



DEPARTMENTAL PROFILE

About the Department of Chemistry

The department was established in 1958. It is one of the oldest chemistry departments in the state of Gujarat. Department has been recognized as a **Centre of Excellence** in Supramolecules and Nanomaterials by Gujarat Council of Science and technology, Gujarat. Covered under UGC Special Assistance Programme (**DRS II**) in the thrust area of Supramolecules and Nanomaterials and also covered under **DST-FIST**. The department has organized 1 international conference, 3 national, 2 state level and 2 University level conferences during the last five years

The department has stimulating postgraduate teaching programmes. Under the CBCS system adopted by the department in year 2010, the students are evaluated by Seminar, Quiz, Assignment, Internal exam (theory & Practical), Dissertation and Industrial visit. Frequent symposia, refresher courses have been organized for the benefit of University, College teachers as well as the talented students. The department is running remedial classes for UGC-NET exam for the benefit of students of Gujarat University.

The department has good library facilities with good collection of more than 5000 books. instrument labs having more than 20 major instruments, 3 labs for students with the capacity of 50 each and 6 research laboratories with all infrastructure facility. The department has access to e-books and journals through INFLIBNET.

The department has good instrumental facilities such as GF-AAS, FT-IR, UV-Visible Spectrophotometer, Powder X-ray diffraction unit, GC-MS, HPLC, Polarograph, Polarizing Microscope, DSC, TGA, DTA, Fluorescence Spectrophotometer, Cyclic Voltmeter, TOC, DLS, CHNSO Analyzer, Impedance Meter, Ion Chromatograph, Microwave synthesizer and good computer facilities for carrying out advanced research.

The department is well-known for its research activities and has very well equipped research laboratories. The main areas of research include: Supramolecular Chemistry, Corrosion, Bioanalysis, medicinal Chemistry, Heterocyclic chemistry, Nanochemistry, Nanomaterials, Co-ordination chemistry etc. The department has organized **8 major scientific events** during the last five years.

Events Organized:

1. One day Colloquium on "Chemistry : Our Life Our Future" on 24th December 2011.
2. Competitiveness through Collaboration" Industry-Academia Congregate, January, 22, 2011
3. 'XXIV-Gujarat Science Congress'-March 21, 2010
4. National Seminar on Confluence of Supramolecular Chemistry and Nanoscience", during January 22 & 23, 2010

5. International Conference on Environmental Issues in Emerging and advanced Economies: Canada, India, December 6 – 8, 2009
6. National Seminar on Emerging Trends in Forensic Science, Forensic Science, Dept. of Chemistry, Gujarat University, Ahmedabad 27-28th April, 2008.
7. National Seminar on Emerging Trends in Supramolecular Research on 30th and 31st March 2007.
8. National symposium on Nanomaterials and Photochemistry, 23rd -24th October 2006,

Research Projects

Department has successfully completed 20 research projects of DST, CSIR, UGC, GUJCOST, GMDC during the last five years.

In all, department has received a grant of 2.2 crores from various bodies during the last 5 years. 3 faculty members are currently having projects from CSIR, UGC and GUJCOST.

Placement

Regular placement interviews are conducted during the month of January under the name "Karbon Konnect " More than 12 companies like Atul, Huback, Torrent, O2h, Zydys- Cadila Finar, Anil starch, Intas, Alembic, Sun Pharma, B A research, Weeda, Amneal Pharmaceutical conducted interviews in 2011. More than 50% was placed with an average percentage of 1.5-2.5 lacs.

Besides academics the students are actively involved in sports and the department team participated in the inter college Volleyball and chess competitions.

Research Collaboration

Department is collaborating with **Rega Institute of Medical Research, Belgium** for anti-HIV activity A tie up with **BITS-Pilani, Hyderabad** for anti-TB activity Collaboration with ANAR chemicals for research work on dyes and inks. Collaboration with Cancer research Institute for research work on anti-cancer drugs.

