# **Curriculum Vitae**

# Contact Details : Kalpana C. Maheria, Ph.D.

#### Associate Professor & Former Head

Applied Chemistry Department Sardar Vallabhbhai National Institute of Technology, Surat – 395 007, Gujarat, INDIA E-mail: kcmaheria@gmail.com kcm@chem.svnit.ac.in



#### **Date of Birth**: 25<sup>th</sup> May

Place of Birth: Vadodara, Gujarat, India

#### Languages : Gujarati, English, Hindi

known

**Education:** 

#### 8

**Ph.D.** in **Applied Chemistry (July 2001- August 2007)** Applied Chemistry Department, Faculty of Technology & Engineering, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat.

Ph.D. Thesis Title: "Synthesis, Characterization and Applications of Some Advanced Inorganic Materials Containing Tetravalent Metal Acid Salts"

#### M.Sc. in Applied Chemistry (1998) Applied Chemistry Department,

Faculty of Technology &Engineering, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat.

*M.* Sc. SeminarTitle: "Controlled released technology – An Overview" *M.* Sc. Dissertation Title: "Controlled released polymeric formulations"

#### B.Sc. in Chemistry (1995)

Department of Chemistry, Faculty of Science, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat.

#### Postdoctoral Fellowship:

#### PDF (February 2012 - October 2013)

**Postdoctoral research work** performed in the area of Green Chemistry and Catalysis at University of Saskatchewan under the collaborative project of University of Saskatchewan and York University, Canada, with Prof. Ajay K. Dalai and Dr. Janusz Kozinski

(Job profile- (i) Synthesis and characterization of novel catalysts and their applications in synthesis of biomass conversion into fine chemicals

*(ii)* Design and fabrication of continuous supercritical water reactor and its use for biomass gasification for bio-energy production)

# Prizes / Awards / Recognition etc. :

1 <sup>st</sup> – 11 <sup>th</sup> November 2018 :	VISITING PROFESSOR, Department of Chemical and Biological Engineering, University of Saskatchewan, Saskatoon, CANADA
1 <sup>st</sup> – 30 <sup>th</sup> June 2017 :	VISITING PROFESSOR, Department of Chemical and Biological Engineering, University of Saskatchewan, Saskatoon, CANADA
December 2016 :	<b>CHAIRPERSON</b> , Session of short lectures, National Seminar in Frontiers in Heterogeneous Catalysis, HETCAT – 2016 held on 10 <sup>th</sup> Dec. 2016 at, M. S. University of Baroda, Vadodara, Gujarat
12 <sup>th</sup> May – 17 <sup>th</sup> June 2016 :	VISITING FACULTY, Department of Chemical and Biological Engineering, University of Saskatchewan, Saskatoon, CANADA
October 2015 :	Paper entitled, "Colorimetric studies of heterocyclic monoazo reactive dyes and their dyeing applications on cotton, silk, and wool fibers" authored by Nikhil M. Parekh, Kalpana C. Maheria. Research on Chemical Intermediates, March 2014, Volume 40, Issue 3, pp 1003-1019 have got space on Advances in Engineering website -
	http://advanceseng.com/chemical-engineering/colorimetric-studies-heterocyclic- monoazo-reactive-dyes-dyeing-applications-cotton-silk-wool-fibers/
March 2014 :	<b>BEST POSTER PRESENTATION</b> award for the research paper entitled, "Synthesis and characterization of bio-potent octahydroquinazolinone derivatives using zeolite H-BEA: DFT, SAR and antimicrobial evaluation", at International Symposium on 'Overcoming the bottlenecks in drug design, discovery and development' jointly organized by the Royal Society of Chemistry (RSC), Daiichi Sankyo India Pharma Private Limited (DSIN) and Ranbaxy Laboratories Limited (RLL), in Gurgaon, Haryana, India.
June 2013 :	Awarded BioFuelNet HQP TRAVEL AWARD to attend workshop on "Growing a successful Canadian bioeconomy" at Montreal, Quebec, Canada.
October 2012 :	Nominated for 'Eni 2013' AWARD for the publication entitled, "Synthesis of diarylpyrimidinones (DAPMs) using large pore zeolites".
October 2012 :	Chaired two sessions (in 'Catalytic Reaction Engineering and Kinetics' and 'Catalytic Bioprocesses'), at 62 <sup>nd</sup> CsChe International Conference, held at, Vancouver, British Columbia, CANADA
March 2012 :	Received <b>THIRD PRIZE</b> for the best paper presentation for the paper entitled, "Dyeing Performance of Heterocyclic Monoazo Reactive Dyes on Various Fibers" at National Conference on Recent Trends in Chemistry, organized by, Department of Chemistry, Veer Narmad South Gujarat University, Surat, Gujarat, India.
February 2003 :	Received <b>FIRST PRIZE</b> for the best oral paper presentation, for the paper entitled, "Synthesis, Characterization of a New phase of Tin Phosphate and its Application as an Ion Exchanger" in All Gujarat Research Scholar's Meet, M. S. University, Vadodara, Gujarat, India
2001-2003 :	Awarded UNIVERSITY RESEARCH FELLOWSHIP, from The M. S. University of Baroda, Vadodara, Gujarat

