Synthesis protocol and Structural elucidation in Chemistry held at Madurai Kamraj Univ. Madurai, Tamil Nadu, 24th April, 1998.

26. Synthesis of some new N1-substituted 4-methylquinolin-2(4)-one derivatives. The paper presented in the National Science Congress in the poster session of National Science Congress held at Univ. of Pune during 3rd-8th January, 2000.

27. Synthesis, spectral studies and antimicrobial activity of some new acridine derivatives. The paper accepted for oral presentation in the Annual Convention of Chemists held during 11th-16th December 1999.

28. Synthesis of some new tricyclic 1,4-benzothiazine derivatives. The paper accepted for poster presentation in National Conference on current trends on the Chemistry of Heterocyclic compounds held during 13th-14<sup>th</sup> March 2000, at Venkateshwara Univ.Tirupati.

29. Fungicidal activity of some substituted aroyl hydrazones. The paper accepted for oral presentation in the National Symposium on Biochemistry, Panjab Agriculture Univ. Ludhiana, Held during 17th-18<sup>th</sup> February 2000. 30. Synthesis and Biological activity of some new S-substituted 2- mercaptobenzothiazole derivatives. M. B. Deshmukh, D. K. Salunkhe and D. N. Chavan. Paper accepted for presentation in Indian Science Congress held at New Delhi during 3rd-8th January, 2000.

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32. Synthesis of some new Tricyclic 1,4-Benzothiazine Derivatives M. B. Deshmukh and A. R. Mulik. The paper accepted for presentation in Indian Science Congress Association, held during 3rd-8th January, 2001.

33. Synthesis of some new quinoline derivatives. M. B. Deshmukh, N. G. Garud and A. S. Kanade. Paper presented in the Indian Convention of Chemists, held at Gurukula Kogri University, Hardwar during 15th-18th Nov. 2000.

34. Synthesis of some new Benzocondensed Heterocycles and their Derivatives. M. B. Deshmukh and S. S. Patil. Accepted for presentation in Indian Council of Chemists, held at Manasgngotri Mysore, during 22-24th Dec. 2001.

35. Synthesis of some new C2-substituted Quinolin-4(3H)-one derivatives. M. B. Deshmukh and S. S. Patil. Paper accepted for presentation in Indian Convention of Chemists, held at Jodhpur during 24-26th Dec. 2001.during 8th-9th Feb. 2002.

36. Synthesis and Biological Activity and Spectral studies of some new Quinoline derivatives (p-44). A.S. Kanade, M. B. Deshmukh and N. G. Garud. Paper presented in the poster session in the National Symposium on Frontiers in Organic Chemistry, held at Dept. of Chemistry, Shivaji Univ. Kolhapur during 8th-9th Feb. 2002.

37. Synthesis and Biological Activity of some new N10-substituted sulphonamide Phenothiazines (P-26). M. B. Deshmukh, D. S. Deshmukh and A. R. Patil. Paper presented in the poster session in the National Symposium on Frontiers in Organic Chemistry, held at the Dept. of Chemistry, Shivaji Univ. Kolhapur during 8th and 9th Feb. 2002.

38. Synthesis of some new Tricyclic 1,4-Benzothiazines (p-27). M. B. Deshmukh and, A.R. Mulik. Paper presented in the poster session in the National Symposium on Frontiers in Organic Chemistry held at Dept. of Chemistry, Shivaji Univ. Kolhapur.

39. Synthesis of some new quinazolin derivatives.(p-28). M. B. Deshmukh, S. S. Patil, S. H. Gaikawad and S. R. Dhongade (Desai). Paper presented in the poster session in the National Symposium on Frontiers in Organic Chemistry held at Dept. of Chemistry, Shivaji Univ. Kolhapur during 8th-9th Feb. 2002.

40. Anti-microbial activity of the extract of the plant Solanum Swattense (I-36). M. I. Maner and M. B. Deshmukh. The paper presented in the International Conference of SAARC countries on

Bio- Technology in Agriculture, Industry and Environment held at Y. C. College of Science, Karad during 28th-30th Dec. 2001.

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42. Synthesis of 3,4-dihydropyrimidine using P2O5 accepted for Indian Society for Biology 2005 held at Rajkot, Gujrat.