Research Achievements

Faculty is very actively engaged in research. Department has produced 30 Ph.D and 5 M. Phil in the past three years. This has resulted in 120 publications in national and international journals (average impact factor 2) with 1600 citations. All the faculty members are fellows or members of various research councils. Prof. Shobhana Menon is also fellow of Royal Society of Chemistry, London. In the past five years the 9 faculty members has attended 84 conferences or seminars and 8

National and international conferences has been organized in the department. The department has organised 3 refresher courses during the last 5 years.

Department is taking care of Gymkhana of Gujarat University and improving the facilities for sports and games for students.

Prof. Shobhana Menon was awarded Gurukul Jyoti Award, 2010 by Gujarat University for excellence in teaching, research and administration Mr. Rutvij Parikh (M.Sc. Analytical Chemistry) 2010 was awarded Silver Peacock award. Mr. Darshak Bhatt received a student project (Rs. 25000) from GUJCOST.

Diploma Course

Department is offering a 3 month diploma course on Intellectual Property Rights(IPR). Department is conducting preparative classes for the UGC-NET exam.

Faculty Profile

Professor & Head

Dr. S.K.Menon	M.Sc. Ph.D.	shobhanamenon07@gmail.com (mobile)9327015426	Inorganic Chemistry	Supramolecular Chemistry, Nanomaterials
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Professors

Dr.N.K.Shah	M.Sc.Ph.D.	Nishchem2004@yahoo.co.in (mobile)9825312095	Analytical Chemistry	Corrosion Inhibitors, Electroanalytical techniques
Dr.K.H.Chikhalia	M.Sc.M.Phil, Ph.D.	chikhalia_kh@yahoo.com (mobile)9427155529	Organic Chemistry	Medicinal Chemistry
Dr.V.K.Jain	M.Sc.Ph.D.	drvkjain@hotmail.com (mobile)9327013263	Inorganic Chemistry	Supramolecular Chemistry, Coordination Chemistry

Associate Professors

Dr.P.Shrivastav	M.Sc.,M.Phil, Ph.D.	pranav_shrivastav@yahoo.com (mobile)9925471963	Analytical Chemistry	Supramolecular Chemistry & Bioanalytical method development & validation
Dr.H.D.Patel	M.Sc.,M.Phil, Ph.D.	hitesh13chem@rediffmail.com (mobile)9428417765	Organic Chemistry	Heterocyclic & Chiral Compounds& their biological activity

Assistant Professors

Dr.C.V.Vyas	M.Sc.Ph.D	cvvyas@gmail.com (mobile)937462654	Inorganic Chemistry	Organic reagents in analytical chemistry
Dr.M.M.Maisuria	M.Sc.Ph.D.	mmmmaisuria@yahoo.co.in (mobile)9376832095	Physical Chemistry	Thermodynamic studies of binary ligand mixtures
Dr.H.Kaur	M.Sc.M.Phil, Ph.D.	hk_ss_in@yahoo.com (mobile)9427628565	Organic Chemistry	Supramolecular Chemistry, Nanocomposites

Non teaching Staff

Courses offered

Master of Science (Chemistry)

Course Type	:	Grant in Aid
Intake	:	150
Eligibility	:	B.Sc. (Chemistry)
Subject offered/Specialization	:	Analytical / Inorganic / Organic / Physical
Duration	:	2 yrs (4 semesters)
Course Commencement	:	June
Selection Process	:	By merit
Placement/Future Career Opportunity	:	Ph.D. programme and employment in industry

M.Phil. (Chemistry)

Course Type	:	Grant in Aid
Intake	:	25
Eligibility	:	M.Sc. (Chemistry)
Subject offered/Specialization	:	Analytical / Inorganic / Organic / Physical

Duration : 1 yr (2 Semesters)
 Course Commencement : June
 Selection Process : By written test and Interview
 Placement/Future Career Opportunity : Faculties in Colleges & Universities,
 Research Institute and industries