# **Research Interests:** [Research experience ~ 12 years]

- Green Chemistry and Heterogeneous Catalysis
- Development of sustainable materials through sustainable technologies
- Materials' synthesis (Inorganic and Hybrid), their characterization and applications as heterogeneous catalysts for organic transformations, biodiesel production, and as ion exchangers in waste water treatment.
- Design of zeolite based composite materials (mesozeolites), Synthesis and characterization of micro-meso zeolites, supported zeolites and their catalytic applications
- Development of new green chemistry routes for the synthesis of bio-active molecules through Multicomponent reactions [MCRs] using zeolite and TMA salts based heterogeneous catalysts.
- Ion-exchange method for metals and colour removal, Ion exchange materials, Thermodynamics and kinetics of ion exchange,
- Biomass conversion into bio-energy using supercritical water gasification technology.
- Synthesis and applications of Ionic Liquids.

# **Research Projects**

- Project entitled, 'Use of Inorganic / Hybrid ion exchanger for the removal of toxic metals from industrial waste water"- Principle Investigator, funded by Ministry of Science & Technology, DST (under WTI programme), Govt. of India, New Delhi.(31.4 lakhs) (2015-18).
- Institute Research Grant for Assistant Professors, for the project entitled, "Development of molecular sieve based catalysts for the green synthesis of pharmaceutics through multicomponent reactions Principle Investigator, Funded by, SVNIT, Surat, Gujarat.(10 lakhs) in 2014.

# **Indian Patents [Granted = 02]**

- 1. Patent No.: 301613;Granted on: 28 / 09 / 2018; Application No.: 641/MUM/2012 Title of the Invention: An improved process for the preparation of Dihydropyrimidin-2-ones"
- 2. Patent No.: 319508; Granted on: 30 / 08 / 2019; Application No.: 642/MUM/2012 Title of the Invention: "An improved process for the preparation of Diarylpyrimidin-2(1H)-Ones"

#### **Work Experience**

July 2007 - Present :	Joined as Assistant Professor at Applied Chemistry Department, SVNIT, Surat, Gujarat, India. Promoted as Assoicate Professor on 28 <sup>th</sup> January 2019
Dec. 2003 – July 2007 :	Teaching Assistant at Applied Chemistry Department, Faculty of Tech. & Engg., The M. S. University of Baroda, Vadodara, Gujarat, India.
Oct. 2002 – May 2003 :	Teaching Assistant at Department of Chemistry, Faculty of Science, The M. S. University of Baroda, Vadodara, Gujarat, India.
Dec. 2001 – Oct. 2002 :	University Research Fellow at Applied Chemistry Department, Faculty of Tech. & Engg., The M. S. University of Baroda, Vadodara, Gujarat, India
Aug. 2000 – May 2001:	Lecturer at Applied Chemistry Department, Faculty of Tech. & Engg., The M. S. University of Baroda, Vadodara, Gujarat, India
June 1996 – Jan. 1999 :	"Junior Chemist" at "CKCO" ENGG Works, Makarpura, GIDC, Vadodara, Gujarat, India.

#### **Administrative Positions Held**

- Head, Applied Chemistry Department, SVNIT, Surat (15<sup>th</sup> March 2017 31<sup>st</sup> January 2018)
- Faculty I/c, Applied Chemistry Department, SVNIT, Surat (1<sup>st</sup> January to November 2015)
- Warden, Mother Teresa Bhavan, SVNIT, Surat (>4 years)
- Associate Warden, SVNIT, Surat

#### **Teaching Experience and Topics (theory) taught:** > 19 years [> 12 years regular experience]

Topics in Inorganic Chemistry: [Lanthanides and Actinides; Group theory, term symbols, Orgel diagrams etc. Bioinorganic chemistry, Organometallic Chemistry, Photochemistry, Inorganic Polymers],

Topics in Catalysis: Concepts of catalysis, Mechanism and Classification of Catalysis, Catalyst types, TON & TOF Preparation methods for inorganic and nanomaterials'

Topics in Industrial Chemistry: [Petroleum products, petroleum refineries, cracking process, cracking catalysts and plants, Industrial Polymers, Drug design and synthesis, Dyes, Composites, Brass alloys. Composites, Superconductors, Fullerenes, Basics of Green Chemistry (Principles, % atom economy, E-factor etc.), Esterification and Hydroformylation reaction, Tertiary waste water treatment, Corrosion inhibitors, Nuclear chemistry

Topic in Analytical Chemistry [Gas chromatography, solvent extraction, ion exchange chromatography] etc.

