

SPARK

11th Edition , May 2014

From the Editor's Desk....

Hello,

Spark is the newsletter of the Chemical Engineering Department which aims to bring forward all the buzz and news from the department in the past few months. The department is extremely proud of all achievements it has attained in the past few months and takes immense pride in bringing it out to you. So we probe and dwell into past memories and a little spark to your lives....



With Regards,
Editorial Team

Know About Chemical Engineering!

Chemical **E**ngineering is not chemistry – it is the bridge between chemistry and the real world outside the laboratory. Chemists study chemical reactions in a test tube. Chemical engineers find a way to scale up those reactions so that products can be manufactured by the truckload. Chemical engineers also find ways to make chemical reactions in a test tube work in a real world environment. To do this, they apply engineering principles to conceive, design, develop, operate, or use processes and products based on their

From Test Tube to Truckload



understanding of chemical and physical phenomena.

What Do Chemical Engineers Do?

Some chemical engineers make designs and invent new processes. Some construct instruments and facilities. Some plan and operate facilities. Chemical engineers have helped to develop atomic science, polymers, paper, dyes, drugs, plastics, fertilizers, foods, petrochemicals... pretty much everything. They devise ways to make products from raw materials and ways to convert one material into another useful form. Chemical engineers can make processes more cost effective or more environmentally friendly or more efficient. **As you can see, a chemical engineer can find a niche in any scientific or engineering field.**

- University of Alberta

What Does a Chemical Engineers Study?

The core chemical engineering subject areas include: material and energy balances, thermodynamics, fluid mechanics, heat transfer, separation processes, chemical reactor analysis, computer process control and other advanced subjects. These areas require a solid foundation of mathematics, physics, and chemistry. In

these courses, a person will learn about the principles required for the design and analysis of processes.

What are they: As Nobel Laureate



Linus Pauling,
Chemical Engineer
(1954)



Giulio Natta,
Chemical Engineer
(1963)



Lars Onsager,
Chemical Engineer
(1968)



Charles J Pedersen,
Chemical Engineer,
(1987)



Martin L Perl,
Chemical Engineer
(1995)



Mario J Molina,
Chemical Engineer
(1995)



Hideki Shirakawa,
Chemical Engineer
(2000)

FACULTY ACTIVITIES

14th February

Dr. P. Senthil Kumar & Dr. K. Sathish Kumar organized the one day short term training programme on “Instrumental Techniques in Water Analysis (ITWA)”.



Mrs. R. Pushpalatha, Associate Professor along with IInd year B. Tech. Chemical Engineering student visited salt processing unit of GHCL Limited, Thirupporur as a part of Industrial Visit.

15th February

Mrs. R. Pushpalatha attended special lecture series organized on “Recent Trend in Nuclear Magnetic Resonance Spectroscopy and Imaging”.

27th February



First International Conference on “Recent Advancements in Chemical, Environmental and Energy Engineering (RACEEE 2014)” was inaugurated by **Prof. Badhrulhisam Bin Abdul Aziz** and his colleague **Dr. Ramesh**, Senior Faculty, University of Malaysia. More than 300 delegates from all over the country participated in the conference.



(Convener - **Dr. K. Ramakrishnan**, Professor & Head of Department Coordinators - **Dr. P. Senthil Kumar**, **Dr. K.P. Gopinath**, and **Dr. R. Saravanathamizhan**).



28th February



Prof. Sai PST, Head of Chemical Engineering, department, IIT Madras, **Dr. Anandaraj**, **Dr. Ramesh**, Senior faculty, University of Malaysia, and **Dr. Sivasamy Scientist**. CLRI gave the key-note address. **Sri Panikkar**, President, Chemical Industry Association gave the valedictory address in the evening.



Dr. N.S. Bhadrinarayana, Dean (Autonomous) M G R. Engineering College, Hosur visited the department participated in the above programme and evaluated poster presentation session.

22nd MARCH

SSN Research Day
celebration

Dr. K. Ramakrishnan, Professor & Head of the Department, Chemical Engineering, **Dr. P. Senthil Kumar** and **Dr. K. Sathish Kumar** have received the third prize in the Research Day Function for conducting the research level conferences.

