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Organizing Chair

**Prof. Dharmesh V Kapatel**  
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J K Fertilisers

**Mr. Sharad Amin**  
MD, Energy Machine

**Mr. Hemant B Shah**  
Transpek Industry Ltd.

## About Us

### Vallabh Vidyanagar

Vallabh Vidyanagar, named after Sardar Vallabhbhai Patel, The Iron Man of India, is 6 kilometers from Anand, The Milk Capital of India. Over the years it has emerged to be an active Educational Hub in the western part of India. It has made its distinct identity in the sector of education by offering numerous emerging and innovative educational programmes and by attracting students from across the globe. Anand is situated between Ahmedabad and Vadodara on the main rail-link and also NH -8, about 75 kilometers from Ahmedabad and 40 kilometer from Baroda. Vallabh Vidyanagar is blessed with the beauty of nature. Its lush green trees of different types and kinds have not only made the town environment-friendly, but also created a serene and ever-enjoyable peaceful atmosphere generating synergistic pleasure on the campus.

### The Institute & the Management

The Institute, G H Patel College of Engineering & Technology (GCET) is managed by the highly reputed and the largest educational trust of Gujarat, Charutar Vidya Mandal (CVM), established in 1945 for the upliftment of rural education. Over the span of 50 years CVM has been making spectacular progress by venturing into various emerging disciplines. Today CVM is nurturing 46 educational institutions of diverse types contributing to the panoramic growth of Vallabh Vidyanagar and New Vallabh Vidyanagar.

From the very inception (in the year 1996) GCET has striven to develop itself into an 'Institution of Excellence' in education and research in consonance with the

spirit of modern Gujarat. In meeting this challenge for excellence, GCET has shaped its institution to the contemporary as well as future demands of need-oriented education. Today GCET has a total strength of more than 2000 students studying for Chemical, Mechanical, Information Technology, Electronics & Communication, Computer, Electrical Engineering and Mechatronics under the tutelage of 125 dedicated and competent faculty members. It has 7 Undergraduate and 4 Postgraduate Programmes.



## Department of Chemical Engineering

(Accredited by the National Board of accreditation)

Department of Chemical Engineering of G H Patel College of Engineering & Technology (GCET) was established, in 1996 as one of the first undergraduate self financed (unaided) engineering disciplines along with Information technology in the state of Gujarat. Originally affiliated to Sardar Patel University, GCET is now one of the affiliated colleges under Gujarat Technological University The department, having an intake of 60 students, has so far produced more than 800 chemical engineering graduates. The Department currently has thirteen faculty members who bring to the Department a wealth of expertise to maintain a vibrant teaching and research environment. It has thirteen laboratories with total of more than 125 equipment, pilot plants and bench-scale experimental set ups to cater the need of undergraduate curriculum of B.E (Chemical Engineering) of Gujarat Technological University. Today many of our distinguished alumni are holding respectable positions in industries like Reliance Petrochemicals, Essar oils, Tata Chemicals, L & T, TCS, Infosys, GSFC, Atul limited and many more. Faculty members have a good frequency of publication peer reviewed National and International journals like Desalination, Hydrometallurgy (Elsevier), Environmental Science and Pollution Research (Springer), International Journal of Hydrogen Energy (Elsevier), Journal of Polymer Science (Taylor & Francis), Journal of Surface Science & Technology, Journal of Scientific & Industrial Research and many others.

## Corresponding Address

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Professor & Head of Chemical Engineering  
& Organizing Chair  
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## Organizing Secretaries

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## IWC Secretariat

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# Indian Water Congress 2014

National Conference on Resource Recovery,  
Water Reuse and Recycle for Sustainable Development  
February 7-8, 2014



**Department of Chemical Engineering**  
(Accredited by the National Board of Accreditation, New Delhi)



निर्मिति विश्वसुखाय

**G H Patel College of Engineering & Technology**  
(A CHARUTAR VIDYAMANDAL INSTITUTE)

Vallabh Vidyanagar- 388 120, Gujarat, India

Supported by



**CHARUTAR VIDYAMANDAL**  
VALLABH VIDYANAGAR, GUJARAT, INDIA

In Association with



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INDIAN MEMBRANE SOCIETY

## Preamble

Water is key to life, determining our public and environmental health and providing the foundation for much of our economic function. This ubiquitous nature of water and its significance to so many facets of life have often made its effective management a challenge, as it requires the collaborative input of so many to make decisions.



There is an urgent and increasing need for better provision of clean water of drinking quality on a worldwide basis. The lack of clean water is the direct cause of millions of deaths every year in developing countries, while in most affluent countries the demand for such water is continuously increasing. Thus, the development of new means to produce drinking water is of paramount importance for international organizations, governments and research agencies. Sustainable development of effective desalination along with other advanced water treatment processes can make a major contribution to meeting the demand for drinking water. However, the advent of technologies also raises a number of other pertinent issues such as energy efficiency as well as environmental and sustainability.