[Currently teaching theory courses: B.Tech. I (CY 104 S1), MSc. - III (MC 305), M.Sc. - IV (MC 406)]

# As a Supervisor: [Total: Ph.D. dissertations: 10, M.Sc. dissertations = 24]

- Ph.D. Students (Awarded): 05
  - Mr. Sunil Mistry (February 2013) Thesis Title: Zeolite Catalyzed Multicomponent Reactions for the Synthesis of Biologically Active Compounds
  - Mr. Nikhil Parekh (May 2013), Thesis Title: Synthesis of Quinoline, Benzoquinoline an Quinazoline based Heterocyclic Monoazo Dyes and their applications
  - Mr. Krunal Shah (July 2014) Thesis Title: Silica Based Solid Acid Catalysts for Biodiesel Synthesis from Various Oil Feed Stocks (Co-supervisor: Dr. Jigisha Parikh, Professor, Chemical Engg. Deptt., SVNIT, Surat)
  - Mr.Darshak Bhatt (June 2015) Thesis Title: Studies onIonic Liquids – Surfactants Interaction Phenomena in Aqueous Media and their Applications (Co-supervisor: Dr. Jigisha Parikh, Professor, Chemical Engg. Deptt., SVNIT, Surat)
  - 5. Mr. Manoj Rathod (October 2017) Thesis Title: Catalytic synthesis of biologically active compounds through multicomponent reactions

#### • Ph.D. students (Ongoing): 05

- 6. Ms. Jenifer Gabla– Thesis submitted on 4<sup>th</sup> November 2019
- Mr. Dharmesh Lathiya Thesis submitted on 4<sup>th</sup> November 2019 (Co-supervisor: Dr. D. V. Bhatt, Professor, Mechanical Engg. Deptt., SVNIT, Surat)
- 8. Ms. Dhara Morawala
- 9. Mr. Henilkumar Lankapati
- 10. Ms. Ayushi Lodhi
- M.Sc. Dissertations (Completed): 20
- M.Sc. Dissertations (Ongoing): 04

#### **Research Publications [Published]:**

#### **SELECTED PUBLICATIONS**

- 1. K Jacobson, KC Maheria, AK Dalai, "Bio-oil valorization: a review", Renewable and Sustainable Energy Reviews, (2013), 23, 91-106. (Publisher: ELSEVIER). (I.F. = 10.556)
- Dhara H. Morawala, Ajay K. Dalai, Kalpana C. Maheria, "TTAB mediated synthesis of Meso-H-BEA and its application in the production of n-butyl levulinate", Catalysis Today, (2019). (Publisher: ELSEVIER). (I.F. = 4.888)
- 3. DH Morawala, AK Dalai, KC Maheria, "Synthesis of n-Butyl Levulinate Using Mesoporous Zeolite H-BEA Catalysts with Different Catalytic Characteristics", Catalysis Letters, (2019), 1-12. (Publisher: SPRINGER) (I.F. = 2.372)
- JJ Gabla, SR Mistry, KC Maheria, "An efficient green protocol for the synthesis of tetra-substituted imidazolescatalyzed by zeolite BEA: effect of surface acidity and polarity of zeolite", Catalysis Science & Technology, (2017), 7(21), 5154-5167. (Publisher: RSC). (I.F. = 5.726)
- Darshak R. Bhatt, Kalpana C. Maheria, Jigisha Parikh, Highly efficient micellar extraction of toxic picric acid into novel ionic liquid: effect of parameters, solubilization isotherm, evaluation of thermodynamics and design parameters, Journal of Hazardous Materials, (2015), 300, 338-346. (Publisher: ELSEVIER). (I.F. = 7.650)
- DR Lathiya, DV Bhatt, KC Maheria, "Sulfated Fly-Ash Catalyzed Biodiesel Production from Maize Acid Oil feedstock: A Comparative Study of Taguchi and Box-Behnken Design", ChemistrySelect, (2019), 4 (14), 4392-4397. (Publisher: Wiley-VCH Verlag GmbH & Co. KGaA) (I.F. = 1.716)
- Dhara H. Morawala, Ajay K. Dalai, Kalpana C. Maheria., Rice husk mediated synthesis of meso-ZSM-5 and its application in the synthesis of n-butyl levulinate, Journal of Porous Materials, (2018), 26 (3), 677-686. (Publisher: SPRINGER). (I.F. = 1.947)
- Darshak R. Bhatt, Kalpana C. Maheria, Jigisha Parikh, A microwave assisted one pot synthesis of novel ammonium based dicationic ionic liquids, RSC Advances, (2015), 5, 12139-12143. (Publisher: RSC). (I.F. = 3.049)
- Chowdari Ramesh Kumar N. Rambabu, K. C. Maheria, A. K. Dalai N. Lingaiah, "Iron exchanged tungstophosphoric acid supported on activated carbon derived from pinecone biomass: Evaluation of catalysts efficiency for liquid phase benzylation of anisole with benzyl alcohol", Applied Catalysis A: General, (2014), 485, 74-83. (Publisher: ELSEVIER). (I.F. = 4.63)
- Krunal Shah, Jigisha Parikh and Kalpana Maheria, "Biodiesel synthesis from acid oil over large pore sulfonic acid-modified mesostructured SBA-15: Process optimization and reaction kinetics", Catalysis Today, (2014), 237, 29-37. (Publisher: ELSEVIER). (I.F. = 4.888)
- Darshak Bhatt, Kalpana Maheria, Jigisha Parikh, Mixed system of ionic liquid and non-ionic surfactants in aqueous media: Surface and thermodynamic properties, Journal of Chemical Thermodynamics, (2014), 184–192. (Publisher: ELSEVIER). (I.F. = 2.196)
- 12. Krunal A. Shah, Jigisha K. Parikh and Kalpana C. Maheria, "Optimization Studies and Chemical Kinetics of Silica Sulfuric Acid-Catalyzed Biodiesel Synthesis from Waste Cooking Oil", Bioenergy