43. Synthesis and QSAR study of substituted 1,3,4-triazoles and 1,3,4-thiadiazoles M.B.Deshmukh, S.A.Deshmukh and S.S.Jagtap. The paper accepted for presentation in the conference on Society for Chemists and Biologists held at Gujrat , 2005.

44. Amberlite IRA-400 Catalyzed Synthesis of Pyrano[2,3-c]Pyrazole Derivatives in Aqueous Media under Microwave Irradiation. M.B.Deshmukh, S.A.Deshmukh, S.S.Jagtap. A.W.Suryawanshi, P.V. Anbhule and S.D. Jadhav. The paper accepted for presentation in the national conference on "Chemistry in Drug Industry" held at 7th-8th October 2005 in Warangal.

45. Solvent free accelerated synthesis of 2-hydrazino benzothiazole Derivatives using microwave irradiation. The paper accepted for presentation in the national conference on Chemistry in Drug Industry held at 7th-8th October 2005 in Warangal.

46. Synthesis and QSAR study of Derivatives of 2-Mercapto Benzothiazole (OP12). M.B.Deshmukh, S.A.Deshmukh, S.S.Jagtap, A.W.Suryawanshi P.V. Anbhule and S.D. Jadhav.

The paper accepted for presentation in the national Symposium Bio-organic and Medicinal Chemistry (NSBM) 5th-7th October 2005.

47. Solventless Synthesis of Fused Pyrazole Derivatives by Using SiO2 as Catalyst under Microwave Irradiation (PP11). M.B.Deshmukh, S.A.Deshmukh, S.S.Jagtap, A.W.Suryawanshi, P.V. Anbhule and S.D. Jadhav. The paper accepted for presentation in the national Symposium Bio-organic and Medicinal Chemistry (NSBM) 5th-7th October 2005.

48. Enolate Trapping of Enones with Organomanganese Reagents (PP5). M.B.Deshmukh, S.A.Deshmukh, S.S.Jagtap, A.W.Suryawanshi, P.V. Anbhule and S.D. Jadhav. The paper accepted for presentation in the national Symposium Bio-organic and Medicinal Chemistry (NSBM) 5th-7th October 2005.

49. Solvent Free Synthesis of 2,3-Bis-(Benzylidine hydrazine)Quinoxalines under Microwave Irradiation (PP7). M.B.Deshmukh, A.R. Mali, A.W.Suryawanshi, P.V. Anbhule and S.D. Jadhav. The paper accepted for presentation in the national Symposium Bio-organic and Medicinal Chemistry (NSBM) 5th-7th October 2005.

50. Synthesis of biologically active tricyclic and tetracyclic derivatives of Quinazolines M.B.Deshmukh, S.S.Patil, S.R. Dhongade, S. S. Jagtap, S. A. Deshmukh Paper presented in the International Symposium on Drug Discovery and Process research held at College of Pharmacy, Belgum on 10 th-12th Feb.2006.

51.Synthesis of Pyrazole substituted quinazolines-4-(3H)ones and quinazolines- 2(1H)-ones M.B.Deshmukh, S. A. Deshmukh and S. S. Jagtap. Paper presented in the International Symposium on Drug Discovery and Process research held at College of Pharmacy, Belgum on 10 th-12th Feb.2006.

52. Synthesis of New Hybrid molecules containing Bnzothiazoles M.B.Deshmukh, S. S. Jagtap, and S. A. Deshmukh . Paper presented in the International Symposium on Drug Discovery and Process research held at College of Pharmacy, Belgum on 10 th- 12th Feb.2006.

53. Synthesis of Some New Benzothiazolyl Sulfonyl ureas M. B. Deshmukh\*, S.S.Jagtap, S.A.Deshmukh, S.D. Jadhav, A.W. Suryawanshi and P. V. Anbhule Paper presented in the National symposium of Royal Society of Chemistry, West India Section RSC. 2005 organized by NCL, Pune on 25th-26th Nov. 2005.

54. Synthesis of New S-substituted Benzothiazole Derivatives. M. B. Deshmukh\*, S.S.Jagtap, S.A.Deshmukh Paper abstracted in the State level Seminar at Parbhani on 18th and 18<sup>th</sup> March, 2006.

