#### CHEMICAL DEPARTMENT - ANNA UNIVERSITY RANK HOLDERS - 2015



Mr. YOHANNAN BIBIN SABILON S/O, Mr. SABILON YOHANNAN Mrs. BEAULA YOHANNAN Rank: 5 CGPA: 9.17 Cash prize Rs. 25,000



Mr.YOHANNAN SUBIN SABILON S/O, Mr. SABILON YOHANNAN Mrs. BEAULA YOHANNAN Rank: 6 CGPA: 9.15 Cash prize Rs. 25,000



Ms. HEMAMALINI. J D/O, Mr. C. JAGADEESH Mrs. J. PADMAVATHI Rank: 9 CGPA: 9.10 Cash prize Rs. 25,000



Mr. VENKATESAN. R S/O, Mr. M. RANGANATHAN Mrs. R. SELVI Rank: 11 CGPA: 9.08 Cash prize Rs. 25,000



Ms. MANIBARATHI. V D/O , Mr. T. VAITHIYANATHAN Ms. V. LALITHA Rank: 12 CGPA: 9.02 Cash prize Rs. 25,000



Ms. NIVESHA. S D/O, Mr. R. SATHIYA Mrs. S. INBALATHA Rank: 15 CGPA: 8.94 Cash prize Rs. 25,000



Ms. BHARGAVI. V D/O, Mr. VASUDEVA SARMA Mrs. V. LATHA Rank: 16 CGPA: 8.93 Cash prize Rs. 25,000



Ms. AARTHI. A D/O, J. ASHOKAN Mrs. A. SAROJA Rank: 16 CGPA: 8.93 Cash prize Rs. 25,000



Ms. POORNIMA. K D/O, P. KARTHIKEYAN Mrs. K. SUBHASHREE Rank: 19 CGPA: 8.86 Cash prize Rs. 25,000



Ms. LIBINA THIVYA BELL. G D/O, Mr. T. GNANA RAJ Mrs. G. AMBIKA Rank: 20 CGPA: 8.85 Cash prize Rs. 25,000

#### VISSION OF THE DEPARTMENT

• To provide knowledge centered education that continually responds to changing realities in the field of Chemical Engineering.

#### MISSION OF THE DEPARTMENT

- To establish academic integrity so as to inculcate the professional skills to compete in global environments.
- To enrich the Chemical Engineering knowledge through research & innovation.
- To hone the skills of students to succeed in Chemical Industry.

### 18th GRADUATION DAY REPORT

The 18<sup>th</sup> Graduation Day was held on the 28<sup>th</sup> of April, 2016. Dr. Jeppiaar Founder Chairman of St. Joseph's College of Engineering presided over the function. Mr.Srinivasan Bhaskar, Vice-President-Technology, Cognizant Technology Solutions delivered the Graduation address and distributed degree certificates.

1315 students received their degree. The College has bagged the Highest number of University Ranks for the 10<sup>th</sup> consecutive year in Anna University Examinations held in the May, 2015. This batch of students secured 106 Ranks.

All the Rank holders were honored by giving a Cash Prizes worth Rs. 27.00 lakhs which includes Rs. 50,000/- each for the Gold Medal and Silver Medal and Rs.25,000/- each for all other Rank Holders & Shields. The total prize money amounts to Rs.29.42 lakhs.

#### PLACEMENT DETAILS

Out of the **1315** students who received their degree, **910** of them are placed through campus interviews, **227** of them through off campus and **174** of them have become entrepreneurs. The students are placed in many leading organizations like Cognizant Technologies, Wipro, Infosys, Mu-Sigma, Comm Vault, Global Analytics, Vembu Technologies, Tech Mahindra Soliton Technologies, HDFC, ICICI, Yes Bank, ITC Ltd, L&T, Zoho, Naukri.com, HCL, Hewitt, Renault Nissan, Virtusa, RBS, Accenture, Mindtree, Kotak Mahindra Bank, Pepsico etc., with a salary ranging from 2.4 lakhs to Rs 6.5 lakhs per annum.

