



GCET TALK

APRIL—JUNE 2006

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THE QUARTERLY NEWSLETTER OF—G H PATEL COLLEGE OF ENGINEERING & TECHNOLOGY
(A GHARUTAR VIDYA MANDAL INSTITUTE)

GCET Celebrates NSDC 2006

GCET, BVM, ADIT, ISTAR and BBIT, the engineering institutions under CVM, jointly organized “National Science Day Celebration” (NSDC) at the ADIT campus from February 26-28, 2006. The celebration encompassed *i-Maze*, which was an yearly technical festival, initiated by GCET in 2003, and *Students’ Papers Contest and Technical Symposium (SPCTS)*, an annual national event of IEEE, Gujarat Section.

NSDC 2006 was inaugurated by Shri N Dinker, ex-member (Technical) of Gujarat Electricity Board. In his speech, Shri Dinker stressed on the importance of knowledge

dissemination by organizing such sort of technical symposiums. Dr. C L Patel, Chairman of CVM presided over the function. In his address, Dr. Patel urged the students to concentrate hard on their studies, so they can become capable enough to face global competition.

The festival consisted expert lectures, paper and model presentations, quizzes, debates etc. All GCET branches, viz. Electronics & Communication, Electrical Engineering, Mechanical Engineering, Mechatronics, Information Technology, Computer Engineering and Chemical Engineering, took part.



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IEEE Comes to GCET

Institute of Electrical and Electronics Engineers (IEEE), New York, gave GCET’s EC & EE Department recognition as an IEEE Student Branch, on February 28, 2006. The college, thus, became the seventh IEEE Student Branch in the Gujarat Section, Asia Pacific (IEEE Region 10). IEEE is one of the world’s leading technical organizations, with its operations spread all over the globe.

GCET IEEE Branch consists of 29 student members and two executive members. The Executive Committee consists of Dr. Ketan Kotecha (Principal and HOD of IT & CP Department) as Branch Counselor, Nilesh Modi (Lecturer, EC & EE Department) as Branch Mentor, and Pre-rit Souda (Third Level, EC) as Branch Chairperson.

HAMs at GCET

♦ **Jay P Shah**
(Fourth Level, EC)

A one-day workshop-cum-demo was organized on HAM radio at GCET on January 31, 2006. The workshop was conducted by a team of experts from Gujarat Institute of Amateur Radio (GIAR), Gandhinagar.

The team consisted of Mr. P C Valera and his colleagues from Gandhinagar. Dr. Joravarsingh Sarvaiya, head of IT department of Anand Agricultural University, and an avid HAM enthusiast, was also present.

The initial portion of the workshop consisted familiarizing students with the concept of

HAM radio and its importance as the only means of communication during calamities and emergencies. Dr. Sarvaiya students were encouraged to clear the “Certification of HAM Radio Operator Exam”. The latter portion of the event consisted a lecture by Dr. Sarvaiya, followed by an extensive question-answer session.

The team from GIAR had brought a mobile communication unit, which was used to give a detailed demonstration of HAM radio.

The team from GIAR was highly pleased by the response from the students, and was hopeful that their visit intensified an interest in HAM radio.

Inter-branch Football Tournery

GCET organized an interdepartmental football competition at the start of the ongoing semester. The tournament was played under flood lights, at the college grounds itself, and watched by a full crowd.

In the final of the tournament, the team of IT & CP Department defeated the team of EC & EE Department, to lift the trophy. Students of BVM officiated as match referees. Dr. Ketan Kotecha, the Principal of the college congratulated the winning team for their excellent performance.

The other participants were the team of CH Department and the team of ME & MC Department.

News from GCET: About Ourselves

Department of Electronics and Communication and Electrical Engineering:

Students of EC & EE Department attended a discussion session on "Communication Through Social Behavior", delivered by Mrs. Varshaben Thakkar from *Waymade College of Education*, Vallabh Vidyanagar, on February 10, 2006. The event was organized by the *GCET Alumni Association (GAA)*.

Prof. C K Modi has started a "MATLAB Study Group" to help students who are interested in learning more about the software. The group meets every Tuesday in the EC & EE Department's AV room.

Prof. B V Thakkar organized a workshop on "PCB Designing" for the students of third level EC on February 11, 2006.

Prof. J C Panchal organized a workshop on "PCB Making" for the students of second level EC and CP on February 16-17, 2006.

Department of Information Technology and Computer Engineering:

Mr. Vikas Patel, Ms. Megha Patel, Mr. Vijay Viradiya and Mr. Anil Metaliya, faculties of IT & CP Department, organized a free workshop on *Microsoft Office* for the non-teaching staff of the college.

Dr. Ketan Kotecha has been appointed a member of *Internal Quality Assurance Cell (IQAC)* of *SPU*.

Mr. Nikhil Joshi, lecturer in CP & IT Department, attended a workshop on communication at CDC on January 27, 2006.