55.Synthesis of biologically active tricyclic and tetracyclic derivatives of Quinazolines M.B.Deshmukh, S.S.Patil, S. R. Dhongade, S. S. Jagtap, S. A. Deshmukh Paper presented in the poster session in the International Symposium on Drug Discovery and Process research held at College of Pharmacy, Belgum on 10 th- 12th Feb.2006.

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58. A Potent synthesis, X-ray diffraction study and biological activity of Bis(2,3dimethoxythio-phosphoryl)dimercapto quinoxaline M.B.Deshmukh and A.R. Mali. A paper presented in International Conference DDPR-2006 held at Belgum.

59. Synthesis of New S-substituted Benzothiazole Derivatives. M. B. Deshmukh\*, S.S.Jagtap, S.A.Deshmukh Paper abstracted in the State level Seminar at Parbhani on 18th March, 2006.

60...Synthesis of potential fibrocystic and cardiovascular analeptic tetrazolo quinoxaline Derivatives, Paper abstracted in the International conference on Advances in Drug discovery research held at Dr.B.A.Marathwada university, Aurangabad Feb.24th-26th 2007.

61.Synthesis of Macromolecule containing Naphthaquinone Paper presented in the International conference on Advances in Drug discovery research held at Dr.B.A.Marathwada university, Aurangabad Feb.24th-26<sup>th</sup>, 2007.

62.Synthesis and study of biological activity of some new 1,4-Benzothiazine 3(1H)one: The paper abstracted in the state level seminar on Advances in Organic synthetic reagents held in Feb.20th-21st ,2007 at Arts, commerce and science college Shahada, Dist-Nandurbar

63. Invited talk & Chairman of the session in the National seminar on, Recent Advances and Techniques in Chemical education ,conducted by Y.C. Institute of Science, Satara, Feb.19th-20th, 2005.

64. Invited Lectures: Resource person for the Refresher Course Organized by Staff Academic College Dr.B.A.Marathwada University, Aurangabad, on 23<sup>rd</sup> September,2006 and delivered talk on Pheromones in Integrated Pest Management.

65.Synthesis of potential fibrocystic and cardiovascular analeptic tetrazolo quinoxaline Derivatives ,Paper abstracted in the International conference on Advances in Drug discovery research held at Dr.B.A.Marathwada university, Aurangabad Feb.24th-26th ,2007.

66.Synthesis of Macromolecule containing Naphthaquinone Paper presented in the International conference on Advances in Drug discovery research held at Dr.B.A.Marathwada university, Aurangabad Feb.24th-26<sup>th</sup>, 2007.

67.Synthesis and study of biological activity of some new 1,4-Benzothiazine 3(1H)one: The paper abstracted in the state level seminar on Advances in Organic synthetic reagents held in Feb.2oth-21st ,2007at Arts, commerce and science college Shahada, Dist-Naddurbar.

68.Synthesisa and Insecticidal activity of some new pyridine derivatives M.B.Deshmukh, S.V. Sarang and C.S,Sripannawar,Thev paper presented in the National Seminar on Environment and Chemistry organized by Arts, Science and Commerce college, Kholwad (Surat)During 29th & 30th December,2008.

69.Attended State level workshop organized by Singhgad Institute ,Pune on En-Chemistry and deliver talk on Designing of organic synthesis. 18th to 21st December, 2007

70.Attended workshop on Green Chemistry of Dahivadi college, Dahivadi.5th February, 2008

71.Paper presented in the International conference 27th to 29th January, 2007on Drug discovery and Nano-technology organized by Yashwantrao Mahavidyalaya, Nanded.

72. Presented Paper in UGC-SAP Symposium on synthesis of New Material for Industrial applications held at Shivaji University,Kolhapur 1st and 2nd, 2008.

73.Attended National Seminar on Effects of synthetic drugs on Human Metabolism venue. Pratishthan Mahavidyalay, Paithan & worked as a Chairman one session on paper presentation during 8th & 9th February,2008.

74.Synthesis and Biological Activity of Crown ethers containing Schiff ,s bases M.B.Deshmukh and K.N.Alsundkar, International Conference on Drug Discovery and Nano-technology organized by Yashwant college ,Nanded 27th January,2008.

75.Phosphorus pentoxide an efficient catalyst for the Friedlander synthesis of quinoline M.B.Deshmukh, S.M.Salunkhe, P.V.Anbhule, D.K.Salunkhe and S.A.Sankpal, UGC-SAP National Seminar on the synthesis of new materials for Industrial applications Organized by Dept. of Chemistry, Shivaji Univ. Kolhapur February 1&b 2nd ,2008.

