

# CURRICULUM VITAE

---

**Prof. Dr. R. D. KULKARNI**

Professor and Director,  
University Institute of Chemical Technology,  
North Maharashtra University, Jalgaon (MS)-425001

Email: [rdkulkarni@nmu.ac.in](mailto:rdkulkarni@nmu.ac.in), [kulkarnird67@gmail.com](mailto:kulkarnird67@gmail.com)

Ph. NO. 91(0257) @ 2255590 O: 2257444 M. 9404366700, 962358094 Fax: 0257- 2258403

# CURRICULUM VITAE

**DR. R. D. KULKARNI, M. TECH. [CHEM. TECH.] Ph. D.**

**PROFESSOR & DIRECTOR,**

U.I.C.T., NORTH MAHARASHTRA UNIVERSITY,

JALGAON. EMAIL: [rdkulkarni@nmu.ac.in](mailto:rdkulkarni@nmu.ac.in), kulkarnird67@gmail.com

(Public Profile on nmu.ac.in and <http://in.linkedin.com/pub/ravindra-kulkarni/11/911/6b0>)



**1. Objective:** To pursue a challenging and sustainable growth oriented career with positive and learning attitude.

**2. Areas of Professional Interests:** Polymers, Pigments & Paints; Fats, Oleochemicals & Surfactants; Perfumes, Waxes & Cosmetics; Nanotechnology; Reaction Engg. & Catalysis; Tribology; Environmental Engg.

## 3. Career Profile

### A. Present Job (since Aug.03, 1994)

Employer	Designation	Job Responsibilities
University Institute of Chemical Technology (UICT), North Maharashtra University, Jalgaon-425001 (M.S.-India)	<b>i) Director</b> -since June 24, 2015 <b>ii) Professor (current post)</b> - by CAS since Aug.16, 2010 & by appointment: Aug.09, 2010-March 31, 2012, <b>iii) Associate Professor</b> 15/ 08/ 2007-08/08/2010, <b>iv) Reader</b> - by CAS since 15/ 08/ 2004 & by <b>Appointment</b> - Sept. 06, 2007 & also during April 10, 2006-Feb.04, 2007 (lien vacancy), <b>v) Sr. Lecturer</b> - since 15/ 08/ 1999 & <b>vi) Lecturer</b> - since Aug.03, 1994	<b>i) Teaching</b> to B. Tech./ M. Tech. programme in Chem. Tech./ Engg., <b>ii) Research and Ph. D. guidance</b> , <b>iii) Consultancy</b> , <b>iv) Campus Placement/ Career Guidance &amp; Counseling/ Entrepreneurship Development</b> <b>v) Head- Dept. of Paint Tech.</b> , <b>vi) Director-UICT</b>

**B. Current Salary:** @ Rs. 49,980/- in the pay scale of Rs. 37,400- 10,000-67,000+HRA+DA+TA (PF A/c No. JAL\HEG-7758) (Employee code 1188)

### C. Past Employment

Employer	Designation	Tenure	Job Responsibilities
i) V. P. Sci. College, Vallabh Vidyanagar-388120 (Gujarat)	<b>Lecturer</b> (Ind. Chem.)	Sept.16, 1993- Aug. 01, 1994	i) Teaching to M. Sc. (Ind. Chem.) & M. Sc. (Oil Tech.), ii) Research, iii) Training & Placement.
ii) <b>Bombay Oil Ind.</b> , Mumbai-78 (MS).	<b>R &amp; D Officer</b>	April 19, 1991- Aug. 28, 1991	i) Process Development ii) Pilot –Plant Trials, iii) Commercial Exploitation.

## 4. Highlights of Research and Consultancy Experience

**A. Research work (Ph. D., M. Tech. / M. Phil.) supervised (Refer to Annexure 1 for details)**

**Approved Ph. D. Guide** in the subject of **Chemical Eng. & Tech., Chemistry and Environmental Science** at North Maharashtra University (vide letter no. NMU/11/PGR-Engg/264/07 dated 31/01/07 and NMU/11/PGR/Chem. Engg./2730/2015 dated 24/11/2015; NMU/11/PGR-Chemistry/36/08 dated 01/01/08 and NMU/11/PGR/Chem./2731/2015 dated 24/11/15)

No. of Students	Awarded	Submitted	Under submission	Registered & In Progress
Ph.D.	06	03	02	05
M. Tech.	45	-	-	04

### B. Research Publications: (For details, refer to Annexure 1)

Publications	Published & Accepted	Communicated	Scholar Citation indices of Published Papers
Books & Monographs	02+03	03	Citations: 305 h-index:11; i-10 index: 12
Journals	55 [International: 39, National:16]	12	
Reviews & proceedings	04	01	
Patents	02 Granted, 05 Filed	02	
<b>Invited Talk: at Conferences/ Refresher/ STTP - 5(International) + 50(National/ Regional) =55</b>			
<b>Conference Presentations: 66 (International) + 46(National)=112, Popular Sci. Talk: 14, articles: 03</b>			

### C. Awards and Recognitions

a. Received 'Best Teacher Award' at the hands of His Excellency Shri Shankarnarayan, Governor, Maharashtra State on Aug. 07, 2014 from North Maharashtra University, Jalgaon as a part of Silver Jubilee and Foundation Day Celebration.

b. **Research Achievements:** i. **Best Paper Award for the year 2006 by JOCCA** -V.V. Gite, R. D. Kulkarni, D.G. Hundiwale, & U.R. Kapdi, *Surface Coating International (JOCCA) Part B: Coatings Transactions*, Vol.89, B2, 117-122 (2006).

ii. **Awards for best posture presentations at Conferences to students: 11(International: 04, National: 07)**

iii. **Visits Abroad for Presentations: 07** (Singapore, Germany, Thailand, Indonesia, Netherland France, Switzerland, Japan) and Interaction with University Faculty at Singapore (NUS, NTU: July 13-16, 2008); Germany (Heidelberg University: September 24-26, 2008); Thailand (Ubonratchathani University: Jan.21-23, 2010); Indonesia (Indonesian Institute of Sciences: Nov.29-Dec.01, 2011); Singapore (NTU: Dec.02, 2011), Netherlands (Delft University Of Technology, Eindhoven University of Technology June 25-29, 2012), Switzerland (Swiss Federal Institute of Technology, ETH, Zurich, June 30, 2012), Japan (Tukusima University, March 1, 2014)

### D. Industrial Projects /Consultancy Work

1. Establishment of Central Instrumentation Lab.- FESEM, XRD, GPC, HPLC, GC, Stress Relaxation Viscometer, FTIR, Zetasizer etc. and generated revenue worth **Rs 23 lakh** through Instrumental Testing of Industry/ Institute samples

Name of the Industry	Project Title	Year of Working
Elantas Beck	Perspectives on Coating Design through Modeling and Simulation Studies- <b>Rs. 2.45 lakh</b>	In Process
Savita Oil Technologies, Mumbai	Upgradation of Mustard Oil through reduction of FFA, minimization of linolenic acid and elimination of stearic acid- <b>Rs. 1.92 lakh</b>	Feb.,2010- July2010
Sidharth Carbochem, Jalgaon	Water Soluble Polymers	2009
Jalgaon Oil Mill Association	Analysis of Groundnut Oil from different varieties of seeds	2008
Jain Biotech, Jalgaon	Characterisation of Biodiesel- <b>Rs. 0.10 lakh</b>	2006
Akry Organics, Boisar	Removal of alkali from Crude Glycol	2005
Rightex Pharma, Jalgaon	Formulation of Dairy Detergent - <b>Rs. 0.10 lakh</b>	2004
Manohar Agro Ind., Jalgaon	Sunflower Oil & Wax from Dewaxing Filter Cake- <b>Rs. 0.30 lakh</b>	2003
Vega Chemicals, Jalgaon	Synthesis of yellow iron oxide	2003
B.P. Refinery, Jalgaon	Interesterification of Palm & Soyabean Oil	2001
Raymonds Ltd., Jalgaon	Techno-economic evaluation of ETP	2000
Indu Agro Farm, Jalgaon	Development of Herbal Shampoo	1999
Kalyani Brakes, Jalgaon	Characterisation of cutting / thermia oil	1998-99
Kalyani Brakes, Jalgaon	Recovery of methanol from brake effluent	1998
Venus Biotech Ltd, Nasik	Manufacture of Palmarosa and Lemongrass oil	1997

### E.1. Executed / ongoing Research Projects sanctioned by different Funding Agencies

Funding Agency	Project Title (with Sanction File No.)	Period	Amount (Rs. in lakhs)
DRDO, NEW Delhi (Co-I, Collaborative Project with NIT, Warangal)	Development of Nanohybrid Self-healing Coatings using ultrasound assisted encapsulation approach for anticorrosion performance (ERIP/ER/1206027/M/01/1539)	2014-17	<b>30.42</b>
TEQIP-MHRD	UV Curable Monomers-Synthesis & Process Design	2013-14	<b>4.0</b>
U.G.C., Delhi - Major Research	Design & development of eco-friendly 1 K polyurethane nano-composite coating system for high performance applications (F. No. 42-244/2013 (SR) dated 12/03/2013)	2013-15	<b>12.0</b> (JRF, Spin coater)
U.G.C., Delhi - Major Research	Reaction Engineering and Modeling of Thin Film Coprecipitation Reactors and Process Development of synthesis of Nanopigments (F. No. 39-877/2010 (SR) dated 12/01/2010) (as Co-I)	2011-14	<b>10.178</b> (JRF, Reactor for Nanomaterials)
AICTE- EDC	Building an entrepreneurial culture through promotion of Entrepreneurship Development Cell (F. No. 8022 / RID / EDC(4)/2009-10 dated 16/03/2010)	2010-13	<b>08.0</b>
DST, Delhi-SERC	Development of Nanocontainer for anticorrosive properties of coatings(SR/S3/CE/0060/2010 dated 30/08/2011)	2011-13	<b>10.08</b> (JRF, Potentiostat)
DST, Delhi-Nano-Mission	Development and Formulation of Sustained Release Nanoparticles of some Anti-Diabetic Drugs (SR/NM/NS-101/2008 dated 19/01/2010) (as Co-I)	2010-13	<b>30.0</b> (Colloid Mill, Freeze Dryer, JRF)
U.G.C., Delhi -	Eco-friendly two pack Polyurethane based on	2010-13	<b>8.36</b> (JRF,

Major Research	renewable vegetable oils & carbohydrates (F. No. 37-274/2009 (SR) dated 13/01/2010)		Abrasion Resistance Tester)
U.G.C., Delhi - Major Research	Techniques for treatment of Electroplating and Metal Processing Effluent (as Co-I)	2004-08	<b>6.626</b> (Ion Analyser+ JRF)
U.G.C., Delhi - Major Research	Metathesis, Epoxidation & Allied Reactions for exploitation of Renewable Resources (F. No. 14-6/2002 (SR-I) 16 <sup>th</sup> March 2002)	2002-05	<b>5.40</b> (Slurry Reactor+ JRF)
U.G.C., Delhi - Minor Research	Low temperature synthesis of 2-Alkyl Imidazoline	2001-02	0.12
A.I.C.T.E., Delhi (R. & D. P.)	Upgradation of Rice Bran Oil and Recovery of Valuable Oliochemicals by Distillative Deacidification (as Co-I)	1999-2002	4.90
U.G.C., Delhi - Minor Research	Value Added Products from Refinery Soapstocks	1998-99	0.12

**Funds generated so far through Projects (Rs. in lakhs): Rs. Rs99.784 lakh**

### E. 2. Infrastructure Projects coordinated for the Department/ University

Funding Agency	Title	Duration, Amount & Support
DST, Delhi- FIST- Level-II	FIST ( Level-II)	2015-20 Rs.240.0 lakh (SPM-RAMAN, Computer Lab, DMA)
UGC XI Plan- Development Grant	Central Instrumentation Facility as Coordinator	2010-12- Rs.2.25 Crore for Purchase & Installation of <b>FESEM</b>
UGC XI Plan Merge Scheme	Career Guidance and Counseling Cell as Coordinator	2010-12- Rs.17.0 lakh (Hardware / Software / Magazines for Placement support and recurring, Project Officer)
UGC-SAP, Delhi	SAP-DRS- Nano Science & Technology [F.3-41/ 2011(SAP-II), dated 05 April 2011] as Deputy Coordinator	2011-16- Rs.74.0 lakh (Particle Size/ zeta potential analyser, AAS) + 2 JRF
U.G.C., Delhi - Innovative Programme	Innovative Programme-M. Tech. Nano Science & Technology [F.14-27/ 2009(Inno. /ASIST), 30 Sept. 2009] as Coordinator	2010-15- Rs.55.50 lakh (XRD, and recurring) + 2 Lecturers
DST, Delhi- FIST- Level-I	FIST (SR/FST/ETI-010/2008 dated Jan. 12, 2008 (Proposal No.-166) Level- I)	2009-14- Rs.83.0 lakh (AFM, Computer Lab, GPC)
U.G.C., Delhi- NON-SAP	NON-SAP ( F.4-7/2008 (BSR)/11-58/2008 (BSR); dated 19/05/08) as Coordinator	2008-12 – Rs.10.0 lakh+ 02 JRF(I Phase); Rs.10.0 lakh+ 04 JRF(II Phase)+ Rs.10.0 lakh+ 04 JRF(III Phase)
A.I.C.T.E., Delhi (MODROB)	Modernisation of Paints Analysis & Testing Laboratory (R.&D. P.)-8018/ RDII/BOR/R& D(155)/99-2000 as Coordinator	2003-05- Rs. 8.0 lakh (Colour Matching Spect., Rheometer)

**Infrastructural and Research Support Grants for Dept./ University: Rs. 7.325 Crores+04 JRF+2 Assistant Professors**

**Submitted Research Proposals under RUSA Component 8.**

### E. 3. Inter-institutional collaborative projects and associated grants (National/ International)

National institutes	Interdisciplinary area	Output (Project Funding, Research)
Dr. Shirish Sonawane, Dept. of Chemical Engg., NIT, Warangal	Nanocontainers for anticorrosive coatings	Collaborative research – 01 DST project (Rs. 10.08 lacs) and 01 DRDO project (Rs.30.42 lacs), joint Ph. D. student, 04 publications and 01 patent filed

## 5. Teaching and related Academic Activities

**A. Courses Teaching/ Taught at UG, PG & Ph. D.:** Ph. D. (Engg./ Science/ Pharmacy faculty): Research Methodology, M. Tech. (Paint/ Oil/ Polymer Tech., Chem. Engg., Nano Science & Tech.), B. Tech. (Paint Tech., Oil Tech.) and M. Sc. (Ind. Chem./ Chem. Tech.)

