

Curriculum Vitae

Dr. KALPANA C. MAHERIA

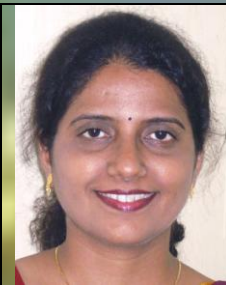
ASSISTANT PROFESSOR,

Department of Applied Chemistry,
S. V. National Institute of Technology,
Ichchhanath, Surat – 395 007, GUJARAT, INDIA

E-Mail : kcm@ashd.svnit.ac.in, Alternate E-Mail: maheria@gmail.com

Tel: (O) +91-261-2201793

Website: www.svnit.ac.in



CARRIER OBJECTIVE

To secure a challenging position, in teaching where I am also able to contribute in research and development.

DATE OF JOINING SVNIT, SURAT

23rd July 2007

DATE AND PLACE OF BIRTH

25th May, Vadodara, Gujarat, INDIA

EDUCATIONAL QUALIFICATION

Ph.D Applied Chemistry

2007

Applied Chemistry Department, Faculty of Tech. & Engg., The M. S. University of Baroda, Vadodara, Gujarat, INDIA

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

Master of Science (M.Sc.) Applied Chemistry

1998

Department of Applied Chemistry, Faculty of Tech. & Engg., The M. S. University of Baroda, Vadodara,
As part of the course work given a Seminar entitled, "*Controlled released technology – An Overview*" and a Dissertation work was carried out on the topic entitled "*Controlled released polymeric formulations*"

FELLOWSHIP AND AWARD

- Awarded University Research Scholarship for the year 2001-2002.
- **First Prize** in the Analytical Section for the best paper presentation, for the paper entitled "Synthesis, Characterization of a New phase of Tin Phosphate and its Application as an Ion Exchanger" in Third All Gujarat Research Scholars Meet held at Applied Chemistry Department, M. S. University, Vadodara, 23rd February 2003.

TEACHING EXPERIENCE

8 years

INDUSTRIAL EXPERIENCE

Worked as a Junior Chemist at "CKCO ENGG WORKS", GIDC, Makarpura, Vadodara, Gujarat.

GUIDED Ph.D STUDENTS

Three Ph.D. students (Pursuing)

RESEARCH INTERESTS

Materials (Inorganic and Hybrid) synthesis, characterization and their applications, Heterogeneous Catalysis (Zeolites and Mesoporous materials)

RESEARCH PUBLICATIONS

Amit Jayswal, Heemanshu Patel, Kalpana Maheria, Rakesh Thakkar and Uma Chudasama, Synthesis and Characterisation of a Bimetallic M(IV) Phosphate – Zirconium Titanium Phosphate and its Single Salt Counter parts, **Proceeding of Thermans**, 2006, 407.

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**, Vol. 86, 2006, 515-525.

Kalpana Maheria and Uma Chudasama, Kinetics, thermodynamics and sorption characteristics of an inorganic ion exchanger, titanium phosphate, towards first row transition metal ions. **Indian Journal of Chemistry**, Vol. 46 A, 2007, 449-454.

Kalpana Maheria and Uma Chudasama. Studies on sorption and elution behaviour of dyes using Titanium phosphonate, **Journal of Scientific and Industrial Research**, Vol. 66, 2007, 1047-1053.

Kalpana Maheria and Uma Chudasama, Sorptive removal of dyes using Titanium phosphate, **Industrial Engineering & Chemical Research**, Vol. 46, 2007, 6852-6857.

Kalpana Maheria and Uma Chudasama, Synthesis and Characterization of Titanium Phosphonate – A novel Hybrid Ion Exchange Material and its Application in Separation of metal ions, Proceeding of Symposium on **Emerging trends in Separation Science and Technology**, 2006, 128-129.

Kalpana Maheria and Uma Chudasama, Synthesis and Characterization of a new phase of titanium phosphate and its application in separation of metal ions, **Indian Journal of Chemical Technology**, Vol.14, 2007, 423-426.