76.Cu(I)catalysed Activated addition of organocadmium reagent to unsatured cyanoesters UGC-SAP National Seminar on the synthesis of new materials for Industrial applications Organized by Dept. of Chemistry, Shivaji Univ. Kolhapur February 1&b 2nd ,2008.

77.Synthesis and X-ray diffraction and spectral study of dye containing benzo- [18]crown-6. M.B.Deshmukh ,D.K.Salunkhe and K.N.Alsundkar, National Seminar on effect of Drugs on Human Metabolism organized by Prathisthan Mahavidyalaya Paithan 8-9th February,2008.

78.Effect of Nano-bacterial culture on the performance of Microbial fuel cell formed with dairy waste())-203) V.D.Patil, S.S. Joshi, M.B.Deshmukh and S.H.Pawar, International conference on nano-materials and Applications 9-11December,2008 held at Shivaji University,Kolhapur.

79 Microwave synthesis of 2,3,4-trisubstituted 1,2 –dihydropyrimido[1,2a]benzimidazole(P-219) M.B.Deshmukh & A.W. Suryavanshi. International conference on nano-materials and Applications 9-11December,2008 held at Shivaji University,Kolhapur.

80. synthesis and evaluation of the biological activity study of dibenzo-18-crown-6 ether containing hydrazone derivatives (PP-87) M.B.Deshmukh,K,N,Alsundkar,S.A. Sankpal and D.K.Salunkhe International conference on nano-materials and Applications 9-11December,2008 held at Shivaji University,Kolhapur.

81.One pot synthesis of Benzimidazole derivatives using sulfamic acis as a catalyst (PP-(81) M.B.Deshmukh,K,N,Alsundkar,S.A. Sankpal, D.K.Salunkhe & P.V.Anbhule. International conference on nano-materials and Applications 9-11December,2008 held at Shivaji University,Kolhapur

82.Trapping of the enolate generated by organomanganese conjugate addition to enone in presence of Cu(I)complex. M.B.Deshmukh,S.D Jadhavand P.V.Anbhule International

conference on nano-materials and Applications 9-11December,2008 held at Shivaji University,Kolhapur

83.Synthesis and Insecticidal activity of some pyrimidine derivatives M.B.Deshmukh., S.V.Sarang & C.S.Shripannawar, Paper presented in the conference held at Kholwad(Surat) 29-30th Nov,2008.

84.Analytical Method Development and Validation for the determination of volatile compounds in Wines by GCMS. Best poster presentation in National Seminar on Advanced Synthetic Methodologies and Functional Materials organized by Dept. of Chemistry , Shivaji Univ. Kolhapur23rd-24th December, 2010.

85. Single Laboratory method for iprovalicarb, fenamidone and fenopyroximate in different matrices by using LC-ESI, MS-MS. D.P.Oulkar, K.Banerji, S.B.Patil, S.H.Patil, P.G.Adsule , Madhukar Deshmukh, paper presented in the International Conference held at Pune Jan.2010.

86.Gallium (III)catalysed multicomponent synthesis of Polyhydroquinolones at ambient Temperature(pp-16);

M.B.Deshmukh. D.R.Patil, P.V.Anbhule and D.K.Salunkhe ,Paper presented in the National Conference on Recent Trends in Chemistry organized by Y.C.Institute of Science, Satara on 14th& 15th October, 2010.

87.Lemon juice catalysed three component reaction as a green approach(pp-46). M.B.Deshmukh., S.S.Patil, R.V.Shejwal and S.D.Jadhav, ,Paper presented in the National Conference on Recent Trends in Chemistry organized by Y.C.Institute of Science, Satara on 14th& 15th October, 2010.

88.Selective Aziridination of Olefinic esters(pp-29), M.B.Deshmukh, P.B.Chavan(Piste), S.T.Mahanwar, ,Paper presented in the National Conference on Recent Trends in Chemistry organized by Y.C.Institute of Science, Satara on 14th& 15th October, 2010.