**B.** Knowledge of Sophisticated Analytical Instrumentation (AFM, FESEM, XRD, FTIR, GLC, HPLC/GPC, UV-Visible, Colour Matching, Brookfield/ Relaxation Viscometers, DSC/TGA, Particle Size Analyser)

**C. Quality (soft & hard) enhancement through participation in QIP-2, Orientation Programme-01, Refresher Courses- 03, STTP- 04, Training Programmes- 02 (For details, refer to Annexure II)**

**D. Syllabi Formulations/ revisions:** Very competitive **curriculum** for Ph. D., M. Tech. and B. Tech. (Chemical Technology and Engineering) based on **academic flexibility** and Cumulative Grade Point Average (**CGPA**) system was framed.

Participated as invited member at meeting of Board of Studies of Chemical Technology organized by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad during 2003 for framing of B. Tech. Chemical Technology and Engineering syllabus and at Workshop organized by Dept. of Mech. Engg., Bharati Vidyapeeth for finalization of Syllabus of M. Tech. in Nanotechnology on June 17, 2011.

**E. Conferences/ Seminars** organized as **Convener: 06**; and Organising Committee Member for **AVISHKAR** and **DIPEX (For details, refer to Annexure III)**



F. Courses organized as Coordinator: **Certificate Courses: 06; Short Term Training Programme(STTP):01, Entrepreneurship Awareness/ Development Programme (EAC/ EDC): 05** and One UGC Academic Staff College, Pune Univ. Refresher Course. (For details, refer to Annexure III).

### G. Membership of Professional Bodies

- i) Fellow Member, Essential Oil Association of India
- ii) Life Member, Oil Technologists' Association of India (No. OTA/LM/300/2013)
- iii) Life Member, Indian Society for Technical Education (LM)
- iv) Life Member, Asian Polymer Society, Delhi (No. L173; www.apa-asia.org)

## 6. Activities related to Higher Education and Administrative Responsibilities

### A. National/ International Level

- i) Worked as **AICTE Observer** for Common Management Admission Test (CMAT) (2013-14, 2012-13).
- ii) Presentation before Dr. G. WieBmeier, Global Technical Officer, **ELANTAS BECK INDIA Global Group, Altana, Germany** at Pune office on Feb.12, 2009 & March 13, 2015 regarding Research Interactions.
- iii) Facilitating **MoU** of North Maharashtra University with **Eastern Michigan University, USA** for admission of UDCT students to M. S. course in Paint Technology. Facilitated MoU of North Maharashtra University with **Tokushima University, Japan** through visit on March 1, 2014. 02 M. Tech. students and 01 M. Tech. student of Paint Tech. visited Tokushima University, Japan during July 21-Aug. 11, 2014 and March 2016, respectively under student exchange programme.
- iv) **Expert** for evaluation of Major Research Projects (Chem. Tech.), **UGC, New Delhi** (Dec 26, 2014).
- v) **Evaluator, NBA, New Delhi**, Accreditation of Colleges & Universities for Engg. & Tech. programmes as per Washington Accord.
- vi) Expert Member, for CAS Selection, Sant Gadgebaba Amravati University (2015); selection of Asst. Professors, SGGGS College of Engg. & Tech. (2013, 2015).
- vii) CAS I-UGC nominee, Advisory committee, UGC-CAS-I Programme (2015-20), Department of Chemical Engineering, Anna University, Chennai.
- viii) Ph. D. Referee for S.P. Pune Univ., S.G.B. Amravati University, R.T.M. Nagpur Univ., ICT-Mumbai, Saurashtra Univ., Rajkot, S.P. University, Vallabh Vidyanagar.
- ix) Visitor's Nominee, Member-Court, Jawaharlal Nehru University, New Delhi (March 2016 - Feb. 2019).
- x) Evaluator for research proposals submitted under RGST, Govt of Maharashtra (2015-16).

### B. Activities as Director-UICT, Head- Dept. of Paint Tech., and University Level Responsibilities

- i) **Member** (2013-15)/ **Secretary**(2015 onwards), **BoG-TEQIP-II**, Nodal Officer-TEQIP Procurement (2013-15), UICT; Coordinator- Industry-Institute Interaction (III) Cell (2013 onwards): facilitated EoI with 08 different Industries; Facilitated procurement of Instruments, Equipments, e-resources, Lab./ Institute Furniture and Hardware and Software worth Rs. 3 Crore through PMSS module. Executed Statutory Audit, Data Audit, Mentoring, Post Procurement Audit by NPIU, Performance Audit of TEQIP-II.
- ii) a) Director-IQAC (2012-14), Member-IQAC (2014-16), NMU. Prepared and Submitted Annual Quality Assurance Reports (AQAR) of the University for the years: 2011-12, 2012-13, 2013-14, 2014-15. Contributed to the institutionalization of quality assurance strategies and processes.  
b) Expert Member-IQAC (2015-16): A.S.C. Arts, Science & Commerce College, Jamner and G H. Raisoni College, Jalgaon. Member advisory committee, UGC-SAP, School of life Sci. NMU, Jalgaon.
- iii) Head (Add. Charge), Swami Vivekananda Studies & Research Centre, School of Thoughts(2012-14)
- iv) **Experience in handling Assessment related practices of NAAC; NBA and NIRF**
  - a) **Secretary, Steering Committee on NAAC 2014 III cycle Reaccreditation, Self Study Report (SSR) Preparation and Presentation, NMU:** Prepared and uploaded the SSR. Coordinated the NAAC PEER Team visit to University during Feb. 23-26, 2015. University bestowed with the status of A Grade [3.05 on 4 point scale] by NAAC on May 01, 2015. Subsequent appeal before NAAC regarding inadequacy of award of CGPA score, the CGPA score was upgraded to **3.11** in Dec. 2015.
  - b) **Member, Steering Committee on NAAC 2008 II cycle Reaccreditation Proposal and Presentation, NMU:** Prepared & submitted the SSR in July 2008 to NAAC, Bangalore and steered Presentations before NAAC PEER Committee for Reaccreditation of North Maharashtra University during Jan. 05-07, 2009. University bestowed with the status of B Grade [2.88 on 4 point scale] by NAAC.
  - c) **Secretary, Steering Committee on National Institutional Ranking Framework (NIRF) 2015-16:** Executed Online Submission of University under NIRF for the period 2015-16 in January 2016: **North Maharashtra University was ranked 59<sup>th</sup> amongst the 100 best Universities in India through nationwide survey under NIRF of MHRD, Govt. of India, Delhi (April 2016).**
  - d) **UICT received 68<sup>th</sup> rank amongst the 100 best Engineering Institutions in India through nationwide survey under NIRF of MHRD, Govt. of India, Delhi (April 2016).**
  - e) Executed submission of SAR of NBA Accreditation of 05 B.Tech. Programmes on June 30, 2015 and application fees on Feb. 06, 2016 for NBA accreditation of 05 M. Tech. programme

f) Online Submission of EoA to AICTE, New Delhi for extension of approval of 05 UG and 07 PG Courses for 2016-17 was carried in Feb. 2016. Also conducted smoothly the D.T.E., Inspection for verification of 2015-16 EOA of 12 courses UG/PG.

v) **Members of following Statutory Bodies/ University Level Committee:** Academic Council, NMU (2012-2016); NMU Senate (2015-16) [No.NMU/1/VC-109/396/2015 dated 30.12.2015]; Guidelines and Syllabus for Entrance Test; Purchase of FESEM; Credit Structure and Academic Flexibility; Member-BOS-Chem. Engg. & Tech. and Faculty of Engg. & Tech. (2000-03, 2004-05, 2006-09, 2011-15); Invited Member-BCUD college grading committee (2015-16).

vi) **Member, University Level Committee under the Chairmanship of Hon'ble Vice-Chancellor, 2008:** The Committee prepared a Vision Document in consultation with all stakeholders depicting Policy, Strategy & Planning for Networking, Teachers Training, Examination Reforms, Campus Placement, Innovative Courses to fulfill global demands and local needs.

vii) **Coordinator- UGC approved University Instrumentation Maintenance Facility Center (IMF- XI Plan):** Effective measures for Repair & Maintenance and Utilization of ultra-scientific tools for revenue generation under 11<sup>th</sup> Plan of UGC.

viii) As coordinator – M. Tech. Programme, facilitated introduction of M. Tech- Chem. Engg. during 2006-07, M. Tech.-Polymer Tech. during 2007-08, M. Tech.-Nano Science & Technology during 2009-10 and M. Tech.- Paint Technology during 2011-12; Worked as officiating Head of UDCT during May-June 2002, May-June 2006 & May-June 2009; Member, Formulation of Guidelines for LIC Visit for affiliation of Engineering Colleges and Member, Subcommittee for evaluation of Syllabi of Certificate/ Diploma, Advanced Diploma Courses in Engineering Sciences, North Maharashtra University, Jalgaon (2007-08).

ix) Sub-Editor, UDCT Newsletter (2006-08), and University Magazine (Girnangan) (2010 onwards).

x) Undertook Modernisation of Paint Characterisation Labs. under AICTE-MODROBS Project.

**xi. Activities as Coordinator- Training and Placement (2000-2008; 2010 onwards), Coordinator- Career Guidance and Counseling Cell (2008-12); Coordinator-EDC**

a) Workshop on HRD Training/ Interview Practice Sessions for B. Tech./ M. Tech./M. Sc. students during March 31-April 02; 2008, Dec. 28-30, 2008; Oct. 08-09, 2009; September 03 and 04, 2010; September 20-21, 2010, Oct. 2011, Feb. 2012, 2013, 2014; 2015-16.

b) GATE Coaching Programme under Remedial Scheme of UGC for B. Tech. Students: Feb. 02-07, 2009; Oct. 05-14, 2009; Sept.-Oct. 2010; Dec. 2015/ Jan. 2016 at U.D.C.T., N.M.U., Jalgaon.

c) **Coordinating Summer Industrial Training of Pre-final & Campus Placement of Final B. Tech. (Chem. Engg. & Tech.) and M. Tech. (Polymer/ Paint Tech.) Students:** So far following organisations have recruited our students: Reliance Petrochemicals, IOCL, Mahindra & Mahindra, Oswal Fertilizers, GAIL, Kansai Nerolac, Videocon, Infosys, Asian Paints, Alembic, Marico Oil Industries, Hindustan Lever, Praj Group, Cadbury, Gharda Industries, Elantas-Beck etc. The Institute has excellent record of Campus Placement (More than 90%).

d) Organised several lectures of eminent personalities/ experts on diverse topics such as personality development, communication skill, entrepreneurial skill, preparations for GRE/ IAS/ GATE Examinations, etc. for the benefit of B. Tech. & M. Tech. students.

e) Major role in launching & editing of Department Website: [udctnm.com](http://udctnm.com) (2002-03).

f) Coordinating **Training and Placement activity of University through Central Training & Placement Cell** 2013 onwards.

g) Facilitated Faculty Development Programme (Training of Mentors) through INFOSYS at Pune (2014) and Bangalore (2015) under CSR and leadership development/ pedagogical training programme under TEQIP-II for University Faculty.

### **C. Activities as Coordinator- UPSA and Extra-Curricular / Social Activities**

i) **UPSA (UDCT Past Students Association)** has been registered at the Office of Charitable Commissioner, Jalgaon in the year 2004 vide registration number F/6815. The alumni meet is organized every year to facilitate interaction on regular basis. Eleven annual meets of past students (Jan 06, 2002-Jalgaon; Jan 26, 2003-Jalgaon; Feb. 27, 2004-Jalgaon; Dec.11, 2005-Thane; Jan. 07, 2007-Pune; Jan 06, 2008- Nashik; Feb.20, 2011- Jalgaon; March 11, 2012- Navi Mumbai; March 03, 2013-Pune, Thane-Feb. 18, 2014, March 15, 2015-Pune) have been organized.

ii) Organised Ten "Blood Donation Camps" jointly with N.S.S. / T.S.V.P.: Sept. 05, 2003, Sept. 15, 2004, Sept. 15, 2006, Oct. 11, 2007, Sept. 15, 2008, Oct. 01, 2009, Oct. 19, 2010, Feb. 27, 2012, Feb. 27, 2014 & Feb. 28, 2016 at U.I.C.T., N.M.U.

iii) Chairman, Result Committee, Yuvaranga-2015 (Jan. 07-10, 2016); Chairman, Welcome Committee, Yuvaranga-Western Region Inter University Youth Festival (Dec. 16-19, 2004) and Ashwamedha-State level Inter University Sports Competition (Nov. 26-Dec. 02, 2006) and Chairman, Welcome & Transport Committee, South-West Regional Inter University Volleyball Competition (Nov. 03-07,2009) organized by North Maharashtra University, Jalgaon.

iv) Worked as volunteer during Gujarat Earthquake Relief Work (March 2001)

v) Convener, "Open House- 98" U.D.C.T., N.M.U., Feb. 23- 28, 1998. Active involvement in the organization of National Science Day (Feb. 28) and Engineers Day (Sept. 15).

vi) President, Jalgaon City, ABVP (2004-08).

vii) Instrumental as Member, Action Team in organization of Silver Jubilee Reunion of B. Sc. (Tech)- 1990 batch at ICT, Mumbai on May 22, 2015.