**Research**, (2014), 7(1), 206 – 216. (Publisher: SPRINGER). (I.F. = 3.043)

- Kalpana Maheria, Janusz Kozinski and Ajay K. Dalai, "Esterification of levulinic acid to n-butyl levulinate using large pore zeolites", Catalysis Letters, (2013), 143(11), 1220-1225. (Publisher: SPRINGER). (I.F. = 2.372)
- Nikhil M. Parekh, Suban K. Sahoo and Kalpana C. Maheria, "Quantum chemical and microbial studies of some novel benzoquinoline based heterocyclic monoazo dyes and their dyeing performance on polyester fiber", Dyes and Pigments, (2012), 95(1), 142-148. (Publisher: ELSEVIER). (I.F. = 4.018)
- 15. Nikhil M. Parekh and Kalpana C. Maheria, "Anti-tubercular and anti-bacterial evaluation of some novel phenyl pyrazolone substituted <sup>1</sup>H-benzo[g]pyrazolo[3,4-b]quinoline-3-ylamine derivatives.", Medicinal Chemistry Research, (2011), 1-9. (Publisher: SPRINGER). (I.F. = 1.720)
- 16. S. R. Mistry and K. C. Maheria, Synthesis of Diarylpyrimidinones using large pore zeolites, Journal of Molecular Catalysis: A Chemical, (2012), 355, 210-215. (Publisher: ELSEVIER). (I.F. = 4.211)
- Nikhil M. Parekh and Kalpana C. Maheria, "Studies on antimicrobial activity for multidrug resistance strain by using phenyl pyrazolones substituted 3-(4-aminophenyl)-2-phenylquinazolin-4(3H)-one derivatives in vitro condition and their dyeing performance". Fibers and Polymers, (2012), 13(2), 162-168. (Publisher: SPRINGER). (I.F. = 1.468)
- Sunil Mistry, Rikesh Joshi, Suban K. Sahoo and Kalpana Maheria, Synthesis of Dihydropyrimidinones Using Large Pore Zeolites, Catalysis Letters, (2011), 141, 1541–1547. (Publisher: SPRINGER). (I.F. = 2.372)
- KalpanaMaheria and Uma Chudasama, Sorptive removal of dyes using Titanium phosphate, Industrial Engineering and Chemical Research, (2007), 46, 6852-6857. (Publisher: ACS). (I.F. = 3.375)
- 20. Kalpana Maheria and Uma Chudasama, Studies on kinetics, thermodynamics and sorption characteristics of an inorganic ion exchanger Titanium phosphate towards Pb(II), Bi(III) and Th(IV), Journal of Indian Institute of Science, (2006), 86, 515-525. Publisher: Indian Institute of Science, Bangalore. (I.F. = 0.857)
- D. R. Lathiya, D. V. Bhatt, K. C. Maheria, "Synthesis of sulfonated carbon catalyst from waste orange peel for cost-effective biodiesel production", Bioresource Technology Reports, 2 (2018), 69– 76. (Publisher: ELSEVIER)
- 22. Sunil Mistry, Rikesh Joshi and **Kalpana Maheria**, Zeolite H-BEA catalyzed multicomponent reaction: One pot synthesis of amidoalkylnaphthols A biological active drug like molecules, **Journal of Chemical Sciences**, (2011), 123(4), 427–432. (Publisher: SPRINGER). (I.F. = 1.496)