89.DABCO catalysed one step synthesis of pyrazolo[1,2-b]phthalazinone in water (pp-13), M.B.Deshmukh. D.K.Salunkhe , D.R.Patil,P.V.Anbhule and S.A.Sankpal , ,Paper presented in the National Conference on Recent Trends in Chemistry organized by Y.C.Institute of Science, Satara on 14th& 15th October, 2010.

90.Synthesis and Insecticidal activity of some Thiocloprid derivatives(OP-9), M.B.Deshmukh, P.P.Patil and Chetan S.S., Paper presented in the National Conference on Recent Trends in Chemistry organized by Y.C.Institute of Science, Satara on 14th& 15th October, 2010.

91. Synthesis and evaluation of dibenzo-18-crown-6 ether containing hydrazone s as Antibacterial Drug, National Symposiumon Advances in synthetic methodologies and New materials, held at Shivaji university, Kolhapur. January, 21-22nd,2011 and presented following four papers

92 Synthesis and Biological Activity of some new Triazolo condensed Pyrimidine Derivatives(P-16). National Symposiumon Advances in synthetic methodologies and New

materials, held at Shivaji university, Kolhapur. January, 21-22nd,2011 and presented following four papers

93. Synthesis and Spectral study of Dibenzo-18-crown-6 containing monoazo dyes (p-79) National Symposiumon Advances in synthetic methodologies and New materials, held at Shivaji university, Kolhapur. January, 21-22nd,2011 and presented following four papers

94.CuI catalysed one pot synthesis of tetrahydrobenzo[b,d]pyran in aqueous media. National Symposiumon Advances in synthetic methodologies and New materials, held at Shivaji university, Kolhapur. January, 21-22nd,2011 and presented following four papers

95.Symposium on Advances in synthetic methodologies and New materials. National Symposium on Advances in synthetic methodologies and New materials, held at Shivaji university, Kolhapur. January, 21-22nd, 2011 ..

96. National Seminar on Specialized Aspect of Organic ChemistryDept. of Chemistry, Karamveer Bhaurao Patil College, Vashi-,18th & 19th December,2012

97.Two days National Seminar on Recent Advances in Agricultural Botany Dept. of Botany, Devchand college, Arjunnagar on 27th-28th Sept.2012.

98.Prospects & Progress in pesticide Chemistry Emerging trends & Techniques in Chemistry, 10th October, 2013Y.C.Institute of Science, Satara.

99. Frontiers in Chemical &Biological Sciences, 24th Sept., 2013 PDVP ,CollegeTasgaon,Sangli

100.Green Chemistry as an Environmentally Benign Chemistry 31st August,2013.Ramkrishna Paramhansa Mahavidyalaya

101. Synthesis of Biologically Active Heterocycles National conference on Drug Designing & Discovery, Devchand College Arjunnagar, Dist-Kolhapur

102.Forensic Application of Chemistry Winter school in Chemistry11th Nov.-1st Decem.2013Dept. of Chemistry,Shivaji Univ. Kolhapur.

103. Recent Advances in Organometallic Chemistry,21st Decem.2013RajarshiChhatrapati Shahu College, KolhapurRajarshi

104. Designing of Organic synthesis & Physico-Organic Chemistry, 22nd & 23rd Feb.2014, Mumbai Univ. Sub-centre Ratnagiri

105. Current Trends in Chemical & Nano-sciences, 17th & 18th January, 2014.Dept. of Chemistry, Shivaji Univ. Kolhapur.

#### 14. Invited talks:

#### Invited lectures in Conferences/symposiums/Colleges/Institutes:

1. Synthesis of Heterocycles & their applications Invited Lecture P. G. Centre, Mumbai University at Gogate College, Ratnagiri, Oct., 1996

2. Organic Reaction Mechanism Invited Lectures in the UGC sponsored Refresher Course Institute of Science, Mumbai, November, 1998

3. Stereochemistry Invited Lectures in the UGC sponsored Refresher Course Academic Staff College, Karnataka Univ., Dharwad November-December, 1998

5.Stereochemistry & Applications of Heterocyclic compounds Invited Lectures or M.Sc PR.P.Gogate & R.V.Jogalekar College of Commerce, Ratnagiri, 1998

6.Recent Advances in Pest Control Invited Lectures in the UGC sponsored Refresher Course Dept. of Botany, Shivaji Univ.,Kolhapur '20th March,1999