Dr. Ketan Kotecha has been appointed a co-opt member of board of studies of Computer Engg. and IT at *Saurashtra University*, Rajkot, for three years.

Dr. Ketan Kotecha has been appointed a convener of the Admissions Committee for Unaided Institutions of Gujarat state.

GCET is organizing a one-day workshop on "Research Methodology in Engineering Education", on April 22, 2006. Eminent speakers from R&D of industries and academia will be participating in the workshop. Contact Prof. Khadeeja Priyan or Prof. Kaushik Nath for registration and other details.

Department of Mechanical Engineering and Mechatronics:

Mr. Nitin Mistry, Managing Director of *CNC Technology Inc.*, Baroda, delivered a lecture on "Mechatronics—An Overview" for MC students on January 10, 2006.

Students of third and fourth level MC were taken on a visit to *PWS Engineers Pvt. Ltd.*, Vallabh Vidyanagar, on February 11, 2006.

Mr. M S Vegad organized a one-day workshop on "Computational Fluid Dynamics" on February 27, 2006, which 25 students from various colleges attended.

Siddharth Patel and Kishor Hirapara, students of second level ME secured first position in "Contraption" at "Mindbend 2006", organized by *SVNIT*, Surat.

Department of Chemical Engineering:

Students of first and second level CH were taken on a plant visit to *Vadodara District Co-operative Sugarcane Growers' Union's* sugar factory at Gandhara.

Prof. Kaushik Nath published two more papers in peer-reviewed international journals: one in *Canadian Journal of Microbiology* and the other in *Biotechnology Letters (Kluwer Academic Publishers, The Netherlands)*.

The department is negotiating with *D K Scientific Instruments*, Ahmedabad, to undertake joint projects on design/fabrication of instruments and imparting maintenance/repair training to lab assistants.

Mr. Vinay Amte, lecturer in CH Department, attended a short-term course on "Colloids and Interfaces", organized by *IIT*, Mumbai, through March 6-10, 2006.

Students of third and fourth level CH were taken on a visit to *Bharuch Enviro Infrastructure Ltd.*, Ankleshwar, on March 18, 2006. They have developed the first land-fill facility in Gujarat.

Department of Civil Engineering and Mathematics:

Mr. V R Shah and Mrs. K S Parikh, both lecturers, attended a three-day national seminar on "Partial Differential Equations and Scientific Computing", organized by *Gujarat University* and *MS University* on January 23-25, 2006.

Industrial Consultancy Cell—GCET

◆ Prof. B A Doshi (In-charge, ICC—GCET)

Industrial Consultancy Cell—GCET (ICC) has carried on its good work into the new year. The cell has followed up last year's major projects, with two programs in the first two months of 2006, thus promising a more successful rest of the year (see box).

Details of some of the major projects in the pipeline:

ICC is developing embedded networking for valves, for *Rotex Automation Ltd.*, Baroda. Negotiations with the company

have yielded positive results, and a deal is expected to be struck soon.

An application is in the works, to the con-

organization is expected from their side by the end of March.

The cell is working on the development of

Programs Undertaken:

Workshop on LINUX: Installation and Administration; LINUX Command; Web Server and FTP Server Configuration Set-up; Samba Server, VNS Server, NFS Configuration Set-up; Utilities (eg. OpenOffice) etc.

An Introductory Course on MATLAB: Applications of MATLAB in Different Fields Related to Mechanical Engineering and Mechatronics.

sultant program of *Microchip Corporation*, USA. The preparation for the proposal has already been done, and reor-

wireless controller for cranes, and compact gearboxes, for *Anupam Industries Ltd.*

NSDC Cultural Events: GCET Does It AGAIN!

Competitions between GCET, BVM, ADIT, ISTAR and BBIT were organized during "National Science Day Celebration" (NSDC) 2006 at the ADIT campus.

The competitions, that took place on February 26-27, 2006, largely included singing and dancing events.

Event	Prize
Singing—Solo	Second, Third
Singing—Group	First
Dance—Group	First

prizes (see box), and proving, without doubt, that when it comes to cultural events, the college has got every other organization's number.

Apart from that, the GCET band gave a mind-blowing 12-minute performance during the cultural night on February 26, 2006.

GCET proved its mettle again, winning four *Congratulations to all the winners!*

Blood Donation Camp @ GCET

A blood donation camp was organized at GCET on February 24, 2006, with the help of A. D. Gorwala Blood Bank, Shri Krishna Hospital, Karamsad.

A fair number of students, faculties and non-teaching staff donated blood on the occasion. A total of 125 bottles of blood was collected during the camp.