## 7. Academic Profile

Examination / Degree	University	Year of Passing	%(Aggregate Marks)	Major Subjects
Ph.D. (Engg. & Tech.)	L.I.T., RTM Nagpur University (M.S.)	02/08/2005 (RTMNU/ Ph. D. /05/40)	Title: <i>Development of value added products from Industrial Wastes</i>	
M. Tech.- Chem. Tech.	L.I.T., Nagpur University (M.S.)	1993	75.3 (979 / 1300)	Oil & Paint Tech., Chem. Engg.
GATE (Graduate Aptitude Test in Engg.)		1990	77.76	Basic Engg. & Sci.
B. Sc. (Tech) (Tech. of Oils, Fats & Waxes)	U.D.C.T., Mumbai University (M.S.)	1990	76.75 (921/1200)	Oil Tech., Chem. Engg., Gen. Engg. & Sci.
B. Sc.	Marathwada University (M.S.)	1987	70.85 (2409/3400)	Physics, Chemistry, Maths

### B. Awards & Scholarships

i) Gold Medal (Stood 1<sup>st</sup> at M. Tech.)

ii) U.G.C. Fellowship

iii) Prof. J.G. Kane Prize & U.D.C.T. Golden. Jubilee Scholarship

iv) National Merit Scholarship

### Year of Award

1993 (Nagpur University)

Sept. 1991 - Feb. 1993

1988 (Mumbai University)

1987- 1990 (Univ. rank: 10)

## 8. Personal Information (Income Tax No. AAZPK8159R, Adhar No. 560542073105)

Date of Birth	Nationality	Marital Status	Languages Known	Hobbies
11- 4 -1966	Indian	Married	Marathi, Hindi, English	Reading, Social Work

**Address for Correspondence:** "SUDATTA", PLOT NO 37, GAT NO. 99, VITTHALWADI, NEAR HIRA SHIVA COLONY, JALGAON. PIN- 425 001 (M.S.) EMAIL: [kulkarnird67@gmail.com](mailto:kulkarnird67@gmail.com)  
Ph. NO. 91(0257) @ 2255590 O: 2257444 M. 9404366700, 962358094 Fax: 0257- 2258403

Place: Jalgaon

Date: 24/12/2015

(R. D. KULKARNI)

## Annexure 1

### Details of Research Work and Publications

#### 1. Research work supervised

##### A. Ph. D. Award

Sr. No.	Name of the Student	Ph. D. Topic	Date of Award	Subject & Date of Registration
1	Mr. Virendrasing Patil	Morphosynthesis of Nanopigments, Extenders & Polymer Nanocomposites and Design & Development of Hygienic & Functional Systems	Thesis Submitted 20.02.2016, viva awaited	Chemistry 20/01/2012 (NMU/11/Ph.D./ Chem/276/2012)
2	Mr. Hansraj Patil	Synthesis and characterisation of Surfactants as Microheterogeneous System for Wet Chemical Synthesis of Nanoparticles	Thesis Submitted 04.03.2016, viva awaited	Chemical Engg.& Tech. (NMU/11/Ph.D./ Chem.Tech./26/2011)
3	Dr. Sujay Mahajan	Synthesis and characterisation of oleochemical derivatives for exploration of ecofriendly tribological, detergent and allied industrial applications	09/10/2015 (NMU/11/Ph. D./Chem./2417/2015)	Chemistry 22/02/2011 (NMU/11/Ph.D./ Chem/221/2011)
4	Dr. Shashikant Pardeshi	Studies on Calibration and Standardization of Physico-Chemical Analysis of lipids.	02/05/2016 (NMU/11/Ph.D. /Chem/ /2016)	Chemistry 26/09/2007 (NMU/11/Ph.D/ Chem./1664/07)

5	Miss Kalpana Shimpi	Techno Commercial and Environmental Evaluation of Biodiesel as Engine fuel	Thesis Submitted 20/07/2015, viva awaited	Env. Sci. 26/09/2007 (NMU/11/Ph.D./Env.Sci/25/07)
6	Dr. Ashok Chaudhari	Preparation of renewable source based polyols and their utilization in synthesis and formulation of polyurethanes for industrial coatings.	11/12/2014 (NMU/11/Ph.D./Chem/2156/2014)	Chemistry 22/02/2011 (NMU/11/Ph.D./Chem/215/2011)
7	Dr. Mayur Chaudhari	Studies on Synthesis and analysis of polymers & photoinitiator for Formulation and Characterization of UV Curable Coatings.	16/07/2012 (NMU/11/Ph.D./Chem/1898/12)	Chemistry (NMU/11/Ph.D./Chem./163/07)
8	Dr. Nippon Ghosh	Development of Techniques for Synthesis of nanoparticles for utilization as spacing extenders, latex modifiers, & paint additives	23/12/2011 (NMU/11/Ph.D./Chem/2767/10)	Chemistry (NMU/10/Ph.D./Chem./153/07)
9	Dr. U. D. Patil	Reaction Engineering of Synthesis of Nanoinorganic Fillers and Their Effect on Thermal, Mechanical and Weather Resistance Properties of Elastomer Nanocomposites	20/12/2010 (NMU/11/Ph.D./Chem/Tech/2767/10)	Chemical Eng. & Tech. (NMU/Ph.D/Eng &Tech./12/06)

#### B. Ph. D. Guidance (In Progress)

Sr. No.	Name of the Student	Ph. D. Topic	Status	Subject & Date of registration
1	Mr. Yogesh Bhoge	Synthesis and crystal design of high performance pigments for development of special effect coatings	Pre-Ph.D. Thesis submitted: 11/03/2016	Chemistry 20/01/2012 (NMU/11/Ph.D./Chem/277/2012)
2	Mr. Nilesh Badgujar	Physicochemical characterisation, process Engg. and mathematical modeling of Pigmented Dispersion for formulation of Coatings	Synopsis Submitted	Chemical Engg. & Tech. 23/02/2011 (NMU/11/Ph.D./Chem.Tech./28/2011)
3	Mr. Vinod Hatkar	Synthesis and characterization of multifunctional monomers and prepolymers for development of UV cure nanocomposite coatings and adhesives	In Progress	Chemistry 3.4.2014 (NMU/11/Ph.D./Chem/822/2014)
4	Mr. Nitin B. Sonawane	--	Registration in progress	Chemistry

#### C. M. Tech. Guidance

- i) M.Tech. (Paint Technology) **2015-16** Batch: Mr. Tushar Pitrubhakt, Miss. Khushbu Ingle
- ii) M.Tech. (Paint Technology) **2014-15** Batch: Mr. Harshal Patil, Mr. Hrushikesh Desale, Dipak Dhangar, Sandup Gund, Aron, Bangalore – Ajay Koshti, Kansai Nerolac Chiplun - Nikhil Chaudhari, Kansai Nerolac, Mumbai - Nilesh Padar, Nilesh Nannavare, Muddasar Khan, Asian Paint – Harish Ajmera, Sunakshi Jamnare, Mahesh Khilare, Pramod Bhagat, Pidilite – Sukruta Deodhar
- iii) M. Tech. (Paint Technology) **2013-14** Batch: Ms. Varsha S. Patil, Mr. Shashikant A. Wagh, Mr. Mayur R. Patil, Ms. Kavita Pandhare, Ms. Rajeshri Chaudhari
- iv) M. Tech. (Nano Science and Technology) **09-11** Batch: Mr. Kalpesh V. Bhavsar, Mr. Nitin A. Charhate, Mr. Tushar V. Chaudhari, Mr. Jitendrasing R. Jadhav, Ms. Minal A. Tathe.
- v) M. Tech. (Polymer Tech.) **09-11** Batch: Mr. Abhijit Anand, Sohan S. Beldar, Kiran Nehete, Ganesh Mavale
- vi) M. Tech. (Polymer Tech.) **08-10** Batch: Shri Rajpal Girase, Shri Jitendra Bharambe, Shri Naveen Shrama, Miss Kalpana Patil, Shri Vinayak Chopade, Shri Yogendra Rajput
- vii) M. Tech. (Polymer Tech.) **07-09** Batch: Shri Rajendra Powar, Shri Rakesh Jain
- viii) M. Tech. (Chemical Engineering) **06-08** Batch: M. L. Bari, 21/01/2009; Nilesh Badgujar, 23/11/09; Sunil Badgujar- 20/11/10



## 2. List of Publications, Books, Patents, Conference Presentations, Invited Talk

### I. International Journals:

Sr. No.	Authors	Title of Paper	Journal	Vol./Page	Year	I. F.
1	VJ Patil, YE Bhoge, TD Deshpande, UD Patil, <b>RD Kulkarni</b>	Room temperature solution spray synthesis of Bismuth Vanadate nanopigment and its utilization in formulation of industrial OEM coatings	Vacuum	127, pp. 17-21	2016	1.86
2	YE Bhoge, VJ Patil, TD Deshpande, UD Patil, <b>RD Kulkarni</b>	Synthesis of Mica Doped Calcium Carbonate Filler for Partial Replacement of TiO <sub>2</sub> in Decorative Paint	International Journal of Engineering Trends and Technology	279-282	2016	--
3	Abhijeet Anand, <b>Ravindra D. Kulkarni</b> , Chandrashekhra Kaduba Patil and Vikas V. Gite	Utilization of renewable bio-based resources viz. sorbitol, diol, and diacid in the preparation of two pack PU anticorrosive coatings	RSC Adv.	online DOI: 10.1039/C5RA17202K	2016	3.84
4	Virendra J. Patil, Ujwal D. Patil, <b>Ravindra D. Kulkarni</b> , Nippon Ghosh	Synthesis of nano CaCO <sub>3</sub> /acrylic co-polymer latex composites for interior decorative paints	Polymer Composite Journal	DOI: 10.1002/p.c.24075	2016	1.67
5	Ashok Chaudhari, <b>Ravindra Kulkarni</b> , Pramod Mahulikar, Daewon Sohn, Vikas Gite	Development of PU Coatings from Neem Oil Based Alkyds Prepared by the Monoglyceride Route	Journal of the American Oil Chemists' Society	92 (5), 733-741	2015	1.54
6	Priya R. Kulkarni, Virendra J. Patil, Ujwal D. Patil, <b>R. D. Kulkarni</b> , P.P. Mahulikar,	Interfacial analysis and reaction engineering of sucrose ester mediated solution spray synthesis of lead chromate nanorods	Chemical Engineering and Processing: Process Intensification	95, 390-402.	2015	2.07
7	N. P. Badgujar, Yogesh Bhoge, TD Deshpande, BA Bhanvase, PR Gogate, <b>R. D. Kulkarni</b> , Shirish Sonawane	Ultrasound assisted organic pigment dispersion: advantages of ultrasound method over conventional method	Pigment and Resin Technology,	44 (4), 213-223	2015	0.79
8	Ujwal D. Patil, Virendra J. Patil, <b>Ravindra D. Kulkarni</b> ,	Solution Spray Controlled Polymorph Selective Synthesis of Lead Chrome Nanocrystals,	Advance Material Research, Trans tech. publication,	Vol. 1110, pp. 263-266	2015	--
9	Virendra J. Patil, Ujwal D. Patil and <b>Ravindra D. Kulkarni</b> ,	A Simple Solution Spray Reactor System for Directed Synthesis of Lead Chromate Nanorods,	Proceeding of the Int. Conf. on Advances in Chemical Engineering and Technology, ICACE-14	pp. 68-71 [ISBN 9879351072843]	2015	--
10	Virendra J. Patil, Ujwal D. Patil, Yogesh E. Bhoge and <b>Ravindra D. Kulkarni</b>	Facile Synthesis of Calcium Carbonate Nanoparticles using Solution Spray Reactor System	International Journal of Applied Engineering Research	9 (10) pp. 1261-1270	2014	0.02
11	Yogesh E. Bhoge, Tushar D. Deshpande, Virendra J. Patil, Nilesh P. Badgujar, Rajashri A. Chaudhari, <b>Ravindra D. Kulkarni</b>	Synthesis of Copper Phthalocyanine Blue Pigment: Comparative Evaluations of Fusion, Solvent and Microwave Techniques	International Journal of Applied Engineering Research	9 (10) pp. 1271-1278	2014	0.02
12	Sujay Mahajan, Priya	Synthesis and	<i>International</i>	2 (8),	2014	2.56

	Deshpande, <b>Ravindra Kulkarni</b>	characterisation of Estolide Esters for Tribological Properties	<i>Journal of Mechanical and Production Engineering</i>	pp.75-78 [ISSN 2321-2071]; IRAJ RF Proceedings ISBN 978-93-84209-31-5, pp. 166-199.		
13	N. P. Badgujar, H. V. Patil, T. D. Deshpande, <b>R. D. Kulkarni</b>	Preparation Of Eco Friendly Stabilized Water Based Pigment Concentrate For The Utilization In Formulation Of Coating	<i>International Journal of Advances in Science, Technology &amp; Engineering</i>	2 (4) 80-82 [ISSN: 2321:8991 ] IRAJ RF Proceedings ISBN 978-93-84209-31-5, pp. 126-128.	2014	--
14	Sameer A. Kapole, Bharat A. Bhanvase, Dipak V. Pinjari, Parag R. Gogate, <b>Ravindra D. Kulkarni</b> , Shirish H. Sonawane, Aniruddha B. Pandit	Investigation of corrosion inhibition performance of ultrasonically prepared sodium zinc molybdate nanopigment in 2 pack epoxy-polyamide coating	<i>Composite Interfaces, Special Issue: Special Section: Polymers &amp; Composites (ISAPM 2014)</i>	21 (9) pp. 833-852 [IF: ISSN 156 8-5543]	2014	0.72
15	Ashok Chaudhari, Anil Kuwar, Pramod Mahulikar, Dilip Hundiwale, <b>Ravindra Kulkarni</b> and Vikas Gite	Development of anticorrosive two pack polyurethane coatings based on modified fatty amide of Azadirachta indica Juss oil cured at room temperature – a sustainable resource	<i>RSC Adv.</i> ,	4 (34), pp. 17866–17872	2014	3.84
16	N. P. Badgujar, H. V. Patil, <b>R. D. Kulkarni</b>	Assessment of role of coco-sulphosuccinates in stabilization of water based concentrates of high performance organic pigments	<i>Proceedings of 41<sup>st</sup> Annual International Waterborne, High Solids and Powder Coating Symposium,</i>	pp. 93-105, ISBN 978-1-60595-165-2.	2014	--
17	S. A. Kapole, B. A. Bhanvase, D. V. Pinjari, <b>R. D. Kulkarni</b> , U. D. Patil, P. R. Gogate, S. H. Sonawane and A. B. Pandit	Intensification of corrosion resistance of 2 K epoxy coating by encapsulation of liquid inhibitor in nanocontainer core of sodium zinc molybdate and iron oxide	<i>Composite Interfaces</i>	21 (6) pp. 469-486 [IF: 0.63 ISSN 156 8-5543]	2014	0.72
18	<b>Kulkarni R. D.</b> , Chaudhari M., Mishra S.	UV Cure Acrylate Monomers: Synthesis, Analysis and Storage	<i>Pigment and Resin Technology</i>	42, pp. 53 – 67	2013	0.79
19	H. V. Patil, <b>R. D. Kulkarni</b> and S. Mishra	Synthesis and characterization of sulfosuccinate monoester surfactant from natural renewable resources	<i>International Journal of Chemistry and Chemical Engineering</i>	3, (2), 69-74	2013	--
20	Sujay Mahajan, Priya Deshpande, <b>Ravindra Kulkarni</b> , Pramod Mahulikar	Synthesis and Characterization of Chemically Modified Epoxidized Mustard Oil for Biolubricant Properties	<i>International Journal of Applied Engineering Research</i>	8 (17), pp. 2023-2030	2013	0.02
21	<b>R. D. Kulkarni</b> , Priya S. Deshpande, Sujay U. Mahajan, Pramod P.	Epoxidation of mustard oil and ring opening with 2-ethylhexanol for	<i>Industrial Crops and Products</i>	49, pp. 586-592	2013	2.8