7. Stereochemistry M.Sc Chemistry D.B.J.College, Chiplun, 17th-2001

8. Advanced methods of pest control Invited Lecture Science Association Series PDVP Mahavidyalaya, Tasgaon ,9th Oct. ,2001

9.Pesticide need in agriculture Invited Lectures in the UGC sponsored Refresher Course SRTM University, Nanded,3rd –4th December,2001

10.Designing of Organic Synthesis Invited Lectures UGC Sponsored Refresher Course Dr. B. A. Marathwada University, Aurangabad 3rd.Feb.2002

11. Pesticides & Agrochemicals Invited Lecture P. G. Centre of Shivaji University, Solapur ,3rd-4th Feb.,2003

12.Designing of synthesis & Stereochemistry Invited Lectures Lectures P. G. Center of Shivaji University, Solapur ,5th Feb. 2003

13. Designing of Organic synthesis Invited Lectures P. G. Centre of Shivaji University, Solapur 9th August, 2004

14. Designing of Organic Synthesis, Pericyclic& rearrangement reactions Invited Lectures D.B.J.College, Chiplun,17th-18th January,2004.

15. Retro synthesis, Umpolung Protection & Deprotection Invited LecturesShriS.H.Kelkar, college, Deogad ,30th Nov.2004Shri

16. Organic Reaction Mechanism Invited Lecture Industrial Chemistry P. G. Centre of Shivaji University, Solapur ,10th July,2004.

17. Designing of Organic Synthesis Invited Lecture Y. C. College of Science, Karad ,20th July, 2004.

18. Theoretical Organic Chemistry Invited Lectures D.B.J.College, Chiplun,12th & 13th Feb., 2005

19. Designing of Organic synthesis Invited Lecture Gulbarga University Chemical Society, 20th Aug., 2005

20. Green Chemistry Invited Lectures UGC Sponsored Refresher Course Modern Trends in Chemical Science & Technology Dr. B. A. Marathwada University, Aurangabad, 14th Sept..2005

21. Reaction Mechanism & Theoretical Organic Chemistry Invited Lectures D.B.J.College, Chiplun, 12th-13 Feb.2005

22. New Syllabus in Chemistry (B,Sc-III) Invited Lecture in the Work-shop Y. C. Institute of Science, Satara., 2009

23. Reaction Mechanism & Molecular orbital Theory Invited Lecture Solapur University, Solapur, 6th-7th Sept. 2006.

23. Pheromones in Integrated Pest Management UGC sponsored Refresher Course Dr. B. A. Marathwada University, Aurangabad ,23rd Sept., 2006

24. Spectroscopic Methods & reaction Mechanism Invited Lecture Arts, Commerce and Science college, Palus 20th Jan. 2006.

25. Reaction Mechanism and Theoretical Organic Chemistry Invited Lectures,P. G. Centre, Mumbai University at D.B. J. College, Chiplun ,19th-20th Feb.,2006.

26. Designing of Organic synthesis, Protection & Deprotection Lectures, P. G. Centre Smt. V. G. Parkar college, Deogad, 23rd Feb., 2006.

37.Organic Reaction Mechanism: Reactive Intermediates Invited Lectures, Sub.. Centre of Dr. Balasaheb Ambedkar Marathwada University, Osmanabad, 7th –8th Oct. 2006

28. Organic Reaction Mechanism & Stereochemistry Invited Lectures, Solapur University, Solapur, 6th –7th Sept., 2006

29. Chemistry of pesticides and formulation Invited Lectures, M.Sc students Industrial Chemistry Shankarao Mohite-Patil Mahavidyalaya, Akluj, Dist- Solapur ,11th October, 2006

30.Designing of Synthesis and MNR spectroscopy Invited Lectures, P.G.Centre of Mumbai University at Ratnagiri 19th& 20th February, 2007.

31.Refresher Course on at Pheromones in Integrated Pest Management Dr. B. A. Marathwada University, Aurangabad ,23rd Sept., 2006

32. Chemistry of Pesticides and Formulation Invited Lecture Shankarao Mohite-Patil Mahavidyalaya, Akluj, Dist- Solapur. 11th October, 2006

33. Developments in heterocyclic compound Invited Lectures, A work shop on Physics & Chemistry vision to 21st century, Bilateral summit between Shivaji Univ. & Hanyang University, Seoul South Korea. January 8-10,2007.