Zeolite HY supported NaHSO₄: A Novel reusable heterogeneous catalyst for the solvent free synthesis of 3,4-Dihydropyrimidine-2(1H)-ones”(Communicated).

EXPERT LECTURES

Delivered a lecture on “Introduction to Infrared Spectroscopy” in Summer School (STTP), on Advanced Instrumental Methods of Analysis (AIMA-09), 24-28th August, 2009, SVNIT, Surat.

Delivered a lecture on “Infrared Spectroscopy” in Short Term Training Program (STTP) on, Advances in Condensed Matter Physics (ACMP-09), 31st August -4th September, 2009, SVNIT, Surat.

Given a seminar on the topic “An Introduction to, Tetravalent Metal Acid (TMA) Salts – A Promising Ion Exchange Materials”, at RTG-Hazira, Reliance Industries Limited, Surat, Gujarat, India, 12th November 2009, Surat, Gujarat.

MEMBERSHIPS

Life member of Catalysis Society of India, Member of Indian Society of Analytical Scientists

CONFERENCE / WORKSHOP / SHORT TERM TRAINING PROGRAMME ORGANIZED

- Co-coordinator of three days training programme on “Pedagogy training” for the faculties of SVNIT, held at SVNIT, Surat, during 12-15th May 2008.
- Co-coordinator of two days training programme on “Research methodology”, held at SVNIT, Surat, during 16-17th May 2008.
- Organizing member of Hydro 2007, at SVNIT, Surat.
- Organizing member of short term training programme on Applications of Mathematical Sciences & Soft Computing held at Applied Sciences and Humanities Department, SVNIT, Surat, during 8-12th Dec, 2009.

- Organizing member of RSTAPS'08-09, held at Applied Sciences and Humanities Department, SVNIT, Surat, during 29th Dec '09 - 2nd Jan'09.
- 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 21st-25th December 2009.

CONFERENCE/WORKSHOP/SEMINAR ETC. ATTENDED (Total 26)

Sr.No.	Title	Institute/Organization	Duration		
			From	To	Days
1.	A Workshop on "Elemental Analysis"	Indian Society of Analytical Scientists, Baroda Chapter.	23 rd Sept. 2000	23 rd Sept. 2000	1 Day
2.	2 nd National Seminar on "Environmental Awareness, Education and Management for Sustainable Rural Development" ORAL	Dept. of Environmental Sciences, Sri Venkateswara University, Tirupati, Andhrapradesh	26 Aug. 2002	28 th Aug. 2002	3 Days
3.	A Workshop on "Thermal Analysis"	Indian Physics Association, Baroda chapter and Triton Technologies Ltd. U.K.	7 th Feb. 2003	7 th Feb. 2003	1 Day
4.	Fourth All Gujarat Research Scholars Meet. ORAL	Materials Research Society of India (Gujarat Chapter)	9 th Dec. 2003	9 th Dec. 2003	1 Day
5.	National workshop on "Spectroscopy and Theoretical Chemistry"	Deptt. of Chemistry, Faculty of Science, M.S.U., Baroda	Feb. 2005	Feb. 2005	1 Day
6.	National Seminar on "Polymers, Surfactants and Gels" POSTER	Deptt. of Chemistry, Faculty of Science, M.S.U., Baroda	Mar.2005	Mar.2005	1 Day
7.	DAE –BRNS Symposium on Emerging Trends in Separation Science and Technology POSTER	BARC, Trombay	29 th Oct. 2006	1 st Sept. 2006	3 Days
8.	2009 Canadian Chemical Crystallography Workshop	McMaster University, Hamilton, Ontario, CANADA	28 th May 2009	30 th May 2009	3 Days
9.	92 nd Canadian Chemistry Conference and Exhibition	Hamilton Convention Centre, Hamilton, Ontario, CANADA	30 th May 2009	3 rd June 2009	5 Days
10.	Workshop on Symmetry, Group Theory, and Spectroscopy	Navyug College of Science, Surat	26 th Oct. 2009	26 th Oct. 2009	1 Day