	Mahulikar	biolubricants with enhanced thermo-oxidative and cold flow characteristics				
22	Amolkumar B. Lokhande, Satyendra Mishra, <b>Ravindra D. Kulkarni</b> , Jitendra B. Naik	Influence of different viscosity grade ethylcellulose polymers on encapsulation and in vitro release study of drug loaded nanoparticles	Journal of Pharmacy Research	7, pp. 414-420	2013	2.89
23	Amolkumar B. Lokhande, Satyendra Mishra, <b>Ravindra D. Kulkarni</b> , Jitendra B. Naik	Preparation and characterization of repaglinide loaded ethylcellulose nanoparticles by solvent diffusion technique using high pressure homogenizer	Journal of Pharmacy Research	7, pp. 421-426	2013	2.89
24	Amolkumar B. Lokhande, Satyendra Mishra, <b>Ravindra D. Kulkarni</b> , Jitendra B. Naik	Formulation and evaluation of glipizide loaded nanoparticle	International Journal of Pharmacy & Pharmaceutical Sciences	5 (4), pp.147-151	2013	0.55
25	A. B. Chaudhari, P. D. Tatiya, R. K. Hedao, <b>R. D. Kulkarni</b> , V. V. Gite	Polyurethane Prepared from Neem Oil Polyesteramides for Self-Healing Anticorrosive Coatings	Industrial & Engineering Chemistry Research	52, pp. 10189-10197	2013	2.6
26	<b>R. D. Kulkarni</b> , N. Ghosh, U. D. Patil, S. Mishra	In situ synthesis of poly (styrene-butyl acrylate-acrylic acid) latex/ barium sulphate nanocomposite and evaluation of their film properties	Polymer Composites Journal	34 (10), pp. 1670-1681 Online ISSN: 1548-0569	2013	1.89
27	A. B. Chaudhari, Abhijeet Anand, S.D. Rajput, <b>R. D. Kulkarni</b> , V. V. Gite	Synthesis, Characterization and Application of Azadirachta Indica Juss (Neem oil) fatty amides (AIJFA) based Polyurethane coatings- A Renewable novel approach	<i>Progress in Organic Coatings</i>	76, pp. 1779-1785	2013	2.4
28	A. B. Chaudhari, D. G. Hundiware, <b>R. D. Kulkarni</b> , V. V. Gite	Renewable Source Based Polyurethane Coatings by Using Monoglycerides of Vegetable Oils and Its Modification by Nano TiO <sub>2</sub>	Pigment & Resin Technology	42 (6), pp. 353-361	2013	0.79
29	<b>R. D. Kulkarni</b> , Tushar Deshpande, Priya Deshpande, P P Mahulikar	Synthesis of Sucrose-Coconut Fatty Acids Esters: Reaction Kinetics and Rheological Analysis	Industrial & Engineering Chemistry Research	52, pp. 15024-15033	2013	2.6
30	A. B. Chaudhari, S. D. Rajput, P. P. Mahulikar, <b>R.D. Kulkarni</b> , V.V. Gite	Development of Eco-friendly Polyurethane Coatings based on Neem oil Polyetheramide	Industrial Crops and Products	50, 550-556	2013	2.8
31	Abhijeet Anand, <b>R. D. Kulkarni</b> , V. V. Gite	Preparation and Properties of Eco-friendly Two Pack PU Coatings Based on Renewable Source (Sorbitol) and Its Property Improvement by Nano ZnO	Progress in Organic Coatings	74, 764-767	2012	2.4
32	Bharat Bhanvase, <b>Ravindra D. Kulkarni</b> , D Pinjari, Parag Gogate, A.B. Pandit Shirish. H. Sonawane	Improved Active Anticorrosion Coatings using Layer-By-Layer Assembled ZnO Nanocontainers with	Chemical Engineering Journal	189- 190, 464- 472	2012	4.3

		Benzotriazole				
33	J. B. Naik, A. B. Lokhande, S. Mishra, <b>R. D. Kulkarni</b>	Development of Sustained Release Micro/Nano Particles using different Solvent Emulsification Techniques: A Review	International Journal of Pharma and Bio Sciences	3(4), 573 – 590 (ISSN 0975-6299)	2012	5.12
34	Sameer. A. Kapole, <b>Ravindra D. Kulkarni</b> , Shirish. H. Sonawane	Performance properties of acrylic and acrylic-polyol polyurethane based hybrid system via addition of nano CaCO <sub>3</sub> and nanoclay	The Canadian Journal of Chemical Engineering	9999:1–7	2011	1.2
35	S. H. Sonawane, P. L. Chaudhari, S. A. Ghodke, M. G. Parande, V. M. Bhandari, S. Mishra, <b>R. D. Kulkarni</b>	Ultrasound assisted synthesis of Polyacrylic Acid-Nanoclay nanocomposite and its application in sonosorption studies of Malachite Green dye	Journal of Ultrasonics Sonochemistry	16, 351-355 [IF:, ISSN-1350-4177]	2009	4.3
36	<b>R. D. Kulkarni</b> , N. Ghosh, U. D. Patil, S. Mishra	Surfactant assisted solution spray synthesis of stabilized Prussian Blue and Red Oxide for preparation of nanolatex composites	Journal of Vacuum Science and Technology B (JVST)	27(3), 1478-83	2009	1.46
37	<b>Kulkarni R. D.</b> , Chaudhari M., Mishra S., Kinetic	Thermodynamic and Process Modeling of Synthesis of UV Curable Glyceryl and Neopentyl Glycol Acrylates	Proceedings of World Academy of Science, Engineering and Technology	Vol. 33, pp. 449-454 ISSN 2070-3740	2008	--
38	V.V. Gite, <b>R. D. Kulkarni</b> , D.G. Hundiwale, U.R. Kapdi	Synthesis & characterization of polyurethane coatings based on trimer of isophoron diisocyanate (IPDI) and monoglyceride of oils	Surface Coating International (JOCCA) Part B: Coatings Transactions	Vol. 89, B2, 117-122	2006	--
39	S. Mishra, V. S. Zope, <b>R. D. Kulkarni</b>	Kinetics and Thermodynamics of Hydrolytic Depolymerisation of polyurethane foam at higher temperature and pressure	Polymer-Plastics Technology and Engineering	43(04), 1001-1011	2004	1.48

## II. National Journals:

Sr. No.	Authors	Paper Title	Name of Journal	Vol./Page	Year
1	<b>R. D. Kulkarni</b>	Surfactant Mediated Polymorph Selective Solution Spray Synthesis of Nanopigments and their Characterisations	Synthesis of Nanomaterials	Conference Proceedings	2016
2	<b>R. D. Kulkarni</b> , S. J. Pardeshi, D. G. Hundiwale	Density as a Tool for the Detection of Adulteration of Sesame Oil in Refined Sunflower Oil and Palmolein Oil	SHARE Journal of Multidisciplinary Research & Studies	Vol. 4, 3-4 [ISSN: 0976-4712].	2013
3	<b>R. D. Kulkarni</b> , S. J. Pardeshi, D. G. Hundiwale	Refractive Index as a tool for finding the adulteration of sesame oil in sunflower oil and palmolein oil	Journal of Science, Technology and Management	Vol. 05, No. 2 [ISSN: 0974-8334].	2012
4	<b>R. D. Kulkarni</b> , Mayur Chaudhari and. S. Mishra	Recent developments in UV cure photoinitiators Part I- Unimolecular cleavable photoinitiators	Paintindia	LXI (1), 59-68 [ISSN: 0556-4409]	2011
5	<b>R. D. Kulkarni</b> , Mayur Chaudhari	Recent developments in UV cure photoinitiators Part II-	Paintindia	LXI (5), 72-80 [ISSN: 0556-	2011



	and. S. Mishra	Bimolecular abstractable photoinitiators		4409]	
6	<b>Kulkarni R. D.,</b> Chaudhari M., Mishra S.	Recent Developments in UV cure Epoxy Acrylate Oligomers	Paintindia	<b>Vol. LXI</b> (7), 58-64 [ISSN: 0556-4409].	<b>2011</b>
7	<b>R. D. Kulkarni,</b> M. L. Bari, Kalpana Shimpi	Synthesis and characterisation of biodiesel from refined soyabean oil and sunflower, cottonseed soapstock	International Journal of Advances in Chemical Engineering and Technology	<b>1</b> , 34-41 [ISSN: 0976-8513].	<b>2011</b>
8	<b>R. D. Kulkarni,</b> Mayur Chaudhari and. S. Mishra	UV Curable Acrylate monomers: Structure – Activity Relationship and Selection Criterion	Paintindia	<b>LX</b> (6), 57 – 76 [ISSN: 0556-4409]	<b>2010</b>
9	Shirish Sonawane, Sameer Kapole, and <b>Ravindra Kulkarni</b>	Process Development and synthesis of nanoclay and nano calcite synthesis and their applications in surface coating Industry	Paintindia	<b>LVIII</b> (05), 97-106 [ISSN: 0556-4409]	<b>2008</b>
10	V.V. Gite, <b>R. D. Kulkarni,</b> D.G. Hundiwale, U.R. Kapdi	Additives for solvent-borne. Waterborne specialty purpose coatings	Paintindia	<b>LV</b> (11), 63-70 [ISSN: 0556-4409].	<b>2005</b>
11	P. M. Thombare, P. R. Kulkarni, <b>R. D. Kulkarni</b>	Developments in Centrifugal Separation Practices in Edible Oil Industry	Chemical Business	<b>19</b> (11), 73-79, 86	<b>2005</b>
12	G. S. Patil, S. S. Sonawane, S. Tausique, <b>R. D. Kulkarni.</b> V. S. Patil	Characterization of Mass Transfer Packings for Extraction of Acetic Acid from Aqueous Solutions	Journal of Institution of Engineers	<b>82</b> , 09-12	<b>2001</b>
13	Nitin Wani, Sanjiv Mahajan, <b>R. D. Kulkarni</b> & B. B. Gogte	Some experiments in Development of Value Added Products from Refinery Soapstocks-II”, <i>Soaps</i>	Detergents & Toiletries Review	<b>31</b> (8), 39-45	<b>2000</b>
14	Kishore R. Patil, S. S. Patil, Ravichandran & <b>R. D. Kulkarni</b>	Synthesis and Characterization of EPN Resins	Paintindia	<b>L</b> (10), 35-41	<b>2000</b>
15	<b>R. D. Kulkarni</b> & B. B. Gogte	Some experiments in Development of Value Added Products from Refinery Soapstocks	Soaps, Detergents & Toiletries Review	<b>29</b> (10), 29 – 31	<b>1998</b>
16	<b>R. D. Kulkarni</b> & B. B. Gogte	SORBO alkyd emulsion paste for primers and synthetic enamels	Paintindia	<b>XLIV</b> (7), 41-45	<b>1994</b>

### III. Patents: Indian Patents

#### Patent Granted:

i) **R. D. Kulkarni**, Ujwal D. Patil, N. Ghosh, & S. Mishra, ‘Solution spray technique for preparation of inorganic Nanoparticles by coprecipitation’ Patent No. 235186, Date of Grant: **26/06/2009**, Date of Publication: 16/11/2007, Patent App. No.: 1639/Mum/2007 dated 27/08/07, International Classification C11D1/83.

ii) Sonawane Shirish Hari, **Kulkarni Ravindra Dattatrya**, Satyendra Mishra, Aniruddha Bhalchandra Pandit, Sarang Gumfekar, Lakshminarayan Ramjee, Kunte Kshitij Jayant, Kate Kunal Hemant ‘Synthesis of calcium carbonate nanoparticles by new recycle reactor using cavitation technique’, Patent No. 273204, Date of Grant: **25/05/2016** Filed on: 16/12/2011, Patent App. No.: 3546/MUM/2011A, Date of Publication: **02/08/2013**, International Classification : C01F11/18

#### Patent Published:

i) ‘Design of Impeller Assisted Circulation Mill for dispersion of nanopigments and high performance pigments’, **R. D. Kulkarni**, Tushar Deshpande, Nilesh Badgujar. Filed on June 30, 2012, App. No. 1844/MUM/2012 A, Date of Publication **03/01/2014**

- ii) 'Process for production of nanosize iron oxide pigment' Niraj Sikwal, S. H. Sonawane, **R. D. Kulkarni**, Nilesh Badgujar, U D Patil, Patent App. No.: 490/CHE/2014 dated 03-02-2014.
- iii) Sameer Kapole, S. H. Sonawane, **R. D. Kulkarni**, A. B. Pandit, B. A. Bhanvase, D. V. Pinjari, P. R. Gogate 'Synthesis of Corrosion Inhibiting Nano Pigment Comprising of Nano Container for Corrosion Inhibitive Coating'; Filed on: 21/05/2012, Patent App. No.: 1539/MUM/2012 A, Date of Publication: **22/06/2012**, International Classification C09D.
- iv) 'Nanoextenders for part replacement of TiO<sub>2</sub> for enhancement of hiding power'. **R. D. Kulkarni**, S. H. Sonawane & S. Mishra, Patent Application No.: 11/Mum/2004 Dated Jan. 14, 2004; Date of Publication: **05/05/2006**, Filed on 1.6.2004; International Classification C072/00.
- v) "IMPROVED SELF HEALING CORROSION INHIBITION COATING BASED ON NANOCAPSULE USING SONOCHEMICAL APPROACH" S. H. Sonawane, **R. D. Kulkarni**, Uday Bagle, Filed at Chennai Office.

#### Patent filed:

- i) **R. D. Kulkarni**, Sujay U. Mahajan, Priya S. Deshpande, P. P. Mahulikar on 'Combined *in-situ* and *ex-situ* process for epoxidation of vegetable oils and fatty acids for selective and stable oxirane ring formations':
- ii) **R. D. Kulkarni**, Sujay U. Mahajan, Priya S. Deshpande, P. P. Mahulikar, Virendra Patil, Ujwal Patil on 'Nanocatalysts for selective, low temperature and ecofriendly synthesis of sebacic acid'.

#### IV. Book/s:

- i) Authored Chapter in edited Book entitled "*Cavitation: A Novel Energy-Efficient Technique for the Generation of Nanomaterials*" (Pan Stanford Publishing Pvt Ltd ): Editor: Sivakumar Manickam, Muthupandian Ashokkumar; Title of Book Chapter: '*Ultrasonic processing for synthesis of nanocomposite via insitu emulsion polymerization and their applications*' by S. H. Sonawane, B. A. Bhanvase, **R. D. Kulkarni** and Pawan Khanna. ISBN 978-98-144-1154-7, pp. 297-337 CRC Press: Taylor & Francis Group, January 31, **2014**.
- ii) Authored Chapter in edited Book entitled "**Theoretical and Experimental Sonochemistry involving Inorganic Systems**" (Springer- Dordrecht, Heidelberg, London, New York): Editor: Prof. Pankaj and Prof. Ashokkumar; Title of Book Chapter: '*Acoustic and hydrodynamic cavitation for nano CaCO<sub>3</sub> synthesis*' by Shirish H. Sonawane and **Ravindra D. Kulkarni**. ISBN No. 978-90-481-3886-9 EISBN 978-90-481-3887-6 pp. 171-189 (**2011**).
- iii) 'Survey of Problems faced by Small Scale Industries (SSIs) in Jalgaon District: An empirical Study under VCRMS and TEQIP-II alongwith Prof Preeti Agrawal & Prof. A P Dongre: released in the form of Booklet in Sept. 2014.
- iv) Contributed an article "**Biodiesel**" in Study Manual prepared for participants of Winter Refresher Course organized by School of Environmental and Earth Sciences, North Maharashtra University, Jalgaon during 19 Dec, 2005 – 07 Jan, **2006**.
- v) **R. D. Kulkarni** and Mayur Chaudhari, *Paint Testing Manual*. It comprises a detail testing procedure of liquid paint and cross linked paint/coating film. It is backed by sound theoretical background as per ASTM and IS standards which is useful for B. Tech and M. Tech. students.