# List of papers presented in conferences / seminars / symposium / workshops: National and International [Total = 75]

Research papers presented in India and Abroad (Canada, France, Germany, Maritiitus, Dubai & Netherlands)

#### **Invited Talks:**

#### [Total 23]

- As an honorable speaker, delivered an invited talk entitled, "Conversion of waste coal fly ash into valuable catalysts and their applications for bio-energy production", on 16th July 2019, at the "2nd International conference on Green and Sustainable Chemistry" held during July 15-16, 2019 at Zurich, Switzerland.
- Delivered a lecture on "Synthesis and characterization of mesozeolites and their applications as heterogeneous catalysts in organic transformations" National seminar on frontiers in heterogeneous catalysis" during (HETCAT 2018) on 08/12/2018, jointly organized by Departmentof Chemistry, Faculty of Science. MSU, Vadodara and Catalysis Society of India at Vadodara, Gujarat, India.
- A short lecture delivered on, "Recent advances and applications of meso zeolites National conference on Recent on Material Sciences", during (NCRAMS 2018) on 23/11/2018, at Faculty of Science, MSU, Vadodara, Gujarat, India.
- Delivered an invited talk on, "Synthesis and characterization Mesoporous Zeolite Beta and their application as solid acid catalyst for the synthesis of biologically active molecules" on 8/11/2018 at Department of Chemical and biological Engineering, University of Saskatchewan, Saskatoon, Canada
- Delivered an invited talk on "Mesoporous zeolite beta catalyzed Mannich MCRs for the synthesis of  $\beta$  amino carbonyl compounds" on 6/11/2018 at Department of Chemistry, University of Saskatchewan, Saskatoon, Canada.
- Delivered an invited oral presentation entitled, Zeolites / zeolite based micro-meso composites catalyzed multicomponent reactions for the synthesis of biologically active molecules, Kalpana. C. Maheria, at 23<sup>rd</sup> National Symposium on Catalysis (CATSYMP-23), 17<sup>th</sup> - 19<sup>th</sup> January 2018, at Royal Orchid Conventional Centre, Yelahanka, Bengaluru – 560 065, India
- Delivered an invited talk on, "An Introduction to an Inorganic and Hybrid Materials" on 29<sup>th</sup> January 2017 in TEQIP II sponsored short term training programme (STTP) on "Current scenario in chemical science and technology" (CSCST 2017) held during 25<sup>th</sup> 29<sup>th</sup> January 2017 at, Applied Chemistry Department, S. V. National Institute of Technology, Surat, Gujarat, India.
- Delivered a technical talk by <u>Kalpana Maheria</u>, on, "Optical Properties of Metal Exchanged Parent and Modified Zeolite H-BEA" at National Conference on Luminescence and Applications [NCLA-17], 9-11th January, 2017 Organized by CSIR- IICT Hyderabad Mahatma Gandhi National Institute of Research & Social Action (MGNIRSA), Hyderabad Luminescence Society of India.
- Delivered an invited talk on, "An introduction to an inorganic and inorgano-organic hybrid materials" during selfsponsored one week short term training programme (STTP) on advances in membrane developments & hands on experience, on 19<sup>th</sup> October 2016, Chemical Engineering Department, S. V. National Institute of Technology, Surat, Gujarat, India.
- Delivered an invited talk on, "An introduction to an inorganic and inorgano-organic hybrid materials" in short term training programme on Recent Trends in Applied Chemical Sciences and Technology, RTACST-2016, on 17<sup>th</sup> October 2016, Applied Chemistry Department, S. V. National Institute of Technology, Surat, Gujarat, India.
- Delivered an invited talk on, "An introduction to an inorganic and hybrid materials" at TEQIP-II sponsored STTP on Advances in Material Science and Engineering (AMSE 2016), 13<sup>th</sup> October 2016, Mechanical Engineering Department, S. V. National Institute of Technology, Surat, Gujarat, India.
- Delivered an invited talk on, "Infra-red spectroscopy fundamentals, instrumentation and applications" at TEQIP-

II sponsored STTP on Advances in Material Science and Engineering (AMSE 2016), on 12<sup>th</sup> October 2016, Mechanical Engineering Department, S. V. National Institute of Technology, Surat, Gujarat, India.