Paper presented recently –

- Oral Presentation:** Paper entitled, "Silica sulphuric acid- A novel heterogeneous catalyst for organic reactions", Krupal Shah, Kalpana Maheria and Jigisha Parikh, presented by my student, at National Conference on Environment Chemistry – 2008 (NCEC-2008) held at Art, Science and Commerce College, Kholwad, Surat, 29th -30th November 2008.
- Oral Presentation:** Paper entitled "Metal organic frameworks as advanced multifunctional materials National Conference on Catalysis for Sustainable Energy and Chemicals, Nikhil Parekh, Kalpana Maheria, Parimal Parikh, at "CATSYMP-19" during 18-21st January 2009, held at NCL, Pune,

- 3 **Poster Presentation:** Catalysis by sulfonic acid functionalized International mesoporous silica, Shah K A, Maheria K C, Parikh J. K. Workshop on nanotechnology and advanced functional materials, held at NCL, Pune, July 9-11, 2009.
- 4 **Poster Presentation:** Paper entitled "Study of heterogeneous Biginelli reaction using zeolites for the synthesis of dihydropyrimidinone (DHPMs)", Sunil R. Mistry, Kalpana C. Maheria, Parimal A. Parikh, CATSYMP, MSU, Baroda, 25th October 2009.

PROFESSIONAL TRAINING RECEIVED (*Selected*)

Sr. No.	Name of Training	Duration	Organization where training was provided
1	"Treatment of water and waste water"	07 th -18 th July 03	Periyar Maniammai College of Technology for Woman, Thanjavur
2	"Recent trends in corrosion, science, technology, monitoring and control"	25 th -29 th Dec. 07	ASHD, SVNIT, Surat.
3	"Induction Training Programme"	18 th -20 th Jan. 2008	SVNIT, Surat.
4	"Pedagogy Training"	12 th -15 th May 2008	SVNIT, Surat.
5	"Training on Research methodology in Engineering"	16 th -17 th Jan. 2008	SVNIT, Surat.
6	School cum workshop on Trace element speciation	24 th -28 th November 2008	Saha Institute of Nuclear Physics, Kolkata

THEORY, PRACTICAL CLASSES CONDUCTED AND COURSES TAUGHT

At M. S. University of Baroda, Vadodara, Gujarat

(Worked as a Lecturer during 2000-2001 and Teaching Assistant during Dec. 2003- July 2007, at Applied Chemistry Department., Faculty of Tech. & Engg., MSU, Vadodara, Gujarat)

Theory classes of Diploma in Textile Technology (Alkanes, Alkenes, Alkynes and Alkyl halides)

Theory classes of Diploma in Textile Chemistry (Topics of Inorganic Chemistry)

Conducted practical classes of UG [B.E.-I, Metallurgical, Chemical, Civil, B.Pharm-I], PG (M.Sc.- I, Applied chemistry) and Diploma classes (DTT-I, DTC - I, II, III).

Organized 9 Industrial Visits for the students of final year M.Sc. (Applied Chemistry), during an academic year 2006-2007.

Teaching Assistant during 2002-2003, Department of Chemistry, Faculty of Science, MSU, Vadodara, Gujarat.

Conducted practical classes of Ist and IInd year B.Sc. Students, Performed expert duties in M.Sc. practical examinations.

At S. V. National Institute of Technology, Surat, Gujarat

(Joined as a Lecturer on 23rd July 2007, promoted to Senior Lecturer in July 2008, re-designated as Assistant Professor in 2009)

BTech - I Dyes, Drugs, Brass Alloys, Fullerenes, Composites, Green Chemistry, Biomolecules

B.Tech – II Chemistry of water, Tertiary treatment, Cooling water, Fuels, Gas chromatography, Nuclear chemistry, Heavy water (in 2007, 2008, 2009)

Five years Int. M.Sc. Programme (in M.Sc. - I, II, III)

Transition metal complexes, colour, magnetic properties, general other properties, biomedical uses of transition metal ions, silicates, zeolites, silicones, gravimetric and volumetric analysis, Lanthanides and actinides: general properties, separation and extraction of lanthanides, topics in metallurgy, epoxides

Conducted practical classes of B.Tech – I, II and Five years Int. M.Sc. – I, II, III students.