#### V. Invited Talk/ Resource Person

##### International Conferences/Programme:

1. **Ravindra Kulkarni**, 'Engineering Education and Placement in India', **International Symposium on Global Engineering Education**, Tokusima University, Japan March 1, 2014
2. **Ravindra Kulkarni**, 'Techno-entrepreneurship-Education, Opportunities, and Challenges', International conference on 'New Horizons & Prospects on Industry-Institute Interaction', organized by Shri Agnihotri College of Engineering, Wardha (MS India), Feb. 5-6, **2012**.
3. **Ravindra Kulkarni**, 'Process design, reaction engineering, and thermodynamics of synthesis of Silver nanoparticles for exploration in hygienic coating system', **9<sup>th</sup> International Symposium on Surface Coating Protective Coatings & Indo-German Conference on Surface Engineering (SSPC-2011)**, organized by The Society for Surface Protective Coating India, The Sheraton, Bangalore, India, Dec. 7-9, **2011**.
4. **Ravindra Kulkarni** 'Synthesis and Reaction Engineering of Multifunctional Acrylates and Formulation and Characterisation of UV cure Epoxy Acrylate Clear Coatings', **International Conference on 'Innovation in Polymer Science and Technology (IPST2011)'** Bali, Indonesia on 28th Nov. - 01st Dec, **2011**. Honoured as Chairman for one session at IPST 2011, Bali, Indonesia on Nov. 30, 2011.
5. **Ravindra Kulkarni**, Nippon Ghosh, Ujwal D Patil, Satyendra Mishra, 'Preparation and film characterization of poly (styrene-butylacrylate-acrylic acid) - barium sulphate nanocomposite'. at **8<sup>th</sup> International Symposium on Surface Coating Protective Coatings & International Paint Expo**

– 2011 (SSPC-2011), organized by The Society for Surface Protective Coating India, India Habitat Centre, New Delhi, March 3-5, 2011.

**National Conferences/ Workshop/ Refresher Courses/STTP**

Sr. No.	Title of Talk	Programme	Organiser	Date
1	Polymorph Selective Synthesis of Nanomaterials and Reactive Crystallisation and Engineering	Joshi Memorial IPI Presentation	College of Engineering and Technology, Akola	March 29, 2016
2	Surfactant Mediated Polymorph Selective Solution Spray Synthesis of Nanopigments and their Characterisations	National Conference on Synthesis of Nanomaterials	G.T. P. College (UGC SAP), Nandurbar	Feb. 09, 2016
3, 4	Pressure driven Membrane Separation Technique and Carbon Footprint and Paris Summit	MHRD-TEQIP STTP on 'Waste Water Treatment'	SGGS Institute of Engg & Tech, Nanded	Dec. 20, 2015
5	NIRF for Higher Education Institutes	NAAC Workshop on 'Teaching, Learning & Evaluation'	IQAC, Kotecha Mahila Mahavidyalaya, Bhusawal in collaboration with NAAC, Bangalore	Dec. 09, 2015
6	'Oleochemicals, Biolubricants and Functional Fluids for Eco-friendly Tribological and Allied Applications'	FDP entitled 'Faculty Improvement for Research in Science & Technology'	School of Chemical Sciences, North Maharashtra University, Jalgaon	on June 19, 2015. (June 18-24, 2015)
7,8	'Measurement and Data Collections –Tools and Interpretations I and II'	Research Methodology Workshop	BCUD, North Maharashtra University	June 11 & 12, 2015
9,10	'Criteriawise preparation of NAAC SSR' and participated as Panelist on "Strengthening of IQAC and NAAC related preparations'	NAAC Workshop	IQAC, North Maharashtra University in collaboration with NAAC, Bangalore	March 22, and 23, 2015

11. Invited talk at MHRD-TEQIP STTP held at SGGS Institute of Engg & Tech, Nanded on Dec. 22, 2014 on 'Reaction Engineering of synthesis of Nanomaterials'.

12. **"Reactive Crystallization and Nanotechnology"** on Dec. 4<sup>th</sup> 2013 in ISTE approved two weeks STTP on Advances in **Heat Transfer, Fluid Mechanics and Mass Transfer**, Jawaharlal Darda Institute of Engineering and Technology, Yavatmal.

13. **Ravindra Kulkarni**, 'Polymorph selective synthesis of Nanopigments' at One week TEQIP supported STTP Course on '**Nano Science and Technology**' at UICT, NMU, Jalgaon on June 24, 2013.

14. Delivered invited talk on 'Use of FESEM in environmental analysis' at National workshop on challenges and opportunities in Environmental Pollution and Health held during March, 12-14, 2013, organized by School of Environment and Earth Sciences, North Maharashtra University, Jalgaon.

15. Inaugural Talk as Guest of Honour at **Rangotsav**, ICT, Mumbai-19 on, 'Recent ecofriendly innovations in Paint Industry,' on Feb. 15, 2013.

16. '**Carbon Trading and Biofuels**' on 20/07/2012 in UGC sponsored Short Term Course in '**Energy Conservation**', UGC-Academic College, S.G. B. Amravati University, Amravati, held during July 16-21, 2012.

17. **"Recent Advances in Nanotechnology"** on June 15, 2012 in AICTE Sponsored Staff Development Programme on Recent Advances in Nanoscience and Technology, at SOCT, NMU, Jalgaon during June 15-30, 2012.

18. **Ravindra Kulkarni**, 'Innovations in Research in Nanomaterials', at Two week AICTE STTP Course on '**Nano Science and Technology**' at UDCT, NMU, Jalgaon on June 20, 2012.

19. **Ravindra Kulkarni**, 'Synthesis and characterization of Nanopigments', at Two week AICTE STTP Course on '**Nano Science and Technology**' at UDCT, NMU, Jalgaon on June 16, 2012.

20. **Ravindra Kulkarni** 'RTD analysis and design of Nonideal Reactors' at SGGS Institute of Engg. & Tech., Nanded on April 20, 2012.

21. **Ravindra Kulkarni** 'Environmental Applications of FESEM', One Day Seminar (**National Science Day Celebration**) by School of Environmental and Earth Sciences, North Maharashtra University, Jalgaon on March 08, **2012**.
22. **Ravindra Kulkarni**, Keynote presentation on 'Synthesis and characterization of Polymer Nanocomposites' at AUPPC sponsored National Level Seminar on '**Recent Advances in Polymer Science**' held at P.S.G.V.P. Mandal's College of Pharmacy, Shahada (M.S.) on Feb. 24-25, **2012**.
23. **Ravindra Kulkarni**, Keynote presentation on 'Field Emission Scanning Electron Microscopy as tool in Pharmaceutical Analysis' at University of Pune sponsored two day State level Seminar on "**Current Trends in Nano Drug Delivery Systems**" by Sinhgad Technical Education Society's Smt. Kashibai Navale College of Pharmacy, Pune on Feb. 17-18, **2012**.
24. **Ravindra Kulkarni**, 'Optical and Electron Microscopy in Pharmaceutical Characterizations' at University of Pune sponsored two day State level Conference on "**Recent Trends in Drug Designing & Analytical Techniques**" by Amrutvahini S. & S.V. Sanstha's Amrutvahini College of Pharmacy, Sangamner, Dist. Ahmednagar on Feb. 15-16, **2012**.
- 25, 26. **Ravindra Kulkarni**, Two lectures on 'Reactive Crystallisation for Polymorph Selective Synthesis of Nanomaterials- I and II' on 07/02/12 at U.G.C. Short Term Course organized by UGC-Academic Staff College, Guru Ghasidas Central University, Vilaspur (C.G.) during Feb. 06-11 **2012**.
27. **Ravindra Kulkarni**, 'Green Nanotechnology', University Level Seminar on '**Recent Trends in Green Chemistry**' at Shri V.S. Naik Arts, Commerce, Science College, Raver, Dist. Jalgaon on Jan. 28, **2012**.
28. **Ravindra Kulkarni**, 'Innovations in Synthesis of Nanomaterials', at University Level Seminar on '**Innovations in Chemical Sciences (ICS-2011)**' at G.D. Bendale Mahila Mahavidyala, Jalgaon on Jan. 24, **2012**.
29. **Ravindra Kulkarni** 'Synthesis of Nanomaterials for development of Novel Applications' at Moolji Jaitha College, Jalgaon as a part of Lecture Series organized on the occasion of **International Year of Chemistry** on Dec. 27, **2011**.
30. **Ravindra Kulkarni**, 'Manufacturing of Nanomaterials and their characterization's, at third One week Professional Certificate Course on 'Nano Science and Technology' at UDCT, NMU, Jalgaon on Dec. 26, **2011**.
31. **Ravindra Kulkarni**, on 'Use of Software's in Chemistry Calculations, Research and Teaching' at University Level Seminar on '**Role of ICT in Teaching Chemistry**' at JTE's GDM Arts, Shri KRN Commerce, & MD Science College, Jamner on Dec. 24, **2011**.
32. '**Introduction to Nano Science and Technology**' on Sept.12, 2011 during UGC-Academic Staff College, Pune University Refresher Course in '**Chemistry and Chemical Technology**' at UDCT, NMU, Jalgaon (Sept. 12-Oct.02, **2011**).
33. '**Latex Nanocomposite**' on June 16, 2011 at AICTE sponsored Staff Development Programme on 'Recent Advances in Polymer Technology' organized by Department of Chemical Technology during June 15-30, **2011**.
34. **Ravindra Kulkarni**, "Relevance of Nanotechnology in Everyday Life" at UGC Sponsored Seminar on '**The Role of Chemistry in our Lives**' organized by SIP Arts, GBP Science & STSKVS Commerce College, Shahada, Dist. Nandurbar (MS) on Feb. 25, **2011**.
- 35, 36. Delivered two lectures on '**Surfactant assisted Nanopigment synthesis**' (06-04-2010) and '**Smart Coatings**' (08-04-2010) at UGC sponsored two weeks Short Term Training Programme on 'Diverse Aspects of Nano Science and Technology' (April 01-12, **2010**), at UDCT, NMU, Jalgaon.
37. **Ravindra Kulkarni**, "Synthesis and characterizations of nanopigments" at National Seminar on '**Programme on Nano Technology & Its Applications**, organized by IRMRA, Thane on July 25, **2009**.
38. **Ravindra Kulkarni**, "Nanostructure based Retrofitting in Paints and Smart Coatings" at National Seminar on '**Programme on Nano Technology & Its Applications**, organized by IRMRA, Thane on July 24, **2009**.
- 39,40. Delivered **two** Plenary Lectures entitled "**Pressure Driven Membrane Separation Techniques in Effluent Treatment**" and "**Carbon Trading**" at School of Environmental and Earth Sciences, North Maharashtra University, Jalgaon on Feb. 06 and 11, **2008**, respectively during Winter Refresher Course (04 Feb. – 24 Feb., **2008**)
41. **Ravindra Kulkarni**, "Applications of Nanotechnology in Surface coating Industries" at National Seminar on '**Programme on Nano Technology & Its Applications**' organized by IRMRA, Thane & BARC, Mumbai on March 16 & 17, **2007**.
- 42,43. Delivered **two** Plenary Lectures entitled "**Biodiesel as Eco-friendly Fuel**" and "**Value Added Products from Industrial Wastes**" at School of Environmental and Earth Sciences, North Maharashtra University, Jalgaon on Dec. 21 and 23, 2005, respectively during Winter Refresher Course (19 Dec., 2005 – 07 Jan., **2006**).



44. **Ravindra Kulkarni**, "Membrane Technique for Treatment of Electroplating and Metal Processing Effluent for generation of value added Products" at Seminar on '**Reuse, Recycling and Conservation of Industrial Waste Water**' at SGGS Institute of Engg. & Tech., Nanded on July 10, 2004.
45. **Ravindra Kulkarni**, "Advanced Tertiary Wastewater Treatment" at Seminar on '**Newer Trends in Environmental Sciences**', at North Maharashtra University, Jalgaon, March 06, 2004.
- 46-48. Delivered **three** Plenary Lectures entitled "**Biodiesel**", "**Glyceride Structure**" and "**Automotive Coatings**" at School of Chemical Sciences, North Maharashtra University, Jalgaon on Nov. 07 and 11, 2003 during Winter Refresher Course (7- 28 Nov., 2003).
49. "**Oleochemicals- Overview & Perspectives**" at School of Chemical Sciences, North Maharashtra University, Jalgaon on March 15, 2002 during Refresher Course (March, 2002).
50. "**Modeling of Chemical Reactions**" at Refresher Course of School of Mathematical Sciences, North Maharashtra University, Jalgaon (10-29 March, 2004) on March 13, 2004.