Dr. P. Senthil Kumar, Associate Professor received the first prize in the Research Day Function for guiding the B. Tech. students to publish their project works in the International Journals.

Dr. P. Senthil Kumar, Associate Professor, Ms. Sai Deepthi A S L and Ms. Bharani R. of final year students have received the cash award in the Research Day Function for receiving best paper award in the National Conferences.



21st MARCH

Dr. K. Sathish Kumar, Associate Professor and **Dr. P. Senthil Kumar**, Associate Professor have organized the One Day National Seminar on "Industry Institute Interaction".

Shri Lakshmi Narasimhan, CMD, CPR Kemproducts (P) Ltd, Chennai, gave the inaugural address.

The key note address were given by **Dr. V.E. Annamalai**, Professor & Head, Department of Mechanical Engineering and **Shri Gnanasundaram**, DGM operations-unit head, Coromandel Int. Ltd, Chennai



19th MARCH

Dr. A. Seenivasan, presented a lecture on the topic "Biochemical synthesis of Chemicals and Energy" in a national level technical symposium on "**Emerging Trends in Biotechnology for Sustainable Development**" at P.S.R. Engineering College, Sivakasi.



19th MARCH

Dr. P. Senthil Kumar, Ms. R.V. Abhinaya, Ms. Arthi, Ms. Gayathri Lashmi and Ms. **M. Priyadharshini** (passed out B. Tech Chemical Engineering Students) published a paper in the title of "**Adsorption of methylene blue dye onto surface modified cashew nut shell**", Environmental Engineering and Management Journal, Vol. 13 (3), 2014, pp: 1 - 13 (IF: 1.435).

24th MARCH

Dr. R. Saravanathamizhan and Dr. A. Seenivasan along with student of second year visited the company **Chettinad Morimura** Semiconductor Material Pvt Ltd., Chennai as an industrial visit .



27th MARCH



Dr. P. Senthil Kumar and **Dr. K. Sathish Kumar**, Associate Professors submitted a proposal for a National Seminar on “**Global Warming – Causes, Impacts and Remediation**” to Ministry of Earth Sciences (MoES), New Delhi.



26th MARCH

SPORTS DAY

Dr. P. Senthil Kumar and his cricket team have received the cash award in the 15th SSN Sports Day Function for winning the staff cricket matches against the non-teaching staff cricket team.

Dr. P. Senthil Kumar has received the cash award in the 15th SSN Sports Day Function, for winning the staff badminton matches which was held between the SSN teaching

Also later that day, the Chemical Engineering Department's March past team led by Ms. Nivedha and Mr. Prabhakaran have received the fourth prize in the 15th SSN Sports Day Function.

COLLEGE DAY!

The awardees at the College Day function held on 28th March 2014 are:

SEMESTER	RANK	NAME
I	1.	Jyotsna
	2.	J.Sivasubramani and Raksha
II	1.	Jyotsna
	2.	Neeha
III	1.	Prathima Raje
	2.	M.Poornima and G. Vandana
IV	1.	Prathima Raje
	2.	Lalith Kumar, Bharath Kumar and Nandhini.V
V	1.	Anitha, Vinodhini
	2.	Deepikaa, Niveditha
VI	1.	Sai Deepthi
	2.	Ineya
VII	1.	Ineya
	2.	Sai Deepthi

Ms. Anitha Venkat received the best outgoing student award for the department of Chemical Engineering, SSN CE.



RACEEE 2014

First-ever International Conference of the Chemical Dept.

The International conference on Recent Advancements in Chemical, Environmental & Energy Engineering (RACEE-2014) began with the release of proceedings by our honorable dignitaries Prof Dr Badhrulhisham Bin Abdul Aziz and Dr. K. Ramesh, Professors, Process System Engineering, Faculty of Chemical and Natural Resource Engineering, University Malaysia Pahang.



This was followed by, the Presidential Address by Mrs. Kala Vijayakumar, President, SSN Institutions, followed by the brief introduction of SSNCE all about to the guests was given by our beloved principal Dr. S. Salivahanan, and the welcome address given by our Professor & Head, Dr. K. Ramakrishnan. The various events were started with the introduction of the theme of RACEE 2014 by Dr. K. P. Gopinath, Department of Chemical Engineering and with the introduction of chief guest by Dr. R. Saravanathamizhan, Department of Chemical Engineering



An inspiring talk by our Chief Guest Prof. Badhrulhisham on "Processing of rare earth materials" was received well by the audience. The vote of thanks was given by Dr. P. Senthil Kumar, Associate Professor, Department of Chemical Engineering. The inaugural session ended with the key note address given by Dr. Anantharaj, Dr. K. Ramesh, University of Malaysia Pahang.