The proposed conference will highlight the particular possibilities that exist for progress and innovation in water management by changing the way we collectively approach the issues and the challenges for water management. Whereas the event will provide a focus on the ways in which new technologies can be applied to advantage, a significant portion of the discussions will help focus on where innovations and progress are to be made through new ways of applying existing and emerging research, knowledge and technologies to both policy and practice.

## Objectives

The two-day conference aims to create a platform for knowledge sharing for all stakeholders in the water and wastewater sector. It covers a rich variety of subjects, technologies and practices, thereby giving a comprehensive overview on the subject. The Conference will allow the dissemination and discussion of cutting edge research in the latest applications available in the water and wastewater treatment industry. The scope will include theoretical and applied research, technological and industrial development. The objective of the programme would be to allow water professionals from industry, government and trade to learn and understand some of the latest developments and opportunities in this sector.

## Thrust areas proposed to be covered

Topics of interest for submission include, but are not limited to :

- Water Supply and Transportation.
- Drinking Water Treatment and Purification.
- Membrane processes for industrial waste water treatment.
- Thermal processes for waste water treatment.
- Advanced oxidation processes of waste water treatment
- Biological waste water treatment
- Resource recovery and water reuse and brine concentration and disposal
- Wastewater Management and Recycling
- Scale and corrosion inhibition and operational problem solving
- Novel Pre-treatment Processes
- Emerging Contaminants in Groundwater
- Groundwater Quality Analysis, remediation and Contaminant Detection
- Groundwater - Surface Water Interactions & Conjunctive Use of Water Resources
- Case Studies

## Conference participation

Participation is open to

- Academic Institutions:** Faculty members/ Ph.D, PG, and senior UG Students of Chemical Engineering, Civil Engineering, Agricultural Engineering, Chemical Technology, Chemistry, Industrial Chemistry, Environmental Science & Technology, Biosciences and Biotechnology, Pharmacy, Industrial Microbiology, and Allied Branches of Engineering,
- Scientists and researchers involved in the R & D in water technologies**
- Industry and Business houses:** Senior Operations, Utility and Project Managers in industries and R & D houses and anyone connected to the field of water and wastewater management.



## Call for papers and posters

Original research papers, critical reviews, experiences in industry, futuristic solutions etc. on any of the thrust areas of the Congress are invited for presentation and publication. Interested delegates may send the abstract of their paper for oral as well as poster presentation, subject to acceptance by the Technical review committee.

### Publication of Proceedings

Authors of the accepted abstracts will be required to submit the camera-ready full paper (along with registration fees), which will be published in the form of a Proceeding (book volume) by the Technical Committee with an ISBN number. The technical committee reserves the right of publishing the book volume with any suitable Indian Publishers.

(The full papers received after the specified dates may not be considered for publication. The format of the full length paper will be intimated.)

### Abstract Format

Single page abstracts with a maximum of 300 words (Times New Roman Font) should be submitted in MS word format. The title should be in 14 pt bold, upper-lower case letters and centered. This should be followed by author's names and affiliations (12 pt bold, centered) and the abstract text (11 pt) aligned justified.

### Best Poster Award

To encourage students and young scientists in the field of water science and technology, three awards will be given for the best posters presented during the congress.

### Exhibition

An exhibition cum demonstration of various water treatment technologies, processes and equipments by various organizations/industries actively working in the relevant fields is planned. Interested organizations will be allotted space to showcase and share their success stories in the areas of water treatment, conservation, recycling or harvesting.

## Registration fees

CATEGORY	REGULAR	EARLY BIRD (Before the 10 <sup>th</sup> December, 2013)
Faculty members	Rs. 700	Rs. 600
PG/Ph.D students	Rs. 500	Rs. 400
UG Students	Rs. 400	Rs. 300
Delegates from Industries	Rs. 1400	Rs. 1200

All payments should be made through DD/Cheque drawn in favour of Principal, G H Patel College of Engineering & Technology, payable at Vallabh Vidyanagar.

## Dates to remember

Last date of receipt of abstracts	NOVEMBER 15, 2013
Last date of intimation of acceptance	NOVEMBER 25, 2013
Last date of submission of full paper	DECEMBER 20, 2013
Last date of registration for the authors of the papers/posters	DECEMBER 20, 2013
Last date of registration as delegate only	JANUARY 10, 2014

## Accommodation

Limited Accommodations will be provided in various guest houses of the University, student hostels, and nearby hotels on request provided well in advance.

## Patrons

**Dr. C L Patel**  
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**Prin. R P Patel**  
Hon. Secretary, CVM

**Dr. Akshai Aggarwal**  
Vice Chancellor, GTU

**Dr. J D Patel**  
Hon. Jt. Secretary, CVM

**Dr. V S Patel**  
Director, SICART

## National Scientific Committee

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