## **VI. Presentations at International Conferences:**

1. Vinod M. Hatkar, Virendra J. Patil, Jitendra S. Narkhade, Ujwal D. Patil, **Ravindra D. Kulkarni** "Preparation and characterization of UV curable nanocomposites coatings using multifunctional epoxy-acrylate prepolymer " **An International Conference on Recent Advances in Nano Science and Technology (RAINSAT-2015)** at Sathyabama University, Chennai during July 8-10, 2015.
- 3<sup>rd</sup> **Global Sustainable Biotech Congress (GSBC-2014)** Organized by North Maharashtra University, Jalgaon and in association with Global Biotech Forum, Nagpur and CETYS University, Mexico during December 1-5, 2014 (2-8)
2. Ujwal D. Patil, Virendra J. Patil and **Ravindra D. Kulkarni**, Single step synthesis of nano silver particles for applications in antimicrobial paints.
3. Sujay U. Mahajan, Priya R. Kulkarni and **R. D. Kulkarni**, Synthesis and Evaluation of Estolide Esters: Bio-Lubricant applications.
4. Virendra J. Patil, Ujwal D. Patil and **Ravindra D. Kulkarni**, Smart and Functional Coating Systems.
5. Y. E. Bhoge, T. D. Deshpande, N. P. Badgujar, and **R. D. Kulkarni**, Green synthesis of copper phthalocyanine blue pigment for eco friendly waterborne formulations.
6. Vinod M. Hatkar, Jitendra S. Narkhede, **Ravindra D. Kulkarni**, Synthesis of Eco-Friendly UV-Cure Multifunctional Polyol Acrylate-Epoxy Prepolymer and Development of Nanocomposite Coatings.
7. Jitendra S. Narkhede, Vinod M. Hatkar and **Ravindra D. Kulkarni**, Synthesis of UV Cure Neopentyl Glycol Acrylate Monomer for UV-Curable epoxy acrylate Nanocomposite Coatings.
8. N.P. Badgujar, A. B. Desai H. V. Patil and **R. D. Kulkarni**, Natural Biocides as an Effective Agent Used in Surface Coating(Resin Free Pigment Concentrates) Formulations-A Review.
9. **R. D. Kulkarni**, Sujay U. Mahajan and Priya R. Kulkarni, Mustard-Estolide Ester Synthesis for Enhancement of Tribological Properties, **69<sup>th</sup> Annual Convention and International Conference on Sustainable Technologies and Futuristic Trends: Oilseeds - Oils Processing and Surfactants & Expo 2014** on November 14-16, 2014 at Hotel Radisson Blu, Agra, India.
10. **R. D. Kulkarni**, H. V. Patil, N.P. Badgujar and S. Mishra, Synthesis, surface properties and antimicrobial activity of sulfosuccinate monoester surfactant. **69<sup>th</sup> Annual Convention and International Conference on Sustainable Technologies and Futuristic Trends: Oilseeds - Oils Processing and Surfactants & Expo 2014** on November 14-16, 2014 at Hotel Radisson Blu, Agra, India.
11. **R. D. Kulkarni** and M. L. Bari, In situ transesterification process and reactor development for biodiesel synthesis from sunflower seed lipids. **69<sup>th</sup> Annual Convention and International Conference on Sustainable Technologies and Futuristic Trends: Oilseeds - Oils Processing and Surfactants & Expo 2014** on November 14-16, 2014 at Hotel Radisson Blu, Agra, India.
12. Virendra J. Patil, Ujwal D. Patil And **Ravindra D. Kulkarni**, A Simple Solution Spray Reactor System for Directed Synthesis of Lead Chromate Nanorods, Int. Conf. on Advances in Chemical Engineering and Technology, **ICACE TKMCE '14**, 16-18 October 2014, Thangal Kunju Musaliar College of Engineering, Kollam 5, Kerala.
13. Virendra J. Patil, Ujwal D. Patil, Yogesh E. Bhoge and **Ravindra D. Kulkarni**, Facile Synthesis of Calcium Carbonate Nanoparticles using Solution Spray Reactor System, 2nd International Conference On "**Innovative Trends in Applied Physical, Chemical, Mathematical, Statistical Sciences and Emerging Energy Technology for Sustainable Development**" (APCMSET-2014), 19th -20th July, 2014, Jawaharlal Nehru University, New Delhi

14. Yogesh E. Bhoge, Tushar D. Deshpande, Virendra J. Patil, Nilesh P. Badgujar, Rajashri A. Chaudhari, **Ravindra D. Kulkarni**, Synthesis of Copper Phthalocyanine Blue Pigment: Comparative Evaluations of Fusion, Solvent and Microwave Techniques, International Journal of Applied Engineering Research, 2nd International Conference On **“Innovative Trends in Applied Physical, Chemical, Mathematical, Statistical Sciences and Emerging Energy Technology for Sustainable Development” (APCMSET-2014)**, 19th -20th July, 2014, Jawaharlal Nehru University, New Delhi
15. Ujwal D. Patil, Virendra J. Pail and **Ravindra D. Kulkarni**, ‘Solution spray controlled polymorph selective synthesis of lead chrome nanocrystals’ *AMDP-2014*, July 17-21, 2014, Busan, Korea. **(Received first prize in Oral Presentation)**
16. N. P. Badgujar, H. V. Patil, **R. D. Kulkarni**, “Assessment of role of coco-sulphosuccinates in stabilization of water based concentrates of high performance organic pigments”, at **41<sup>st</sup> Annual Waterborne, High Solids and Powder Coating Symposium, at New Orleans, Louisiana, USA** during February 24 - 28, **2014**.
17. Sujay Mahajan, Priya Deshpande, **R. D. Kulkarni** and P. P. Mahulikar, “Enhanced lubrication properties of vegetable oils by oxirane ring opening” **International Conference on Global Opportunities for Latest Developments in Chemistry and Technology-2014 (GOLD-CT 2014)** February 06-08, **2014**
18. N. P. Badgujar and **R. D. Kulkarni** “Preparation of stabilized water based pigment concentrates by using Inorganic and Organic Pigments” **International Conference on Global Opportunities for Latest Developments in Chemistry and Technology-2014 (GOLD-CT 2014)** February 06-08, **2014**
19. **R. D. Kulkarni**, S. Mishra and H. V. Patil “Synthesis and Characterization of Lauryl Sulfosuccinate from Oleochemicals” **International Conference on Global Opportunities for Latest Developments in Chemistry and Technology-2014 (GOLD-CT 2014)** February 06-08, **2014**
20. Sujay Mahajan, P. S. Deshpande, **R. D. Kulkarni** "Synthesis and Characterization of Estolide Esters for Tribological Properties" **International Conference on Global Opportunities for Latest Developments in Chemistry and Technology-2014 (GOLD-CT 2014)** February 06-08, **2014**.
21. V. J Patil, U. D. Patil and **R. D. Kulkarni**, “Polymorph selective synthesis of CaCO<sub>3</sub> nanoparticles using solutions spray reactor” **International Conference on Global Opportunities for Latest Developments in Chemistry and Technology-2014 (GOLD-CT 2014)** February 06-08, **2014**.
22. Y. E. Bhoge, T. D. Deshpande, N. P. Badgujar and **R. D. Kulkarni** "Comparative evaluations of fusion, solvent and microwave techniques in synthesis of copper phthalocyanine blue pigment" **International Conference on Global Opportunities for Latest Developments in Chemistry and Technology-2014 (GOLD-CT 2014)** February 06-08, **2014**.
23. H. S. Ajmera, M. B. Khilare, S. N. Gund, P. R. Bhagat and **R. D. Kulkarni**, “Paint Sludge Detackification and its re-use” **11<sup>th</sup> International Symposium On Surface Protective Coatings, SSPC India 2014, Ahmedabad, Gujarat (SSPC-2014)** Jan 19-21, **2014**.
24. V. J Patil, U. D. Patil and **R. D. Kulkarni**, "Impinging Solution Spray Synthesis of Silver Nanoparticles and their Utilizations in the Formulations of Waterborne Hygienic Coatings” at **41<sup>st</sup> Annual Waterborne, High Solids and Powder Coating Symposium, at New Orleans, Louisiana, USA** during February 24 - 28, **2014**. (Paper Selected)
25. Y. E. Bhoge, T. D. Deshpande, N. P. Badgujar and **R. D. Kulkarni**, “Process intensification of aqueous dispersion of Phthalocyanine pigment surface modification, cavitation milling and surfactant stabilization” at **41<sup>st</sup> Annual Waterborne, High Solids and Powder Coating Symposium, at New Orleans, Louisiana, USA** during February 24 - 28, **2014**. (Paper Selected)
26. Sujay Mahajan, Priya Deshpande, **R. D. Kulkarni** and P. P. Mahulikar, “Synthesis and characterization of chemically modified epoxidized mustard oil for biolubricant properties”, **International Conference on Chemical, Environmental and Bioprocess Engineering (CEBE-2013), Jawaharlal Nehru University, New Delhi**, 21-22<sup>nd</sup> December, **2013**.
27. H. V. Patil, **R. D. Kulkarni** and S. Mishra, “Synthesis and characterization of sulfosuccinate monoester surfactant from natural renewable resources”, **International Conference on Chemical, Environmental and Bioprocess Engineering (CEBE-2013), Jawaharlal Nehru University, New Delhi**, 21-22<sup>nd</sup> December, **2013**.
28. V. J Patil, U. D. Patil and **R. D. Kulkarni**, “Impinging solution spray synthesis of CaCO<sub>3</sub> nanoparticles and the influence of surfactants and solvents on polymorph selectivity” at **5<sup>th</sup> Asian Conference on Colloid and Interface Science [ACCIS-2013], Department of Chemistry, University of North Bengal, Darjeeling, West Bengal, India**, during November 20-23 **2013**.
29. Y. E. Bhoge, T. D. Deshpande, N. P. Badgujar and **R. D. Kulkarni**, “Synthesis of copper phthalocyanine blue nanopigment comparative evaluation of fusion, solvent and microwave

technique” at **5<sup>th</sup> Asian Conference on Colloid and Interface Science [ACCIS-2013]**, **Department of Chemistry, University of North Bengal, Darjeeling, West Bengal, India**, during November 20-23 **2013**.

30. V. J. Patil, Y. E. Bhoge, U. D. Patil, T. D. Deshpande and **R. D. Kulkarni**, “Phase selective synthesis of bismuth vanadate (BiVO<sub>4</sub>) nanopigment using surfactant assisted impinging solution spray process and their application as high performance pigment in paint” **10<sup>th</sup> International Symposium On Surface Protective Coatings, SSPC India 2013 (SSPC-2013)**, Feb. 15-16, **2013 (2nd Best poster paper awarded)**.

31. **R. D. Kulkarni**, N. P. Badgular and T. D. Deshpande “Effect of ZnO nanoparticles on anti ageing properties of saturated polyester resin coating” **10<sup>th</sup> International Symposium On Surface Protective Coatings, SSPC India 2013 (SSPC-2013)**, Feb. 15-16, **2013**

**8<sup>th</sup> Coatings Science International Conference** organized by Eindhoven University of Technology at **Noordwijk, The Netherlands** during June 25-29, **2012 (31-37)**:

32. **R. D. Kulkarni**, Abhijeet Anand, V. V. Gite, “Synthesis of renewable sorbitol and dimer acid based polyester polyol and investigation of structure-activity relationship of two pack polyurethane nanocomposite”.

33. **R. D. Kulkarni**, Virendra J. Patil, N. Ghosh, U. D. Patil, S. Mishra, “Surfactant mediated polymorph selective synthesis of lead chrome nanopigments by controlled coprecipitation in Mixed Flow Reactor”.

34. T. D. Deshpande, Y. E. Bhoge, N. P. Badgular, S. H. Sonawane, **R. D. Kulkarni**, “Mathematical modeling of microbead and high speed dispersion and evaluation of dispersion stabilization mechanism”.

35. Ashok Chaudhari, D. G. Hundiwale, **R. D. Kulkarni**, V. V. Gite, “Synthesis, Characterization and Application of Azadirachta Indica Juss (Neem oil) hydroxyl-fatty amides (AIJFA) based Antimicrobial Polyurethane coatings: A Renewable approach”.

36. B. A. Bhanvase, S.E. Karekar, Sameer Kapole, **R. D. Kulkarni**, D. V. Pinjari, A. B. Pandit, S. H. Sonawane, “Ultrasound assisted synthesis of zinc molybdate anticorrosive pigment and its role in polyvinyl ester coating”.

37. Sameer Kapole, **R. D. Kulkarni**, B. A. Bhanvase, and A. B. Pandit, S. H. Sonawane, “Performance of TDI modified soya alkyd nanocomposite coating containing calcium carbonate and Iron Oxide on wood substrate”.

38. P. R. Kulkarni, **R. D. Kulkarni**, P.P. Mahulikar, “Formulation and characterisation of UV Cure Nanocomposite Coatings based on Acrylates of Epoxidised Sunflower Oils”.

**9<sup>th</sup> International Symposium on Surface Coating Protective Coatings & Indo-German Conference on Surface Engineering (SSPC-2011)**, organized by The Society for Surface Protective Coating India, The Sheraton, Bangalore, Dec. 7-9, **2011 (38-41)**.

39. **R D Kulkarni**, Shirish Sonawane, Tushar Deshpande, Nilesh Badgular, Yogesh Bhoge, ‘Surfactant assisted ultrasound dispersion of phthalocyanine pigments in water borne and solvent thinnable systems: Modeling and Simulation studies’.

40. **R D Kulkarni**, Tushar Saindane, Rajendra Bhavsar ‘Evaluation of nanoadditives for UV Cure Coatings’ (**2<sup>nd</sup> prize for best poster presentation**).

41. **R D Kulkarni**, Virendra Patil, U D Patil, S. Mishra, “Synthesis and characterization of Lead Chrome nanowires and nanorods by mixed flow coprecipitation process”.

42. **R D Kulkarni**, Ritesh Shimpi, N. P. Badgular

**7<sup>th</sup> Coatings Science International Conference (COSI 2011)**, organised by Eindhoven University of Technology, **Netherlands**, June 29-July 4, **2011 (42, 43)**:

43. V. V. Gite, Abhijeet Anand, **R. D. Kulkarni**, ‘Preparation and Properties of eco-friendly two pack PU coatings based on Renewable source (Sorbitol) and its property improvement by nano ZnO’.

44. V. V. Gite, A.B. Chaudhari, D. G. Hundiwale, **R. D. Kulkarni**, ‘Synthesis of renewable source (vegetable oils) based polyurethanes resins for industrial coating’.

**8<sup>th</sup> International Symposium on Surface Coating Protective Coatings & International Paint Expo – 2011 (SSPC-2011)**, organized by The Society for Surface Protective Coating India, India Habitat Centre, New Delhi, March 3-5, **2011 (44, 45)**:

45. **R. D. Kulkarni**, Mayur Chaudhari, Akshay Dhake, and Tushar Saindane, “Formulation and characterization of scratch resistant UV Cure acrylic automotive topcoats based on nanoadditives”.

46. **R. D. Kulkarni**, Nilesh Badgular, Tushar Deshpande, ‘Mathematical Modeling and Simulation of Microbead Mill for optimised dispersion of pigments’ (**2nd Prize for best poster at SSPC-2011**).

47. **R. D. Kulkarni**, Mayur Chaudhari, S. Mishra, “Investigation of influence of photoinitiator type, concentration and film thickness on UV cure behavior of Epoxy Acrylate Coatings on metal surfaces” at **International Conference on Frontiers of Polymers and Advanced Materials (Macro-2010)**, IIT New Delhi, Dec. 14-17, **2010**.

**International Congress of Chemistry and Environment (ICCE – 2010 at Thailand)** in association with Ubonratchathani University and Chemical Society of Thailand (PACCON – 2010 The Pure and Applied Chemistry International conference -organized by Chemical Society of Thailand)-Jan.21-23, **2010** (47-48):

48. **R. D. Kulkarni**, N. Ghosh, U. D. Patil, S. Mishra, 'Synthesis and Characterization of Lead Chrome Nano Spindles'.

49. **R. D. Kulkarni**, N. Ghosh, U. D. Patil, S. Mishra, 'Surfactant Stabilized Synthesis of Nano Prussian Blue in Falling Film Reactor'.