34. Research Methodology Invited Lecture, under lead College programme. Organized by Arts, Commerce & Science College, Palus , 16th February, 2007

35. Designing of organic synthesis. Invited Lecture State level workshop on En-Chemistry. Singhgad Institute, Pune ,18th to 21st December, 2007

36. Applications NMR & Mass Spectrometry Invited Lectures Modern Trends in instrumental Techniques of Analysis College of Engineering Rajaramnagar College of Engineering Rajaramnagar, Tal-Walwa Dist-Sangli. ,5th February, 2007

37. Molecular Orbital Theory & Non-benzenoid Aromatic compounds Invited Lectures Solapur University, Solapur,16th Feb., 2007.

38. NMR, Mass Spectroscopy, RetrosynthesisElectroorganic synthesis Invited Lectures, Sub-Centre Mumbai University at Ratnagiri, 26-28th December, 2008

39. Green Chemistry Invited Lectures, One day work-shop Dahiwadi College, Dahiwadi ,5th February,2008

40. Spectroscopy, Designing of synthesis, Aromaticity, Protection & deprotection Invited Lectures Sub-Centre of Mumbai University, 26th-28th December, 2008.

41. Reaction Mechanism Invited Lectures NET-SET Coaching, North Maharashtra Univ. Jalgaon , 23rd May,2008

42. Effective Teaching Methodologies in Chemistry & Designing of Organic Synthesis Invited Lectures Balbhim College, Beed ,27th December,2009

43. IR spectroscopy & Designing of Synthesis Invited Lecture Sub-canter of Mumbai University at Ratnagiri, 25th-28th December, 2009.

44. Applications of GCMS Invited Lecture A workshop on Analytical instrumentation, 17th February, 2009

45. Retro-synthesis Invited Lectures Y.C.Institute of Science, Satara, 27th October, 2009

46. Applications of HPLC Invited Lecture Workshop on Analytical Instrumental TechniquesUSIC ,Kolhapur on 29th January,2010.

47. Designing of Organic SynthesisInvited Lecture P.G.Centre S.H.Kelkar, College, Deogad Jan.2010

48. Designing of Organic Synthesis and Spectroscopy Invited Lecture Sub-.Centre Mumbai. Univ., 3rd December, 2010

49. Green Chemistry Invited Lecture S.G.M. College, Karad ,19th December 2010.

50. 1) Green Chemistry 2) Forensic Application of Chemistry on Invited Lectures in the Refresher Course Univ. of Pune,17th& 18th December, 2010.

51. Writing of Research proposal for different Agencies in one day seminar Invited Lectures Y.C.Institute of Science, Satara ,16th December, 2010.

52. Writing of Research Proposal of different agencies Invited Lecture, Lead college activity Y.C.Institute of Science Satara,16th December,2010

53. Recent trends in Chemistry Invited Lectures, College Lead Activity S.G.M. College, Karad, 24th December, 2010

54. Designing of Organic Synthesis & Protection & Deprotations Invited Lectures P.G.Centre S.H.Kelkar College Deogad, 26th& 27th February, 2011, Deogad

55.Molecular Orbital Theory Invited Lecture Y.C.Institute of Science Satara ,11th February, 2011

56.Molecular Orbital Theory Invited Lecture Y.C.Institute of Science Satara, 16th December 2011.

57. Project Writing Invited Lecture one-day workshop Y.C.Institute of Science Satara, 16th December 2011.

58. Project formulation Invited Lecture One-day seminar, PDVP college Tasgaon, on 20th august, 2011.

59. Revision of B,Sc. Syllabus Invited Lecture Balwant College, Vita., 30th August, 2011

60. Green Chemistry (IYC-year of Chemistry)Miraj Mahavidyalaya, Miraj, 17th Sept. 2011

61. i)Forensic Applications of Chemistry ii) Green Chemistry Refresher course for College & Univ. Teachers Vidyapratisthan,s Arts, Commerce & Science College, Baramati , 25th July,2012

62. Reaction Mechanism M.Sc (Org. Chemistry) Vivekanand College ,Kolhapur, July-October,2012(2 lect. Per week on Saturday)

63. Reaction Mechanism M.Sc (Analytical Chemistry) Balasaheb Desai College, Patan , 2nd October, 2012.

64. Greening in Agriculture Invited Lecture National Environmental Engineering Research Institute, Nagpur17th Feb.2012.

65. Material Science & Engineering: Scope and Significance Invited Talk One day work shop on Role of basic Sciences & Humanities in Engineering 2012