Ph. D. (Chemistry)

Course Type : Grant in Aid
 Eligibility : M.Sc. (Chemistry)
 Subject offered/Specialization : Analytical / Inorganic / Organic / Physical
 Selection Process : By written test, group discussion and personal
 Interview
 Placement/Future Career Opportunity : Faculties in Colleges & Universities,
 Research Institute and industries

Diploma Course in Intellectual Property right (IPR)

Course Type : Self Finance
 Intake : 40
 Eligibility : any graduate of recognized University
 Duration : 3 months
 Course Commencement :
 Selection Process : By merit and Interview
 Placement/Future Career Opportunity : Industries

Instrumental Facilities available at the Department

No.	Name of Instrument
1.	X-ray Diffractometer XRD-7 -SEIFERT
2.	GCMS – Shimadzu QP 5050
3.	Fourier Transform Infrared Spectrometer Bruker Tensor 27 with Microscope Helios ATR, DR with heating capsule
4.	Differential Thermal Analyzer Model DTA-50-Schimadzu
5.	Fluorescence Spectrophotometer F-2000 - HITACHI
6.	Spectrophotometer U-3210 - HITACHI
7.	Polarizing Microscope -Leica
8.	Total Organic Carbon Analyzer with PC and Printer- Anatoc
9.	Fourier Transform Infrared Spectrometer Jasco 410
10.	Vapour Pressur Osmometer - KNAUER
11.	UV / VIS Spectrophotometer- JASCO V-570
12.	Ion chromatography – Dionex ICS1000

13.	Atomic Absorption Spectrophotometer- Chemito
14.	HPLC- Chrompac with Integrator-Schimadzu CR 370
15.	Electrochemical Analyzer- CH instruments 620 A
16.	Spectrophotometer Ciba-Corning
17.	Dynamic lights scattering, nanotracs, METROHM
18.	CHNSO elemental analyser- ELEMENTAR
19.	AAS with graphite furnace- ANALYTICAL JENA- METROHM
20.	Electrochemical impedance meter – METROHM
21.	Microwave synthesizer – CEM
22.	Conductometer-Dosimeter-METROHM

Sr. No.	Name of Project ongoing	Grant	Funding Agency	Duration	Investigators
3	Super Molecular Chemistry Application to Dyes & Metal Clusters	50 lacs	UGC-SAP, New Delhi (Coordinator)	5 yrs	Dr.S.K.Menon
4	“Novel supramolecular ditopic receptors based on calix[4]pyrrole macrocycles and their derivatives, for ion pair recognition and simultaneous separation and preconcentration of cationic and anionic guests”	10 lacs	UGC (MAJOR)	3 yrs	Dr.V.K.jain
5	Supramolecular Assemblies: Nanomedicine and Nanotechnology Preconcentration, Separation and Recovery of Toxic Trace Metals	2.25 lacs	GUJCOST (MINOR)	3 yrs	Dr.V.K.Jain
6	Polymer nanocomposites	2 lacs	UGC	2 years	Dr.Harjinder Kaur

Publications by the Faculty in last five years:

Dr.Shobhana K. Menon

1. Alok Pandya, Shobhana Menon, Rapid Colorimetric Detection of Sulfide Using Calix[4]arene Modified Gold Nanoparticles as a Probe, **Sensors & Actuators: B. Chemical**, (accepted) **2012**.
2. Manishkumar B. Patel, Shobhana K. Menon, Calix[4]arene based 1,3,4-oxadiazole and thiadiazole derivatives: Design, Synthesis, and biological evaluation
Organic & Biomolecular Chemistry, Accepted (**2012**)
3. Nishith R. Modi, Bhargav Patel, Manishkumar B. Patel, Shobhana K. Menon, Novel monohydrogenphosphate ion-selective polymeric membrane sensor based on phenyl urea substituted calix[4]arene
Talanta 86, 121– 127, **2011**
4. Shobhana K. Menon, Nishit R. Modi, Bhargav Patel, Manishkumar B. Patel, Azo calyx[4]arene based neodymium(III)-selective PVC membrane sensor
Talanta, 83,1329-1334,**2011**
5. Shobhana K. Menon, Ravindra V. Patel, Bhoomika Mistry, V. A. Rana, Dielectric study of novel Liquid Crystals Based on Calix[4]arene Schiff bases
Liquid Crystals:38,123 -134,**2011**
6. Ravindra V. Patel, Jayesh G. Panchal, and S. K. Menon, Development and validation of GC/MS method for determination of pramipexole
Bio Medical Chromatography 25,524-530, **2011**.
7. Shobhana K. Menon, Ravindra V. Patel, Bhoomika Mistry "Synthesis and study of binuclear calix[4]arene Schiff base Mn (II) complexes as catalyst in the presence of PhIO for the catalytic oxidation of olefin."
Journal of Inclusion Phenomena and Macrocyclic Chemistry (accepted) 2011.
8. Shobhana K. Menon, Bhoomika Mistry, Evaluation and solubility improvement of Carvedilol - PSC[n]arene inclusion complexes with Acute Oral toxicity studies"
Journal of Inclusion Phenomena and Macrocyclic Chemistry, DOI:10.1007/s10847-011-0056-x,b,**2011**
9. Shobhana K. Menon, Nishit R. Modi, Bhoomika Mistry, Kuldeep Joshi, Improvement of some pharmaceutical properties of mycophenolate mofetil by p-sulphanatocalix[4]resorcinarene inclusion complex
J. of Inclusion Phenomena: 10.1007,s10847-010-9870-9,2011
10. H.S. Mehta, H. Kaur and S.K. Menon, A Study on Complexation and Transport of Cr(III) Through a Chromogenic Aza Crown Liquid Membrane ,

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- 11 Ravindra V. Patel, Jayesh G. Panchal, V. A. Rana and S. K. Menon, Liquid Crystals based on calix[4]arene Schiff bases,
J. of Inclusion Phenomena-66,285-295,2010
- 12 S. K. Menon and Anish Kumar: Potentionmetric biosensing of glucose by fullerene based silver selective electrode
Fullerene Nanotubes and Carbon Nanostructures:18,186-197,2010
- 13 Ravindra V. Patel, Jayesh G. Panchal, and S. K. Menon, The synthesis and characterization of calix[4]arene based azo dyes,
J. Incl. Phenom Macrocycl. Chem. 67 ,73-79,2010
- 14 Anishkumar and S. K. Menon, Cooperative anion recognition by a novel heteroditopic receptor based on dibenzo[18]crown-6-fullero-bis(pyrrolidine)
Supramolecular Chemistry, 22: 45-56.2010
- 15 Jayesh G. Panchal, Ravindra V. Patel, and Shobhana K. Menon Preparation and physicochemical characterization of carbamazepine (CBMZ): para-sulfonated calix[n]arene inclusion complexes,
Journal of Inclusion Phenomena and Macrocyclic Chemistry, 67,201-208 ,2010
- 16 H. Mehta, H. Kaur, S. K. Menon, Molecular recognition of Aromatic Amines by, Coumarin Substituted Aza-Crown ether
Turkish Journal of Chemistry, 34, 1-10 2010
- 17 Sudhir Dave, H. Kaur, S. K. Menon, Selective solid-phase extraction of rare earth elements by the chemically modified Amberlite XAD-4 resin with azacrown ether
Reactive & Functional Polymers 70,692-698 ,2010
- 18 Gaurang Patel, S. K. Menon, Recognition of lysine, arginine and histidine by novel para-sulfonatocalix[4]arene thiol functionalized gold nanoparticles in aqueous solution
Chemical Communications: 3563-3565 ,2009
- 19 Anish Kumar, Mandav V. Rao and S. K. Menon, Photoinduced DNA cleavage by fullerene-lysine conjugate,
Tetrahedron Letters, 50: 6526-6530,2009
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Chemical Communications, 1849-1851, 2009
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Chemical Biology and Drug Design, 73, 553-557.2009