- Delivered an invited talk on "Studies on effect of acidity and adsorption / desorption properties of zeolites on the synthesis of biologically active compounds via MCRs" at TEQIP-II sponsored STTP on Micro to macro chemistry meets technology developments, M<sup>2</sup>-CMTD 2016, on 9<sup>th</sup> October 2016, Applied Chemistry Department, S. V. National Institute of Technology, Surat, Gujarat, India.
- Delivered an invited talk on, "A comparative study on the acidity and adsorption / desorption properties of zeolites towards the synthesis of biologically active compounds via MCRs", at Faculty of Applied Science and Engineering, on 20<sup>th</sup> June 2014 at University of Toronto, Toronto, Ontario, Canada.
- Delivered an invited talk on, "Catalytic Synthesis of n-Butyl Levulinate from Levulinic Acid over Various Acidic Zeolites", at Department and Chemical and Biological Engineering, on 11<sup>th</sup> June 2014 at University of Saskatchewan, Saskatchewan, Canada.
- Delivered an invited talk on, "Bio-oil gasification using supercritical water flow reactor for bio-energy production"
  Indo-Canadian Symposium in CHEMCON 2013 conference, during 27<sup>th</sup> 30<sup>th</sup> December 2013, ICT Mumbai, Maharashtra, India.
- Delivered an invited talk entitled, "Safe drinking water scenario in developing nations" delivered at Engaging India: Human and Social Dimension of Science and Technology Conference, during 3<sup>rd</sup> 4<sup>th</sup> June 2012, held at University of Calgary, Calgary, Alberta, Canada.
- Delivered an invited talk "Applications of zeolites as green protocol for the synthesis of pharmaceuticals" at Canada India Education Summit, Engaging India 2011: A multidisciplinary conference, during17<sup>th</sup> - 18<sup>th</sup> June, 2011 held at Carleton University, Ottawa, Ontario, Canada.
- Delivered two talks on "Introduction to Infrared Spectroscopy" on 12<sup>th</sup> March 2010 at P. M. Patel Institute of Research and Post Graduate Studies, Vallabh Vidyanagar, Anand, Gujarat, India.
- Given a seminar on the topic "An Introduction to, Tetravalent Metal Acid (TMA) Salts A Promising Ion Exchange Materials", 12<sup>th</sup> November 2009, Surat, Gujarat, at RTG-Hazira, Reliance Industries Limited, Surat, Gujarat, India.
- Delivered a lecture on "Infrared Spectroscopy" in Short Term Training Program (STTP) on, Advances in Condensed Matter Physics (ACMP-09), during 31<sup>st</sup> August – 4<sup>th</sup> September, 2009, at Department of Applied Chemistry, S. V. National Institute of Technology, Surat, Gujarat, India.
- Delivered two lectures on "Introduction to Infrared Spectroscopy" in Summer School (STTP), on Advanced Instrumental Methods of Analysis (AIMA-09) during 24<sup>th</sup> - 28<sup>th</sup> August, 2009, Department of Chemical Engineering, S. V. National Institute of Technology, Surat, Gujarat, India.

#### **Expert Lectures Organized:**

- Lecture of Dr. Pramanik, Professor, IIT Kharagpur, India, on 'Promise of nanomaterials in Biology', at SVNIT, February 2013.
- Lecture of Dr. A. K. Dalai, Professor, University of Saskatchewan, Canada, at SVNIT, January 2014.
- Lecture of Dr. Rajesh Sharma, Senior Scientist, University of Saskatchewan, Canada, at SVNIT, January 2014.
- Lecture of Dr. A. A. Natu, DAAD Research Ambassador from India, on "Study and research opportunities in Germany", at SVNIT, January 2015.
- Lecture of Dr. Sandeep Chaudhary, Assistant Professor, MNIT Jaipur, on "Discovery of Artemisinin as Nobel Medicine: A Gift from Traditional Chinese Herb Artemisia Annual" on 9<sup>th</sup> February 2016.
- Two expert lectures of Dr. Naveen Kumar, "Biofuels: Opportunities and Challenges for India" and "Algal Biofuels: Myth and Reality" on 6<sup>th</sup>January 2017.