66.Designing of Organic synthesis & Green Chemistry U.G.C Refresher Course Pune Univ. (Invited Lectures, 25th June, 2012, Forensic Application of Chemistry 67.Green Chemistry U.G.C Refresher Course and Science College, Baramati 25th July,2012

Vidya Pratisthan.s Arts, Commerce

68.Research Methodology, Writing of Thesis,Dissertation.Two days workshop on Research Writing, Ethics, Plagiarism and publishability Shivaji University, Kolhapur 26th & 27th July, 2012

69.Green Chemistry Techniques.(Microwave Asst.Reactions, Zeolites, Biocatalyst) A work shop on Revised Syllabusm B.Sc-III, Vivekanand College, Kolhapur 13th August,2012

70.Reaction MechanismM. Sc. (Analytical Chemistry)Balasaheb Desai College, Patan,2nd October, 2012.

71.Writing of Research Proposal? Invited Lecture on How to prepare & Submit Research Proposal? Dept. of Zoology, Shivaji University, Kolhapur, 5th February, 2013

72.Material Science Scope & Significance Role of Basic Sciences & Humanities in Engineering Rajarambapu institute of Technology, Rajaramnagar, Islampur( Dist-Sangi) on 24th December,2012

73.Research Methodology Research Tools & Techniques in Geography, Organized by Dept. of Geography, Shivaji University, Kolhapur on 15th December, 2012

74.Green Chemistry Special Lecture Organized byDept. Of Environmental Materials Division, NEERI, Nagpur.

75.Writing of Research papers, Ethics & Plagiarism Writing of Research papers, Ethics & Plagiarism S.G.M.College, Karad on 28th January,2013

76.Writing of Research, Ethics & Plagiarism Writing of Research, Ethics & Plagiarism Kamala college, Kolhapur on 24th January,2013,

77.Greening in Agriculture Two days National Seminar on Recent Advances in Agricultural Botany Dept. of Botany, Devchand college, Arjunnagar on 27th-28th Sept.2012.

78.Designing of Synthesis National Seminar on Specialized Aspect of Organic ChemistryDept. of Chemistry, Karamveer Bhaurao Patil College, Vashi-,18th & 19th December,2012

79.Invited Lecture on Greening in Agriculture Training Workshop on 19th December, 2013District Agriculture Training Centre , Arabhavi

80.Invited Lecture Mass spectrometryAdvanced spectral methods of analysis D.P.Bhosale college, Koregaon, Dist-Satara

81.Invited Lecture on Forensic Application of Chemistry Winter school in Chemistry11th Nov.-1st Decem.2013Dept. of Chemistry, Shivaji Univ. Kolhapur.

82.Invited Lecture on Synthesis of Biologically Active Heterocycles National conference on Drug Designing & Discovery,Devchand College Arjunnagar,Dist-Kolhapur

83.Lecture on Green Chemistry Green Chemistry as an Environmentally Benign Chemistry 31st August,2013.Ramkrishna Paramhansa Mahavidyalaya

84.Chaired session & Invited LectureFrontiers in Chemical & BiologicalSciences, 24th Sept.,2013PDVP CollegeTasgaon(Sangli)

85.Invited Lecture: Prospects & Progress in pesticide Chemistry Emerging trends & Techniques in Chemistry, 10th October,2013 Y.C.Institute of Science, Satara

86.Chairman of Oral Session Current Trends in Chemical & Nano-sciences, 17th & 18th January, 2014.Dept. of Chemistry, Shivaji Univ. Kolhapur.

87.Invited Lecture Research Methodology ,Ethics and Plagiarism Dept. of Electronics Shivaji Univ.Klhapur

88.Invited Lectures Designing of Organic synthesis & Physico-Organic Chemistry, 22nd & 23rd Feb.2014,Mumbai Univ. Sub-centre Ratnagiri

89. Invited Lectures Reaction Mechanism, Theoretical chemistry & Stereochemistry ,2013 Vivekanand College ,Kolhapur

90. Recent Advances in Organometallic Chemistry, 21st Decem.2013 Rajarshi Chhatrapati Shahu College, Kolhapur