International Conference on '**Recent Advances in Polymer Technology**', Dept. of Chemical Tech. & School of Chemical Sciences, North Maharashtra University, Jalgaon Dec. 28-29, **2009** (49-57):

50. **R. D. Kulkarni**, Kalpana Patil, 'Synthesis and characterization of Benzoxazine polymer and to study its Nanocomposite'.

51. **R. D. Kulkarni**, R. Pawar R. Mulay, N. P. Rumale, and V. A. Bhanu, 'Evaluation of BYK nano Alumina additives in the Epoxy Wire Enamel for Improvement in Insulating Properties'.

52. **R. D. Kulkarni**, O. P. Gautam, 'Rheological studies of water borne dispersions containing mineral fillers and polymer emulsions'.

53. **R. D. Kulkarni**, U. D. Patil and S. Mishra, "Synthesis of nano CaCO<sub>3</sub> and preparation and characterisation off silicone rubber nanocomposites'

54. **R. D. Kulkarni**, N. Ghosh and S. Mishra, "Micelle Synthesis of Prussian Blue nanoparticles and preparation and characterization of nanolatex composites".

55. **R. D. Kulkarni**, M. Chaudhari and S. Mishra 'Effect of Pigmentation on Dispersion, Stabilisation, Flow Properties and Curing Inhibition of UV Curable Epoxy Acrylate Coatings'.

56. **R. D. Kulkarni**, P. Deshpande and P. P. Mahulikar, 'Low Pressure Clay Catalysed Synthesis and Characterization of Dimer Acids'.

57. **R. D. Kulkarni** and N. P. Badgular, 'Modelling of Ball Mill for Dispersion of Pigments in Long oil Alkyd'.

58. **R. D. Kulkarni** and A. Kumar 'Synthesis and charecterisation of Acrylic Microgel for utilisation in high solid automotive basecoat'.

59. **R. D. Kulkarni**, N. Ghosh, U. D. Patil, S. Mishra, " In situ preparation & Characterisation of nano CaCO<sub>3</sub> –styrene acrylate latex nono composite", **International Conference on Photonics, Nanotechnology and Computer Science (ICOPNAC-2009)**, Prist University, Thanjavur, Tamilnadu (India) Feb. 25 -28 **2009**

60. **R. D. Kulkarni**, Mayur Chaudhari, S. Mishra, "Kinetic, Thermodynamic and Process Modeling of Synthesis of UV Curable Glyceryl and Neopentyl Glycol Acrylates" **WCSET 2008:World Congress on Science, Engineering and Technology**, Heidelberg, Germany, (publication in Proceedings of World Academy of Science, Engineering and Technology, Volume 35, Sept. 2008) September 24-26, **2008**.

61. **R. D. Kulkarni**, N. Ghosh, U. D. Patil, and S. Mishra, "Surfactant assisted solution spray synthesis of stabilized Prussian Blue and Red Oxide for preparation of nanolatex composites" **International Conference on Nano Manufacturing (NanoMan2008)**, Tianjin University and Nanyang Technological University, Singapore, July 13-16, **2008**.

62. M. L. Bari, K. G. Shimpi and **R. D. Kulkarni**, 'Combined Acidulation and Esterification Technology for Production of Biodiesel from Industrial Wastes', **Indo- Italian International Conference on Green and Clean Environment (GCE 2008)**, at MIT, Pune (India) March 20-21, **2008**.

63. Shirish Sonawane, S. Mishra and **R.D. Kulkarni**, 'Effect of nano-size of CaCO<sub>3</sub> particles on rheological behavior of alkyd resin', **International Conference on Advances in Manufacturing & Technology Management (ICAMTM 2007)** at Mumbai (India), January 18-20, **2007**

64. Selukar N. B., Thombre P. M., Sonawane Atul and **R. D. Kulkarni**, "Exploration of Jatropha, Karanja, and Neem Oil for synthesis of Biodiesel", International Conference, '**Modern Trends in Plant Sciences with Special Reference to the Role of Biodiversity in Conservation ICPSBC-05**', Amravati University, Amravati (India), Feb. 17-20, **2005**.

65. **R. D. Kulkarni** & G. A. Usmani, "Upgradation of Ricebran Fatty Acids for Synthesis of Oleochemicals" **International Seminar on 'Ricebran & Palm Oil'**, OTAI, Kanpur(India) Sept. 21-22, **2002**.

66. Pradip Sankul & **R. D. Kulkarni**, "Kinetics of Synthesis of Sucrose Polyester" International Seminar on 'Oleochemicals, & Surfactants', OTAI, Mumbai (India) 25-26 Nov., **2001**.

## **VII. Presentations at National Conferences/ Seminars**

1. Dipak S. Dhangar, Vinod M. Hatkar, Jitendra S. Narkhede and Ravindra D. Kulkarni, "Green Synthesis of UV Cure Multifunctional 1,6 Hexanediol Diacrylate Monomer" in National Conference on Recent Advanced in Chemical Sciences, Technology and Environment (RACSTE-2015), 9,



March 2015, organized by University Institute of Chemical Technology, North Maharashtra University, Jalgaon.

2. Varsha Patil, Sujay U. Mahajan and **R. D. Kulkarni**, UV- Cure Multi and Mono-functional Acrylate Monomers: A review on UV curable coatings, National conference on Emerging Trends in Oleochemicals and Ecofriendly Coating Technologies -2013, UICT, North Maharashtra University, Jalgaon, September 28, **2013**.

3. Y. E. Bhoge, T. D. Deshpande, N. P. Badgujar and **R. D. Kulkarni**, Surfactant assisted ultrasound dispersion of Phthalocyanine pigments in waterborne and solvent thinnable systems, National conference on Emerging Trends in Oleochemicals and Ecofriendly Coating Technologies -2013, UICT, North Maharashtra University, Jalgaon, September 28, **2013**.

4. V. J. Patil, H. A. Bhirud, U. D. Patil and **R. D. Kulkarni**, "Solution spray synthesis of zinc oxide nanoparticles and its application in antifouling coatings", National conference on Emerging Trends in Oleochemicals and Ecofriendly Coating Technologies, UICT, North Maharashtra University, Jalgaon, 28 September **2013**.

5. Hansraj V. Patil, **R.D. Kulkarni**, S. Mishra, Synthesis and Characterization of Ethanolamides from Natural Renewable Resources and Utilization in Surfactants Synthesis at 9<sup>th</sup> All India Peoples' Technology Congress (AIPTC) held at the Mini Auditorium of Science City, Kolkata on February 8, **2013**. Proceeding published available online [http://fosetonline.org/AGA/18-AGB\\_HANSRAJ\\_V\\_PATIL.pdf](http://fosetonline.org/AGA/18-AGB_HANSRAJ_V_PATIL.pdf)

6. **R. D. Kulkarni**, Sujay Mahajan, Priya Deshpande, P. P. Mahulikar, Synthesis and characterization of chemically modified epoxidized mustard oil for biolubricant applications at National Conference on Environmental and Energy aspects for Sustainable Development at Department of Chemical Engineering, Shri Guru Gobind Singhji Institute of Engineering and Technology, Nanded. March 15-16, **2013**.

7. **R. D. Kulkarni**, V. J. Patil, Y. E. Bhoge, U. D. Patil, N. Ghosh, and S. Mishra, "Polymorph selective synthesis of CaCO<sub>3</sub> nanoparticles using impinging solution spray process and their utilization for preparation of PBSA/ CaCO<sub>3</sub> Latex Composites", Nano India 2013, Thiruvananthapuram, February, 19-20, **2013**.

8. Sujay Mahajan, **R. D. Kulkarni** "Alternative – Green Base Fluid for Lubricants: Synthesis and Characterization", Young Researcher's Conference 2013 held at Institute of Chemical Technology, Mumbai, 12-13 Feb., **2013**.

9. **R. D. Kulkarni**, Kalpana Shimpi, P. R. Patil, 'Industrial Waste as a source for the production of Biodiesel' in National Conference on Environmental Surveillance for Natural Resource Management (ESNRM 2012), organized by School of Environmental and Earth Sciences, NMU, Jalgaon during January 9-10, **2012**.

10. **R. D. Kulkarni**, Sujay Mahajan, Priya Deshpande, P. P. Mahulikar, Synthesis of Biodegradable Polymer from Vegetable Oil at National conference on Nanomaterials, Industrial Polymers and Eco-friendly coatings – Perspectives and Challenges, NIPEC-2012, at North Maharashtra University, Jalgaon on Feb. 18, **2012**.

11. V.J. Patil, Y. E. Bhoge, U. D. Patil, and **R. D. Kulkarni** "Surfactant mediated synthesis and ultrasound dispersion of nano Iron Oxide Pigment", National Conference on Nanomaterials, Industrial Polymers and Eco-Friendly Coatings- Perspectives and Challenges, NIPEC-2012, NMU, Jalgaon, February 18, **2012**.

National Conference on '**Nanostructures and Nanomaterials**', Dept. of Chemical Tech., North Maharashtra University, Jalgaon, March 19, **2011**. (9-11):

12. Monal Bannore, Kavita Wagh, Nippon Ghosh, **R. D. Kulkarni**, 'Sol-gel derived nanohybrid coatings'. (**3<sup>rd</sup> Prize for best poster**)

13. **R. D. Kulkarni**, Mayur Chaudhari, Akshay Dhake, and Tushar Saindane, "Formulation, Characterisation and Optimization of UV Cure epoxy acrylate coatings for automotive topcoats based on nanoadditives".

14. **R. D. Kulkarni**, Nippon Ghosh, S. Mishra, "Formulation, Characterisation and Optimization of UV Cure epoxy acrylate coatings for automotive topcoats based on nanoadditives".

**National Seminar on 'Recent Advances in Polymer Technology-III'**, Dept. of Chemical Tech., North Maharashtra University, Jalgaon Jan. 15, **2011** (12,13):

15. **R. D. Kulkarni**, V.V. Gite, A. Chaudhari, D G Hundiwale, 'PU based on Renewable Monoglycerides' (**2<sup>nd</sup> Prize for best poster**)

16. **R. D. Kulkarni**, V.V. Gite, A. Anand, 'PU based on Renewable Sorbitol'

National Conference on '**Natural Resource Management for Sustainable Development**', School of Environmental & Earth Sciences, North Maharashtra University, Jalgaon Feb.01-02,**2010**.(14-15):

17. **R. D. Kulkarni**, Mahendra Patel, Komal S. Patil, P. M. Thombre, and P. R. Patil, 'Pollution potential of effluent from Electroplating and Metal Processing Industries from North Maharashtra Region- Physicochemical Characteristics and Toxic Chemicals'.

18. **R. D. Kulkarni**, Kalpana Shimpi, P. R. Patil, 'Utilisation of waste cooking oil for production of Biodiesel'.  
National Seminar on '**Recent Advances in Polymer Technology-II**', Dept. of Chemical Tech., North Maharashtra University, Jalgaon Jan. 30, **2009** (16, 17):
19. N. Ghosh, U. D. Patil, S. Mishra, & **R. D. Kulkarni** "Application of nanocomposite emulsion to exterior wall paint",
20. Rajendra Panwar, **R. D. Kulkarni**, N. P. Rumale & V. A. Bhanu. "Study of structure property relation in wire enamel resin".
21. N. Ghosh, **R. D. Kulkarni** & S. Mishra, "Solution spray process for coprecipitation process synthesis of Nanopigments", second position at Avishkar-2008 (University Level Science & Allied Research Exhibition cum Competition, Dec. 15-16, **2008**) organized by North Maharashtra University, Jalgaon. Subsequently received prize at State Level Avishkar organized by Sant Gadgebaba Amravati University and award of first position (Engg. Category) at Western Zone Science & Allied Research Exhibition 'Anveshan', organized by Rajiv Gandhi Technological University, Bhopal, in association with Association of Indian Universities (AIU), New Delhi and subsequently presented research project at National Level Science & Allied Research Exhibition 'Anveshan' organised by Bengal College of Science & Engineering, Kolkata.
- Papers presented at '**Role of Nanotechnology in Polymer & Chemical Industries**', Department of Chemical Technology, North Maharashtra University, Jalgaon, 15 March, **2008**, (19-21):
22. N. Ghosh, V. Patil, R. Chaudhari, & **R. D. Kulkarni**, 'In Situ Synthesis of BaSO<sub>4</sub>/ Poly (Vinyl Acetate-Methyl Methacrylate) Nano Composites'.
23. N. Ghosh, U. D. Patil, **R. D. Kulkarni**, & S. Mishra 'Preparation and Characterization of poly(VA/MMA)/ Nano-CaCO<sub>3</sub> composites Latex'.
24. U. D. Patil, S. Mishra, & **R. D. Kulkarni**, "Novel process for preparation of inorganic nanosized particles using co-precipitation technique in micellar mode" (**1<sup>st</sup> Prize**).
- Papers presented at '**C. V. Raman Memorial Seminar**', North Maharashtra University, Jalgaon, 28 Feb., **2007**, (22-24):
25. N. Ghosh, **R. D. Kulkarni** & S. Mishra, "In situ synthesis of nanoparticles during vinyl-acrylic emulsion polymerization for development of latex nanocomposites". (**1<sup>st</sup> Prize**).
26. Mayur Chaudhari & **R. D. Kulkarni**, "Synthesis of Acetophenone & Benzophenone derivatives for utilization as photoinitiators for UV curable coatings".
27. Mahendra Patel, **R. D. Kulkarni** & P. R. Patil, "Chelation of Iron & Cadmium salts for elimination by UF Technique".
- Papers presented at '**C. V. Raman Memorial Seminar**', North Maharashtra University, Jalgaon, 28 Feb., **2006**, (25, 26):
28. Ujwal D. Patil, Satish V. Patil, **R. D. Kulkarni**, and S. Chattopadhyay. 'Kinetics of fermentation of cellulosic waste'
29. P. M. Thombare and **R. D. Kulkarni** 'Depolymerisation of Powder Coating Waste'.  
Papers presented at '**Recent Trends in Chemical Technology**', Department of Chemical Technology, North Maharashtra University, Jalgaon, Jan. 6 & 7, **2006**. (27-32):
30. Atul E. Sonawane and **R. D. Kulkarni**, "Evaluation of Karanja Oil Biodiesel as Fuel for Diesel Engine under Magnetic Field".
31. Dhananjay Zope, Mahendra Bari and **R. D. Kulkarni**, "Synthesis and Kinetic Characterisation of Fatty Alkyl Ester and its Utilisation as Feedstock for Metathesis".
32. Sunil M. Badgajar and **R. D. Kulkarni**, "Development of Two Step Synthesis of 2- Alkyl Imidazoline and Kinetic Modeling".
33. P. M. Thombare and **R. D. Kulkarni**, "Preparation and Characterization of Sucrose Polyester from Methyl Oleate, Karanja Soap and Groundnut Soapstock".
34. Komal S. Patil, S. A. Desai, **R. D. Kulkarni**, and P. R. Patil, "Synthesis and Characterization of Aromatic Polyamides for preparation of UF Membrane".
35. Ujwal D. Patil, Satish V. Patil, **R. D. Kulkarni**, and S. Chattopadhyay, "Biotechnological approach for the bioconversion of lignocellulosic wastes".  
Papers presented at '**Recent Trends in Synthetic Organic chemistry**', School of Chemical Sciences, North Maharashtra University, Jalgaon, Dec. 16 & 17, 2005. (33, 34):
36. P. S. Deshpande, **R. D. Kulkarni**, and P. P. Mahulikar, "Evaluation of Metathesis Reaction for Chain modification and Functionalisation of lipids for utilisation in organic chemical industry".
37. P. R. Patil, P. M. Thombare, Komal Patil, Mahendra Patel, and **R. D. Kulkarni**, "Physicochemical Characterizations of effluent from Electroplating and Metal Processing Industry".
38. **R. D. Kulkarni** and A. E. Sonawane, "Microwave Assisted Metathesis of Unsaturated Fatty Acid Methyl Esters", **National Seminar on 'Oleochemicals'**, OTAI-Nagpur Chapter, L.I.T., Nagpur 27 Feb., **2005**.