#### As an editorial member:

Journal of Catalysts & Catalysis, Publisher: STM Journals

#### As a Reviewer:

- Sustainable Chemistry & Engineering, Publisher: ACS
- ACS Applied Materials & Interfaces, Publisher: ACS
- Industrial & Engineering Chemistry Research, Publisher: ACS
- ACS Omega, Publisher: ACS
- Green Chemistry, Publisher: RSC
- Catalysis Today, Publisher: Elsevier
- Catalysis letters, Publisher: Springer
- Journal of Catalysts & Catalysis, Publisher: STM Journals
- Journal of Molecular Catalysis, Publisher: Elsevier
- Applied Catalysis A: General
- BioEnergy Research, Publisher: Elsevier
- Fuel, Publisher: Elsevier
- Journal of Industrial and Engineering Chemistry Publisher: Elsevier
- Powder Technology Publisher: Elsevier
- Advanced Composites Letters, Publisher: SAGE
- Letters in Organic Chemistry: Publisher: Bentham Science
- Current organic chemistry, Publisher: Bentham Science
- Fibers and Polymers, Publisher: Springer
- Medicinal Chemistry Research: Publisher: Springer
- Journal of the Serbian Chemical Society, Publisher:Srpskohemijskodruštvo
- Synthetic Communications, Publisher: Taylor & Frances
- Journal of Scientific & Industrial Research, CSIR-NISCAIR
- Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, Publisher: Taylors & Frances
- Reviewer of Book Chapter, Bentham Science Publishers

# Conference / Workshop / Short Term Training Programme / Seminar Organized [Total = 18]

- 1. Co-coordinator of three days training programme on "Pedagogy training" for the faculties of SVNIT, held at SVNIT, Surat, during 12<sup>th</sup>-15<sup>th</sup> May 2008.
- 2. Co-coordinator of two days training programme on "Research methodology", held at SVNIT, Surat, during 16<sup>th</sup>-17<sup>th</sup> May 2008.
- 3. Organizing member of Hydro-2007, at SVNIT, Surat, 2007.
- 4. Organizing member of short term training programme on Applications of Mathematical Sciences & Soft Computing held at Applied Sciences and Humanities Department, SVNIT, Surat, during 8-12<sup>th</sup> Dec, 2009.
- 5. Organizing member of RSTAPS'08-09, held at Applied Sciences and Humanities Department, SVNIT, Surat, during 29<sup>th</sup> December 2009 2<sup>nd</sup> January 2010.
- 6. Coordinator of AICTE sponsored staff development programme entitled "Recent developments and future trends of nanotechnology in modern science" held at Applied Chemistry Department, Sardar Vallabhbhai National Institute of Technology, Surat, Gujarat, during 21<sup>st</sup>-25<sup>th</sup> December 2009.
- 7. Member of Innovation in Science Pursuit for Inspired Research(INSPIRE) programme, organized at Applied Chemistry Department, SVNIT, December 2010.
- 8. Co-coordinator, INSPIRE programme, organized at Applied Chemistry Department, SVNIT, February 2011.
- 9. "Organizing Secretary" of One day seminar on "Recent advances in analytical techniques" (RAAT-2011), 12<sup>th</sup> May 2011 organized as a part of celebration of year 2011 as International year of Chemistry.
- 10. Coordinator, INSPIRE programme held at, Applied Chemistry Department, SVNIT, Surat, during 27<sup>th</sup> -31<sup>st</sup> August 2011.

- 11. Member, National Seminar on Fundamentals of Spectroscopic Techniques and its Applications in Elucidating Molecular Structures, held at Applied Chemistry Department, SVNIT, Surat, October 8, 2011.
- 12. Coordinator, National Seminar on "Patent Awareness", organized by ED cell, SVNIT, Surat, 16<sup>th</sup> September 2011.
- 13. Member, Local organizing committee, International congress of environmental research 2011 (ICER 2011), held at SVNIT Surat, Gujarat, India, during 15<sup>th</sup> -17<sup>th</sup> December 2011.
- 14. Member, Local organizing committee, 14<sup>th</sup> International Conference on Physical Science Interface with Humanity (CONIAPS-XIV), 22<sup>nd</sup> -24<sup>th</sup> December 2011. (Chaired one of the session).
- 15. As Faculty I/C, organized TEQIP-II sponsored two days Course Curriculum Revision Workshop on Five Years Int. M.Sc. in Chemistry during 16<sup>th</sup> 17<sup>th</sup> January 2015, at Department of Applied Chemistry Department, SVNIT, Surat, Gujarat, India.
- 16. Convener, TEQIP-II sponsored five days workshop on Advanced Analytical Techniques for Material Characterization during 23<sup>rd</sup> 27<sup>th</sup> February 2015, at Department of Applied Chemistry, SVNIT, Surat, Gujarat.
- 17. Coordinator, TEQIP-II sponsored five days workshop on Recent Trends in Applied Chemical Sciences and Technology, (RTACST-2016) during 17<sup>th</sup> 21<sup>st</sup> October 2016, at Department of Applied Chemistry, SVNIT, Surat, Gujarat.
- Coordinator, TEQIP-II sponsored five days workshop on Current Scenario in Chemical Sciences and Technology, (CSCST-2017) during 25<sup>th</sup> – 29<sup>st</sup>January 2017, at Department of Applied Chemistry, SVNIT, Surat, Gujarat.