This was followed by the Paper Presentation and Poster Presentation sessions where students and faculties from various institutions were given an opportunity to present their research works in the gathering and win many prizes.

Cultural evening!!

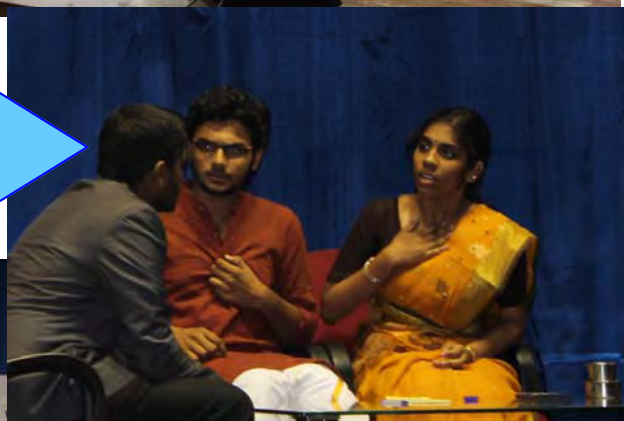


Ravishing dances!!

Yours musically...



Drama performance by
2nd years!!!



Unforgettable mimicry performance by Kaliraj of 2nd year!!!

On a happy note, the International Conference came to an end with the distribution of Best Paper Award by Mr. Panicker, President, Chemical Industries Association during Valedictory Session. The grand success of the conference was appreciated by the chief guest and requesting for more such events to be conducted in the near future.



INSTINCTS 2k14

March 13- 15, 2014

The theme of this year's INSTINCTS was cartoons and caricatures. Needless to say, the entire college was adorned with miniature cartoon characters and colors, It was like Disney Land has invaded the city.

Starting the first day where Actor AJMAL KHAN came to host the inaugural function was the perfect way to kick off this 3day cultural fest. With the promo videos, dance performances etc. the entire auditorium was jam packed with students from various colleges who stayed glued to the seats the whole time!!! The day prolonged with informal events, light music, ending with the pro show where Singers **Ranjith**, **Shakthishree** and **Aalaap Raju** took everyone to a whole new world with their mesmerizing voice and tender music.



The next day opened with short film contest called Reels of fire wherein each student showcased their talent with a promise to be the future directors!!! The 2nd day was as equivalent to the 1st in terms of fun and frolic with dance shows, plays and bike stunts that made our day. Like icing on the cake, the vogue show and DJ night left everyone exhausted and happy bringing the day to an end. On the final day, highlight features were the variety show and Choreo night. Thus the extravaganza cultural fest was a grand success filled with loads of fun and laughter with credits to the **convenor**, **Rakesh** and **Barani**, who was part of the decoration team, **Nivedha**, participant in Vogue show and all others, from Chemical Dept who participated and put all their efforts to make it happen!!!

SYMPOs, CONFERENCES & more...

*Priyadarshini B and Gayathri R of III year won the **Best Innovative Design Award** and were finalists of Chemo-philia Quiz at Azeotropy, IIT Bombay on 8th and 9th March, 2014.*



*T. V. Harish Kumar and J. Shiva Subramanian won **FIRST** place in Paper Presentation in PetroVision, AC Tech., Anna University, Chennai*

*Priyadarshini B and Gayathri R of III year won the **FIRST** place in Tech Quiz at Chemclave, IIT Madras on 22nd and 23rd March, 2014.*

Yashwant R and Prabhakaran C presented a paper in the National Conference on Recent Trends in Chemical Engineering held at Anna University on 25-26, Feb, 2014.

Sai Madhusudanan and Pradeep Panneerselvam presented a paper entitled "Hydrotopic extraction of xanthones from mangosteen pericarp" in International Conference on Recent Advancement in Mechanical Engineering and Interdisciplinary Developments (ICRAMID) held on 7th & 8th Mar 2014 at Ponjesly College of Engineering, Nagercoil. This paper was later published in an international journal "Advanced Materials Research".