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J. Incl. Phenom Macrocycl. Chem. 67,63-71,**2009**
- 23 Bhargav Patel, Anish Kumar, Shobhana K. Menon, Liquid membrane transport kinetics of Hg (II) by dithio derivatized macrotricyclic compound,
Journal of Macromolecular Science – PAC, 46,1151-1155,**2009**
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Separation Science and Technology, 44, 2806-2837, **2009**
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- 27 S. K. Menon, Bhargav Patel and Anishkumar, Mercury selective membrane electrode based on dithio derivatized macrotricyclic compound
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- 29 S. K. Menon and Anishkumar, Fullerene derivatized s-triazine analogues as antimicrobial agents
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- 30 M.S. Gidwani, H. Kaur, Usha Pal and S.K. Menon, A Chromogenic Calixarene Hydroxamic Acid for the Sequential Separation of Ti(IV) and Zr(IV)
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- 31 S. K. Menon and Anishkumar, Fullerene-Ferrocene Dyad linked by rigid bilinkage: Synthesis, photophysical properties and application as copper ion sensor,
Journal of Physical Organic Chemistry- 22, 661 – 669,**2008**
- 32 Uma Harikrishnan and Shobhana K Menon, Electrochemical studies on the interaction of metal ions with a novel crown ether fulleropyrrolidine,
Fullerene nanotubes and carbon nanostructures, 16, 165-171,2008.
- 33 S K Menon, P Jose, U Harikrishnan & U Pal, Calix[6]arene derivative as chromogenic sensor for anti-hypertensive drugs,
Indian Journal of Chemistry: 47, 246-250, **2008**
- 34 R.B. Jotania, S. K. Menon, R.B. Khomane, C. C. Chauhan, B. D. Kulkarni, Synthetic properties of barium-calcium hexaferrite particles prepared by sol-gel and microemulsion techniques,
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- 35 S. K. Menon and Uma H, Synthesis, Characterization and Spectral Properties of crown ether based diazo dyes,
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Molecular Crystal Liquid Crystal, 482, 71-83, **2008**
- 37 S. K. Menon, Vrajesh B. Parikh, An Embodiment on Metal-Complexation of Crown Ether Schiff Bases
Reviews in Inorganic Chemistry: 28, 89-151, **2008**.
- 38 S.K.Menon and Princy Jose, Lower-Rim Substituted Calixarenes and Their Applications,

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transportation of fluoride ions with alizarin based azacrown ether Zr-complex,
J. of Fluorine Chemistry, 127,1228-1234,2006

Prof. N.K.Shah

- 1) Patel A.S., Panchal V.A., Trivedi P.T., Shah N.K., “Corrosion inhibition of Al-Pure in Hydrochloric acid solution by organic Schiff base.”, *Journal of Applied Chemical Research*, **Islamic Azad University, 2011**. (accepted)
- 2) Panchal V.A., Patel A.S., Shah N.K., “Inhibition of Al-Mg alloy in hydrochloric acid using Schiff bases as corrosion inhibitors.”, *Material Protection*, **Engineer Society of Corrosion, 2011**. (accepted).
- 3) Panchal V.A., Patel A.S., Trivedi P.T., Shah N.K., “Corrosion inhibition of Al-Mg alloy in hydrochloric acid using Benzylamine-N-(p-methoxy benzylidene).”, *Journal of Materials and Environmental Science*, **University of Mohammed Premier Oujda, 2011**. (accepted).
- 4) Patel A.S., Panchal V.A., Trivedi P.T., Shah N.K., “Impedance Spectroscopic Study of Corrosion Inhibition of Al-Pure by Organic Schiff base in Hydrochloric Acid.”, *Journal of Saudi Chemical Society*, **Elsevier, 2011**. (accepted)
- 5) Patel A.S., Panchal V.A., Mudaliar G.V., Shah N.K., “Electrochemical and chemical investigation on the corrosion of Al-Pure in hydrochloric acid solution using Schiff bases.”, *Bulletin of Materials Science*, **Springer, 2011**. (accepted)
- 6) Panchal V.A., Patel A.S., Shah N.K., “Adsorption behavior and thermodynamics investigation of Aniline-N-(p-methoxybenzylidene) as corrosion inhibitor for Al-Mg alloy in hydrochloric acid.”, *Prajna*,