ISTE Chapter—GCET Lectures

♦ **Mr. Vipul R Shah**
(Secretary, ISTE Chapter—GCET)

The following lectures were organized at GCET in February-March 2006, under the ISTE Chapter—GCET:

Name of Lecture	Speaker	Date
Strategic Role of Science & Technology in India's Economic Development in Context of Globalization	Dr. D K Mishra	February 1
An Introduction to Wavelet Transform	Prof. Maulika Patel	February 10
IRIS Reorganization	Mr. Mitesh Panchal	February 17
Vedic Mathematics	Ms. Pankti Modi	March 3
GCET Network	Mr. Nikhil Gondaliya and Mr. Amit Amit	March 6 and 7
XML	Mr. Chirag Mehta	March 8
Image Stegnaography	Mr. Niteen Leuva	March 9
Adhoc Network	Mr. Vijay Viradiya	March 10

Placement News

♦ **Mr. Y N Rai**
(TPO, GCET)

The following leading companies visited GCET during January-February 2006, selecting students from the 2002 batch:

- * Gujarat Glass Pvt. Ltd.
- * Gujarat State Petroleum Corp. (Gandhinagar)
- * Neilsoft Ltd. (Pune)
- * Syntel Pvt. Ltd. (off-campus)
- * IDMC (Vitthal Udyogagar)
- * Dolcera Pvt. Ltd.
- * Adani Group (Mundra Port and Export Division)
- * ZEUS Software (off-campus)
- * Wipro—BPO
- * ... and many more!

Campus Recruitment of Final Year Students

Branches	No.
Computer Engineering	14
Chemical Engineering	06
Information Technology	04
Mechanical Engineering	19
Electronics & Communication	13
Mechatronics	09
Electrical Engineering	08
Total	73

Congratulations to all those who got placed!

GCET Voice—Issue 6

will come out on the college's

Annual Day

Make sure that you pick up your copy from the college library!

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Jay P Shah
Prerit Souda

CONTRIBUTE:

If you would like to contribute a piece (an article, a poem or even a work of fiction) for the next issue of **GCET Voice**, contact Prof. Kaushik Nath of the Department of Chemical Engineering.

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Science: Around the Globe

◆ **Prerit Souda** (Third Level, EC)

Mathematics: Sudoku, the popular puzzle, is helping researchers dig into deep mathematics. The puzzle is proving to be an ideal tool for investigating the infamously difficult class called NP complete, which includes problems such as scheduling, network routing and gene sequencing. (*IEEE Spectrum, INT*)

Medicine: Can DNA stop time? Tapping the power of longevity, genes could alter the arc of typical human lifetime. Hence, a person might be able to retain the youthfulness he or she feels at 50 till the age of 80 or 90. Sirtuins are a family of genes that may be master regulators of the survival mechanism employed in organisms to withstand adversity. Understanding how they produce their

health and longevity enhancing effects can lead to a longer, disease free human life span. (*Scientific American India*)

Computers: Microsoft's Internet Explorer (IE) 7 is likely to have better security. Microsoft found that malicious codes generally flow in through less restricted websites and hence they have tried to develop a new set of security settings to prevent them through this route. (*CHIP*)

Entomology: Researchers at the *University of Cambridge, UK*, have trained honey bees to recognize human faces, by getting the insects to associate black-and-white shots with a sucrose drink or with a quinine solution. Results demonstrated that face recognition, which might seem to be a sophisticated neural ability, does not need much brain power. (*Journal of Experimental Biology*)

Editorial

This is the second issue of GCET Talk. It gives us much pleasure and satisfaction to report in this context that the first issue (Jan-Mar '06) evoked fairly good response from all concerned, particularly from some of our alumni and well-wishers.

This year would be a memorable year for GCET as it is completing its one decade of existence. Ten years is not a long period for the life of an institute, however GCET has already made its presence prominent on the educational map of Gujarat. Our stride towards the path of excellence, we hope, will continue in the days to come. Constructive criticism is always welcome from the readers of the newsletter.

Kaushik Nath

Letters to the Editor

This is really a good idea to have the GCET newsletter. The Jan-Mar issue of the newsletter was attractive. This newsletter enables alumni like myself, who are miles away, to be in touch with GCET. I always cherish my days in the college. I'd definitely like to contribute to the newsletter as well. I'll write and send something in the very near future, regarding the scope of engineering here in the USA.

Parvez Musani (Alumnus 2000)
Sr. Business Analyst, Manhattan Associates, Boston, USA

I went through GCET Talk today, and indeed it was a great pleasure. Congratulations to the entire team!

Dr. N D Jotwani (Former Principal)
Professor DA-IICT, Gandhinagar

GCET Talk is simply superb. Thank you, and congratulations for this. The Industrial Consultancy Cell (*Jan-Mar '06*) is the best initiative one can expect from a premiere institute. This will help students, faculties and the institute a lot. It will make them face real problems of the industry and hence develop a bifocal vision of theory and practical to learn every aspect of engineering and technology. I heartily congratulate the team behind it.

Bhavinkumar Hadvani (Alumnus 2001)
Manager, STF, Reliance Industries Ltd., Motikhavdi, Gujarat

You can send in your letters by e-mail to kaushiknath2003@yahoo.co.in, and we'll try to get as many printed, in the forthcoming issues, as possible.