*Neeha, Malavikha and Jyotsna of II year won **THIRD** place in ChemETrix at Chemclave, 2014 organized by IITM.*

*Priyadarshini B and Gayathri R of III year won the **FIRST** place in Chemistry Quiz and Material Science Quiz at Chemfluence, AC Tech on 27th and 28th Febraury, 2014.*

SYMPOs, CONFERENCES & more...

In RACEEE 2k14!!

Suchithra B and Nandhini V presented their POSTER.

Sankaranarayanan and Vignesh PR presented their PAPER.

Arutprakasam and Abhishek Rao also presented their PAPER.

*Pradeep Panneerselvam and Sai Madhusudanan won **SECOND** Place in Poster presentation, **FIRST** place in General Quiz and Technical quiz and Sai was the winner of Mr Genius and Pradeep, the Runner up at **TECHNOVATION-2014 (CIT)** held on 24th n 25th Jan. 2014*

B.M. Prathima Raje of III year attended a workshop on Fluent at Chemfluence, AC. Tech, chennai on February 28th 2014.

R.Shreya, M.Poornima , G.Vaishali , Devi Bhagya and M.Karthik of III year have attended industrial safety and risk management workshop conducted by the Safety Engineers Association (SEA) at Chemfluence, AcTech college on February 25th 2014.

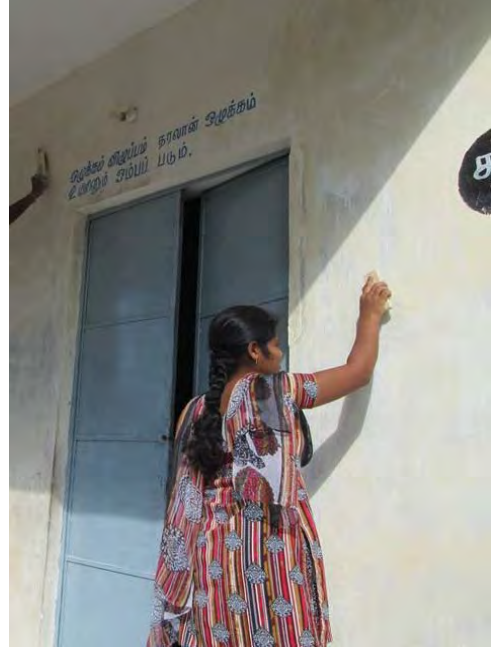
Pradeep's achievement

Cheminnovate (Energy Con- traption)	Second	IIT MADRAS	23 rd Mar 2014
Contraption	First	AC TECH	25 th - 1 st Mar 2014
Chemborghini (Chem-E-Car)	Second		
Energy Encoun- ter	Second		
Glider	Second	MIT	8 th - 9 th Mar 2014
Technical Quiz	Second	AC TECH	5 th - 6 th Feb 2014
Expert's Opin- ion	Second	MIT	29 th Mar 2014
Jaw Dropper	First		
Les Quiz- erables (Chem Quiz)	First	SVCE	24 th Aug 2013



Beyond the books...

R. Priya and Chevanthi volunteered at a week-long NSS camp at Eecahngaadu village from 26-01-2014 to 01-02-2014. Society work like white washing the school building, tank cleaning, and teaching was done. Priya also organized events for Thamiltulir magazine inauguration which was held on 06-03-2014.



சாரல் தமிழ் மன்றம்

சாரல் தமிழ் மன்றம் சார்பாக நடந்தேறிய நாடகத்தில் நமது வேதிப் பொறியியல் துறையிலிருந்து பங்குகொண்ட மாணவர்கள் – தா.நந்திதா , தி.மாதவன் மற்றும் மதிவதனி.

இடம் : கல்லூரியின் பிரதானக் கேளரங்கம்.

நாள் : 10 மார்ச், 2014.

IT IS A TEAM WORK !!



Editorial Team

Priyadarshini B

Pradeep P

Nandhini V

Suchithra B

Poornima M

Shreya R

Karthik J

Dr. A. Seenivasan

Dr. K. Ramakrishnan