Journal of Pure and Applied Sciences, S.P.University, Gujarat, **India** **2011**. (accepted)

- 7) Shah M.D., Patel A.S., Mudaliar G.V., Shah N.K., "Schiff bases of Triethylenetetramine as corrosion inhibitors of zinc in hydrochloric acid.", *Portugaliae Electrochimica Acta, Portuguese Electrochemical Society, Europe* 29(2) (2011) 101-113.
- 8) Shah M.D., Panchal V.A., Mudaliar G.V., Shah N.K., "Inhibitive effect of Salicylidene-N-N'-dimorpholine towards corrosion of zinc in hydrochloric acid.", *Anti-corrosion Methods and Materials*, Emerald, **UK** 58(3) (2011) 125-130.
- 9) Patel A.S., Panchal V.A., Shah N.K., "Corrosion inhibition of Al-Pure by Aniline-N-benzylidene (ANB) a Schiff base as inhibitor in hydrochloric acid", *Prajna, Journal of Pure and Applied Sciences*, S.P.University, Gujarat, **India** 18 (2010) 73-75.
- 10) Talati J D, Shah N K, Trivedi P T, Shah M D & Mudaliar G V, Toluidine-N-salicylidenes as Corrosion Inhibitors for Al-Mg Alloy (AA 5052) in Hydrochloric Acid, *Euro Corr 09, France*, **2009**.
- 11) Desai M N, Talati J D, Mudaliar G V & Shah N K, Toluidine-N-salicylidenes as Corrosion Inhibitors for Zinc in Hydrochloric Acid, *KORSEM08, Turkey*, **2008**.
- 12) Desai M N, Talati J D, Vyas C V & Shah N K, Some Schiff bases as Corrosion Inhibitors for Zinc in Sulphuric Acid, *Indian J. Chem. Technol.*, New Delhi, **India**, 15 (2008) 228.
- 13) Desai M N, Talati J D & Shah N K, Schiff bases of Ethyenediamine / Triethyltetramine with Benzaldehyde / Salicylaldehyde as Corrosion Inhibitors of Zinc in Sulfuric Acid, *Anti-Corr. Methods and Materials*, **UK**, 55 (2008) 27.
- 14) Desai M N, Talati J D, Shah N K & Mudaliar G V, A Comparative Study on the Effectiveness of Aniline-N-Benzylidene and Aniline-N-Salicylidene as Inhibitors in Corrosion Protection of Zinc in Hydrochloric Acid, *1st*

International Conference : Corrosion and Material Protection, Prague (Czech Republic), 2007.

- 15) Desai M N, Mudaliar G V, Shah N K & Talati J D, Ortho-, meta- and para-anisidene-N-salicylidenes as Corrosion Inhibitors of Zinc in Sulphuric Acid, *14th Asian-Pacific Corrosion Control Conference*, Shanghai, **China, 2006.**

Latest Literary Work published

Co-authored “ Paribhaishik Kosh: Rasayanvigyan “ in two volumes along with Dr.M.N.Desai, Former Professor & Head of Chemistry Department, Gujarat University.