Papers presented at 'C. V. Raman Memorial Seminar', North Maharashtra University, Jalgaon, 28 Feb., 2004, (36 -39):

39. P. M. Thombare, V. S. Zope, R. D. Kulkarni, "Chemical Recycling of Powder Coating Waste by High Pressure & Temperature Hydrolysis".

40. C. B. Patil, & **R. D. Kulkarni**, "Evaluation of Synergism in Action of Antioxidants in Stabilization of Oils & Fats".

41. Tushar Deshpande, Deepak Deore, & **R. D. Kulkarni**, "Optimization of Manufacture of Yellow Iron Oxide with respect to Shed Development".

42. Vijay Sandanshive, Sunil Badgujar & **R. D. Kulkarni**, "Process Design and Reaction Engineering of low Temperature synthesis of 2-Alkyl Imidazoline".

43. V. S. Zope, S. Mishra & **R. D. Kulkarni**, "First Order Kinetic Model of Depolymerisation of PU Foam" National Seminar on 'Emerging trends in the Chemical Sciences in the New Millennium', Shri Shivaji Science College, Amravati, 5- 7 Feb., **2004**.

44. **R. D. Kulkarni** & B. B. Gogte, "Mathematical Modeling of Paint Dispersion" National Seminar on Instrumentation & Process Control, L.I.T., Nagpur 08-09 Aug., **2002**.

45. **R. D. Kulkarni** & B. B. Gogte, "Some experiments in Development of Value Added Products from Refinery Soapstocks-III". National Conference on 'Ecofriendly Technology', Amravati University, Amravati, 07 Feb. **2002**.

46. R. K. Patil, R. V. Chaudhari & **R. D. Kulkarni**, "Kinetics of Hydrodistillation of Lemongrass & Peppermint Oil", National Seminar on 'Oil, Soap & Paint Industries', OTAI-Nagpur Chapter, L.I.T., Nagpur 14 Oct. **2001**.

### **VIII. Popular Talk delivered as Resource Person**

1. Requisite Préparations for NAAC accreditation of College at A.S.C. Arts, Science & Commerce College, Jamner, Sept. 2016.

2. Talk on 'Stephen Hawkins' at Science Association, Kotecha Mahila Mahavidyalaya, Bhusawal on Dec. 09, 2015

3 "Alumni and their role in building reputation of Institute" at School of Environmental & Earth Sciences, NMU, Jalgaon on the occasion of Alumni Meet and World Ozone Day Celebration, 17<sup>th</sup> Sept. **2012**

4. "Relevance of Nanotechnology for Surface coating Industries" before Research & Development Group, Kansai Nerolac, Lower Parel, Dec. 12, **2008**.

5. "Facts about Edible Fats" at Rotary AGM, Rotary Hall, Mayadevi Nagar, Jalgaon, 13<sup>th</sup> November, **2008**.

6. "Carbon Trading" at Workshop under Technical Education Quality Improvement Programme on 'Solid Waste Management' at SGGS Institute of Engg. & Tech., Nanded on Sept. 08, **2007**

7. "Commercial prospects of biodiesel", on Jan. 12, 2006 at Faculty Development Programme in Entrepreneurship (Jan. 05- 18, **2006**) and "Manufacture of Biodiesel" on March 03, 2006 at a Workshop organized by MITCON Consultancy Center, Jalgaon.

8. "Role of Nanotechnology in Chemical Industries", at M. J. College, Jalgaon on Sept. 26, **2005**.

9. "Prospects & Planning of Chemical Projects" at Entrepreneurship Camp of B. E. (Mech. / Elect. Engg.) students organised jointly by J. T. Mahajan College of Engg., Faizpur and MITCON on Jan. 29, **2005**.

10. "New Horizons in Chemical Sciences" at Pratibha Niketan Mahavidyalaya, Nanded on Dec. 20, **2004**.

11. "Nutritional Aspects of Groundnut oil" at Annual General Meeting of Oilseed Milling Association, Jalgaon District on March 27, **2004**.

12. 11. Delivered two lectures at Puranmal Lahoti Govt. Polytechnic, Latur on Jan. 31, **2004**: I) Plantation of Jatropha and Karanja II) Manufacture of Biodiesel.

13. Delivered a keynote lecture on 'Importance of Alumni Association' at Govt. College of Engg., Jalgaon on March 09, **2003**.

14. "Overview of recent advances in the field of Extraction and Refining of Oils" at a Workshop organised by Sunny Earth Minerals Ltd., Jalgaon (Sept. 15, **1999**).

### **IX. Popular articles:**

1. 18th I.C.C. (Indian Council of Chemists) Conference Souvenir, Dec. 27 to 29, 1999, North Maharashtra University, Jalgaon: 'Facts About Fats', **R.D. Kulkarni**.

2. For Jalgaon Janata Sahakari Bank, Jalgaon : 'Developments in Chemical Industries' (in Marathi) Jan. 2007.

3. For Farmers, 'Biodiesel- Agricultural, Manufacturing and Economical Aspects' (in Marathi)

### **X. Editors/ Members of Editorial Board of different Journals**

1. 'International Journal of Nanoscience and Technology', Pritam Publications and The Universal Research Institute of Science and Technology.

2. 'International Journal of Advances in Chemical Engineering', Pritam Publications and The Universal Research Institute of Science and Technology.

### **XI. Reviewer for following Journals: Pigments and Resins, Can. J. Chem. Eng.**

## Annexure II

### Short term Courses/ Refresher Courses/ QIP/ Important Meetings attended

Organizer	Title	Period
NPIU, MHRD, Govt. of India and SPFU Maharashtra (ICT, Mumbai)	TEQIP Progress	Aug. 05, 2013
TEQIP-INNOVATION Meet (ICT, Mumbai)	Incubation Center	Sept. 11, 2013
NPIU, MHRD, Govt. of India (Bangalore)	TEQIP Progress	Sept. 24, 2013
NPIU, MHRD, Govt. of India and SPFU Maharashtra (Aurangabad)	Progress on School of Finishing, Transition Rate	April 07, 2014
AICTE-CII (Pune)	Industry-Institute Workshop (III Cell)	June 13-14 2013
NPIU, MHRD, Govt. of India (Hyderabad)	PMSS Training	May 23-24,2013
NBA Workshop, Shirpur	NBA-Outcome based Accreditation	March 2013
NBA Workshop, Pune	NBA-Outcome based Accreditation	Jan. 2013
ISO- Training-NMU	ISO-Internal Auditor Training	April 6-8,2011
College for Leadership & HRD, Mangalore	Human Resource Developmental Intervention-FEEL Teacher	Oct. 26-28, 2007
A.S.C., Dr.B.A. Marathwada Univ., Aurangabad	Environmental Sciences	Aug. 03 – 23, 2004
Priyadarshini College of Engineering, Nagpur	Training and Placement –Challenges and Opportunities	March 29 – April 8, 2004
MITCON Consultancy Center, Jalgaon	Faculty Development Programme in Entrepreneurship	Jan. 05- 18, 2004
B.S.D. College of Engg., Dhule-05	Computer Visual Aids for Effective Teaching	Oct. 22- Nov. 09, 2001.
A.S.C., Pune Univ., Pune	Orientation Course	March 31 - April 27, 2001
L.I.T., Nagpur	Chemical Processing for Better Environment	May 29- June 24, 2000
R.K.N.E.C., Nagpur	DSP & TSA using Mathematica	21 June – 03 July, 1999
Govt. College of Engg., Ujjain (M.P.)	Microprocessor controlled environmental instrumentation	June 07- 19, 1999
I.I.T. (Delhi ), Delhi – 16	Gas Liquid Reactor Design	21 – 25 Dec., 1998
I.I.T. (Powai), Mumbai	Electrochemical Techniques: Principles and Practice	May 11 – 16, 1998

#### Attended following Symposia/ Workshops:

- i) Workshop on ‘National Institutional Ranking Framework ((NIRF) Document and Webportal’ on Sept.29, 2015 (Tuesday) at National Media Center, New Delhi.
- ii) National Conference on ‘Soybean Oil for Health & Industrial Uses’, held on June 6, 2015 at CSIR-IICT, Hyderabad by OTAI-Southern Zone.
- iii) AICTE Workshop on ‘Entrepreneurship’ at New Delhi, Sept. 05, 2014
- iv) Workshop on ‘Team Building’ by FLAGSHIP INDIA at UICT, Jalgaon during July 27-28, **2013**.
- v) Workshop on Patent Awareness on Aug. 4, **2008** by TIFC, DST & North Maharashtra University.
- vi) “Relevance of Gandhian Thoughts in Science Teaching” on Jan. 28, **2008** by Mahatma Gandhi Foundation, North Maharashtra University, Jalgaon.
- vii) “Biodiesel”, by VNIT, Nagpur on October 16, **2004**.
- viii) "Patent Awareness” by North Maharashtra University, Jalgaon on March 27, **2004**.
- ix) “Chromatography in the New Millennium” by ISAS, Mumbai on Oct 10, **1999**.
- x) “Technology Management” by S.G.G.S. C.E.T., Nanded (M.S.) on Apr. 16, **1998**.

### Annexure III

#### A. Conferences/ Seminars and Scientific/ Engineering Exhibitions organized

- i) One Day National Conference on Entrepreneurship in Education; 29th September, 2014- 10.00 AM to 12.00 noon jointly organized by North Maharashtra University, Jalgaon and CMAI Association of India (member, Organising committee) and Release of Booklet on 'Studies and survey of Problems faced by SSI of Jalgaon District'
- ii) Head (Additional Charge), Swami Vivekananda Studies and Research Centre, School of Thoughts: organized National conference 'Thought of Epoch making thinkers and its relevance in the present' on March 20- 21, 2014.
- ii) Coordinator, MHRD-TEQIP National Conference on 'Emerging Trends in Oleochemicals and Ecofriendly Coating Technologies', Sept. 28, **2013**, Dept. of Paint & Oil Tech., University Institute of Chemical Technology, North Maharashtra University, Jalgaon.
- iii) Coordinator, UGC SAP-DRS National Conference on 'Nanostructures and Nanomaterials', March 28, **2012**, Dept. of Chemical Tech., North Maharashtra University, Jalgaon.
- iv) Member, State Coordination Committee, DIPEX-**2003, 2004, 2007, 2010** (state level exhibition of projects of Engineering students).
- v) Member, Organising Committee, Avishkar (University level Science & Allied Research Exhibition cum Competition) organized during Dec. month of **2006, 2007, 2008, 2009, 2010, 2011**.
- vi) Coordinator, National Conference on 'Nanomaterials, Industrial Polymers, and Ecofriendly Coating Technologies-Challenges and Perspectives' Feb. 18, **2012**, Dept. of Chemical Tech. & School of Chemical Sciences, North Maharashtra Univ., Jalgaon.
- vi) Convener, National Conference on 'Nanostructures and Nanomaterials', March 19, **2011**, Dept. of Chemical Tech., North Maharashtra University, Jalgaon.
- vii) Convener, International Conference on 'Recent Advances in Polymer Technology' Dec. 28-29, **2009**, Dept. of Chemical Tech. & School of Chemical Sciences, North Maharashtra Univ., Jalgaon.
- viii) Convener, National Seminar on 'Recent Advances in Polymer Technology' Jan. 30, **2009**, Dept. of Chemical Tech., North Maharashtra University, Jalgaon.
- ix) Convener, National Seminar on 'Role of Nanotechnology in Polymer and Chemical Industries', March 15, **2008**, Dept. of Chemical Tech., North Maharashtra University, Jalgaon.
- x) Convener, Regional Conference on 'Agricultural and Village Industries' Sept. 24, **2006**, Jalgaon.
- xi) Convener, National Seminar on 'Recent Trends in Chemical Technology', Jan. 6-7, **2006**, Dept. of Chemical Tech., North Maharashtra University, Jalgaon.

#### B. Certificate Courses, Short Term Training Programme, Entrepreneurship Awareness/ Development Programme and UGC Refresher Courses Organized as Coordinator

Title with content	Participants	Period
UGC-Academic Staff College, Pune University Refresher Course in 'Chemistry and Chemical Technology' at UDCT	28 Lecturers from different Colleges/ Universities (all over India)	Sept. 12-Oct.02, 2011
Five 2/3 days Entrepreneurship Awareness Camp ( jointly with MITCON)	B.E. / B. Tech. (Chem. Engg. / Tech., Mech. / Elect./ Civil/ E & TC Engg)/ M. Sc. students	March 19-22, 2004; Feb. 04-05, 2009; Feb. 04-06, 2011; Feb. 14-16, 2011; July 11-13, 2011
Three One week Courses on ' <i>Nano Science and Technology</i> '(with Dr Navin Shimpi)	35 Students & Lecturers from different Colleges	May 11-15, 2010; May 11-15, 2011 and Dec. 26-30, 11
UGC sponsored Two Weeks Short Term Training Programme on ' <i>Diverse Aspects of Nano Science and Technology</i> '	22 Lecturers from different Colleges/ Universities (all over India)	April 01-12, 2010
One week Course on ' <i>Formulation and Processing of Paints</i> ' [Ball Mill, Bead Mill, Attritor, Colour Matching, Brookfield Viscometer]	M. Sc. Students	July 02-09, 2009
One week Certificate Course ' <i>Sophisticated Instrumental Analysis</i> ' [GC, HPLC, FTIR, Colour Matching Spectrophotometer, Brookfield Viscometer] (with Prof. J B Naik)	B. Tech., B.Sc., B. Pharm. and M. Sc. students	2 Batches: June19-25, 2009 and July 02-09, 2009
	Senior Chemistry Lecturers of Colleges	July 08-15, 2009.

**Revenue generated through organization of Certificate/ STTP Courses: Rs. 2.25 lakh**