# Professional Training, Summer / Winter School or Other Courses Attended [Total = 27]

#### **Conference / Symposiums / Seminars etc. attended**

[Total = 42]

#### **Memberships of Professional bodies**

- •
- Member, American Chemical Society
- Member of Chemical Institute of Canada (MCIC) (2009, 2011, 2012, 2014, 2016, 2017, 2018)
- Life member of Catalysis Society of India
- Life Member of ASSET
- Life Member of Indian Academy of Sciences
- Life Member Indian Institute of Chemical Engineers

# Foreign Visits [Universities / Laboratories]

- McMaster University, Hamilton, Ontario, Canada, 2009
- Canadian light source [CLS laboratories], University of Saskatchewan, Saskatchewan, Saskatchewan, Canada, 2010
- Simon Fraser University, Burnaby, Vancouver, British Columbia, Canada, 2010
- University of Calgary, Calgary, Alberta, Canada, 2010
- McGill University, Montreal, Quebec, Canada, 2011
- York University, Toronto, Ontario, Canada in October 2013
- University of Saskatchewan, Canada during 5<sup>th</sup>-11<sup>th</sup> June 2014
- University of Alberta, Canada during 12<sup>th</sup>-13<sup>th</sup> June 2014
- University of Toronto, Canada on 20<sup>th</sup> June 2014

#### ORCID ID: https://orcid.org/0000-0001-9448-5659

#### SCOPUS ID: 17435202000

GOOGLE SCHLOAR LINK: https://scholar.google.co.in/citations?hl=en&user=vBbKsa0AAAAJ

[*i10 –index* = 19, *h-index* 14, Citations = 680, From Google Scholar]

# Administrative Responsibilities Handled at Institute and Department level

- Worked as Head, Applied Chemistry Department, S.V. National Institute of Technology, Surat, Gujarat, India (15<sup>th</sup> March 2017 31<sup>st</sup> January 2018)
- Worked as Faculty In-Charge, Applied Chemistry Department, SVNIT, Surat (Since 1<sup>st</sup> January to November 2015)
- Worked as I/C HOD, Applied Chemistry Department, SVNIT, Surat.
- Worked as Associate Warden (Kasturbabhavan)and Warden (Mother Teresa Bhavan), SVNIT, Surat (>5 years' experience)
- Participated in course curriculum revision workshops of Five Years Integrated M.Sc. Programme in Chemistry
- Organized expert lectures of National and International Speakers at Institute level
- Co-Chairman, Institute Magazine Committee
- Member, Classroom Complex Committee
- Member, Convocation Committee
- Member, Institute's anti-ragging committee
- Member, ICC committee
- Member Women Awareness Cell
- Member, IPR policy revision committee
- Member, First year B.Tech. and M.Sc. Admission committee 2015
- Member, Hostel Admission Committee
- Member, Hostel Disciplinary Committee
- Member, Physical stock verification (Institute level)
- Member Secretary, Departmental and DAAC meetings
- Member, SVP school committee (till January 2012)
- UG In-Charge, Applied Chemistry Department (Since 2008 January 2012 & Nov. 2013 to 2014)
- Coordinator, Departmental Library Committee
- Coordinator, Ph.D. credit and progress seminars
- Coordinator, PG Examination coordinator
- Coordinator, UG Examination coordinator
- Coordinators, Departmental Examination Cell
- Coordinator, Department Stock verification, (Since 2008 January 2012 & November 2013 to March 2014)
- Coordinator, Annual report, Websites, MIS etc. (Since 2008 January 2012 & November 2013 to March 2014)
- Coordinator, Departmental Finance committee (DOC and Annual Grant)
- Member, Department purchase committee
- Member, Tender committee of various departmental instruments
- Member, New ACD building infrastructure development committee
- Worked as Chairperson / Member of Scrutiny committee / selection committee for TA interviews / interview committee for the selection of Assistant Professor interviews / project fellow interviews / Ph.D. candidate interviews
- Examiner and Chairperson in several Ph.D. credit and research progress seminars
- Chief coordinator / Member of institute's cultural and technical events (SPARSH, Kashish, Mind Bend, CHRD etc.)
- Organized several industrial visits of M.Sc. final year students at M. S. U., Vadodara and SVNIT Surat.

# Hobbies

Reading, Travelling, Listening, Music, Singing & Yoga [Completed Yoga Certificate Course (YCC) from The M. S. University of Baroda, Vadodara, Gujarat, India]

I hereby declare that all the above statements made by me are correct to the best of my knowledge and belief.

**Date:** November 2019 **Place:** Surat, Gujarat, India

Kalpana C. Maheria, Ph. D.