Dr.K.H.Chikhalia

1. Rahul P. Modh, Amit C. Patel, Kishor H. Chikhalia, DESIGN, SYNTHESIS & BIOLOGICAL EVALUATION OF SOME NOVEL QUINAZOLINONE SCAFFOLDS, **Medicinal Chemistry (BENTHAM)**, (accepted manuscript).
2. Paresh K. Patel, Rahul V. Patel, Dharmesh H. Mahajan, Parimal A. Parikh, Girish N. Mehta and Kishor H. Chikhalia, Design, synthesis, characterization, and in vitro antimicrobial action of novel trisubstituted s-triazines, **MEDICINAL CHEMISTRY RESEARCH**, 12 November 2011 (DOI: 10.1007/s00044-011-9849-0)
3. Rahul V. Patel, Amit B. Patel, Premlata Kumari and Kishor H. Chikhalia, Synthesis of novel 3-(5-sulfanyl-1,3,4-oxadiazol-2-yl)-2H-chromen-2-one condensed s-triazinyl piperazines and piperidines as antimicrobial agents, **MEDICINAL CHEMISTRY RESEARCH**, 11 November 2011 (DOI: 10.1007/s00044-011-9842-7)
4. Rahul V. Patel, Premlata Kumari, Dhanji P. Rajani, Kishor H. Chikhalia, Synthesis, characterization and pharmacological activities of 2-[4-cyano-(3-trifluoromethyl)phenyl amino]-4-(4-quinoline/coumarin-4-yloxy)-6-(fluoropiperazinyl)-s-triazines, **Journal of Fluorine Chemistry**, 132, 2011, 617-627.
5. Rahul V. Patel, Premlata Kumari, Dhanji P. Rajani, Kishor H. Chikhalia, A new class of 2-(4-cyanophenyl amino)-4-(6-bromo-4-quinolinylloxy)-6-piperazinyl (piperidinyl)-1,3,5-triazine analogues with antimicrobial/antimycobacterial activity, **Journal of Enzyme Inhibition and Medicinal Chemistry**, online on July 8, 2011. (doi:10.3109/14756366.2011.592491)
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7. Rahul V. Patel, Premlata Kumari, Dhanji P. Rajani, Kishor H. Chikhaliya, Synthesis and studies of novel 2-(4-cyano-3-trifluoromethylphenyl amino)-4-(quinoline-4-yloxy)-6-(piperaziny/piperidinyl)-s-triazines as potential antimicrobial, antimycobacterial and anticancer agents, **European Journal of Medicinal Chemistry**, 2011, Volume 46, Issue 9, September 2011, Pages 4354-4365
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9. Sweta D. Desai, Kishor R. Desai , Christophe Pannecouque and Erik De Clercq Synthesis of a Novel Class of Some 1,3,5-Triazine Derivatives and their Anti-HIV Activity. **International Journal of Drug Design & Discovery** Volume 2, Issue 1, January - March 2011, page-361-368
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11. Dharmendra H. Patel, Kshor H. Chikhaliya, Nisha K. Shah, Dhaval P. Patel, Pankaj B. Kaswala, & Vipul M. Buha, Design, synthesis and antimicrobial study Of some Pyrimidine derivatives, **Pharmaceutical Chemistry Journal**. Volume 44, Number 2, June, 2010, page 94-98.
12. Amit C. Patel; Dharmesh H. Mahajan; Kishor H. Chikhaliya, Synthesis and Antibacterial Studies of Some Novel 2-(Coumarin-3-yl)-5-mercapto-1,3,4-oxadiazoles Containing 2,4,6-Trisubstituted s-Triazine Derivatives, **Phosphorus, Sulfur, and Silicon and the Related Elements**, 185, 2010, 368–376
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- 15 Design, Synthesis and evaluation of some 1,3,5-triazinyl urea and thiourea derivatives as antimicrobial agents. Mayank J. Patel, **Kishor H. Chikhaliya, J. Enz. Inhib. Med. Chem. (in press, 2009)**
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