#### **HIGHER STUDIES**

192 Students are pursuing their higher studies at various Universities in India as well as Abroad. Students have got admission into top ranking Universities like University of Texas, Stanford University, Carnegie Mellon University, University of Massachusetts, Arizona State University, North Carolina State University, National University of Singapore, Illinois Institute of

Technology, NJIT, University of West Virginia, Leeds University (UK), North Carolina State University, IITs, IIMs, NIITs etc, through our Advisory Bureau for Higher Studies (ABHS).

#### **CO - CURRICULAR ACTIVITIES**

#### The Indian National Academy of Engineering (INAE) Awards:

The Indian National Academy of Engineering (INAE), New Delhi has constituted the best project award for the final years students. After preliminary scrutiny of the projects submitted nationwide, 16 projects were selected for the final presentation. Out of these 16 projects St Joseph's is proud to win 3 projects.

The selected projects are

- "Design and Development of 3D Printer" done by G. Vignesh ,S. Akash of the Mechanical Engineering Department under the guidance of Mr. L. Balamurugan. This Project also received NIT Kozhikode National Award for the Best B.Tech. Project by ISTE.
- "Effect of Dynamically Controlled Reflectors on the performance of Solar Panels" done by Soloman Jeshur Raja, A.V. Vamsi Krishna of the Electrical and Electronics Engineering Department under the guidance of Mrs. V. Uma.
- "Dry Agram [Beta] A Unique DNA Based Ink and Hologram for Authentication Security" done by E. Jothivanam, Y.V. Vamsi Bharadwaj of the Bio Technology Department under the guidance of Dr Justin Pakiya Jacob
- Ms. Reshmi.N and Ms. Ishwarya.B, of the Bio Technology Department carried out their final year project in "Tuberculosis Research" at National Institute for Research in Tuberculosis, Chennai. This Project is jointly funded by National Institute of Immunology (ICMR, India), National Institute of Health, USA
- Mr. Naveen Kumar.R and Mr. Heronimus Melvin.X, of the Bio Technology Department carried out their final year project in the "Bioethanol from Agriculture waste", which has been published in International Journal named "Renewable Energy" with an Impact factor of 3.5
- Mr. Joseph Jose. K of the Electronics and Communication Department attended a Student Leadership Conference organized by Optical Society of America, held at Tucson, Arizona, USA.

#### **EXTRA-CURRICULAR ACTIVITIES**

Our students have excelled not only in the field of academics, but also in the field of sports. We have V Sneka, S.Srinidhi, M.Vigneshwar, Tharani, Kerchiyal, S.Anandharaj, Mohammed Aship Asharaf, S.Sowjanya, Tulika Godamkar & J.G.Nivethitha who represented our college in various events at the National and International Levels.

The Management, Principal and Staff extended a hearty congratulation to all the above students and all the budding graduates for their academic and extracurricular achievements.

No of students Appeared : 1471

No. of students Passed : 1315

Pass Percentage : 89.4

First Class with Distinction : 143

Passed with First Class : 1172

## Ranks bagged by the college right from its inception (From May 1998 University Examinations)

Total No. of Ranks : 1002
Gold Medals : 44
Silver Medals : 38
Other Ranks : 920

Anna University Ranks for the 10<sup>th</sup> consecutive year

Total No. of University Ranks : 106

University Rank Awards: Total
Cash Award (106\*25,000)
Shields & Medals

Rs. 29.42 lakhs
Rs. 26.50 lakhs
Rs 2.92 lakhs

**Placement** 

**Total No. of Students Placed through** 

Campus Recruitment : 910 Off Campus : 287 Self Employed : 174

**Higher Studies** 

Students pursuing Higher studies through Advisory Bureau for Higher Studies (ABHS)

> Abroad : 133 India : 59

**Sports** 

International Players : 3 National Players : 6

Represented Anna University in

All India University Tournaments : 8

The Trust has constituted awards to the topper in each branch. The awardees of the Trust awards are:

S.No	Name of the Award	Branch	Year	Name of the Student
1	Dr. M.G.R Award	CSE	2011-2015	Ms. Pavithra Sridhar
2	A.P. Baulraj Award	ECE	2011-2015	Mr. Denesh Kumar.S
3	Abraham Lincoln Award	EEE	2011-2015	Mr. Karthick.S
4	Mother Teresa Award	MECHANICAL	2011-2015	Mr. Pravin Kumar.S
5	Dr. A.P.J. Abdul Kalam Award	ICE	2011-2015	Ms. Umayal .C
6	Kalpana Chawla Award	EIE	2011-2015	Ms. Shantha Laxmi .K
7	Martin Luther King Award	IT	2011-2015	Mr. Swaminathan .T.V
8	Deiva Pulavar Thiruvalluvar	CHEMICAL	2011-2015	Mr. Yohannan Bibin
9	M. Visvesvaraya Award	Bio-Tech	2011-2015	Ms. Aishah Salma Shariff
10	Mahakavi Subramaniya Bharathiar	M.B.A	2013-2015	Mr. Kannan.T
11	Pavendar Bharathidasan Award	M.C.A.	2012-2015	Ms. Deepika.R
12	Dr. S. Radhakrishnan Award	M. Sc.	2010-2015	Ms. Dezosa
13	Annai Janaki M.G.R Award	M.E (Applied	2013-2015	Ms. Josephine Vincent
14	Perunthalaivar Kamarajar Award	M.E (Power Electronics)	2013-2015	Ms. Nuthalapati Mani Deepika Prasanthi
15	Arignar Anna Award	M.E (Computer Science)	2013-2015	Ms. Helen Victoria.A
16	Nelson Mandela Award	M.E (C&I)	2013-2015	Ms. S.Arockia Sukanya
17	Sir C. V. Raman Award	M.E ( Power Systems )	2013-2015	Ms. Amritta.P
18	Srinivasa Ramanujan Award	M.E (Software Engineering)	2013-2015	Ms. Sangeetha Nagarajan
19	C.K Prahalad Award	M.E (Manufacturing Engineering)	2013-2015	Mr. Vincent.B
20	Dr. Muthulakshmi Award	M.Tech( Bio.Tech)	2013-2015	Ms. Caroline. D.G

Achievements of our students year after year

	UNIVERSITY RESULTS		PLACEMENT		ABHS		ANNA UNIVERSITY RANKS					
Year of passing	Total No of Students	No of Students Passed	% f Pass	Through Campus Interview	Off Campus Interview	Self Employed Own Business	Abroad	India	Total no of university Ranks	Gold Medals	Silver Medals	Other Ranks
2006	902	817	90.5	469	176	33	98	41	62	3	2	57
2007	984	892	90.6	609	144	29	76	34	45	1	2	42
2008	1014	923	91.2	810	31	23	38	21	45	3	4	38
2009	1227	1134	92.4	681	267	33	97	56	59	6	2	51
2010	1273	1183	92.9	705	298	62	88	30	59	3	3	53
2011	1380	1265	91.7	864	218	60	97	26	84	5	4	75
2012	1365	1229	90.1	901	176	70	92	39	123	2	3	118
2013	1368	1243	90.9	686	161	58	112	51	112	1	1	110
2014	1485	1329	89.7	697	184	71	129	58	107	4	1	102
2015	1471	1315	89.4	910	227	174	133	59	106	-	-	106

#### **DEPARTMENT OF CHEMICAL ENGINEERING**

	Total No of students graduated	72		
UNIVERSITY RESULTS	No of students graduated in First class with distinction	17		
	No of students graduated in First class	67		
	Through Campus Interview	59		
PLACEMENT	Off Campus Interview	05		
	Self Employed Own Business	01		
HIGHER	Abroad	06		
STUDIES	India	03		
	Total no of university Ranks	10		
ANNA UNIVERSITY RANKS	Ranks	1. Mr. YOHANNAN BIBIN S 2. Mr.YOHANNAN SUBIN S 3. Ms. HEMAMALINI. J 4. Mr. VENKATESAN. R 5. Ms. MANIBARATHI. V 6. Ms. NIVESHA. S 7. Ms. BHARGAVI. V 8. Ms. AARTHI. A 9. Ms. POORNIMA. K 10. Ms. LIBINA THIVYA BE	Rank: 5 SABILON Rank: 6 Rank: 9 Rank: 11 Rank: 12 Rank: 15 Rank: 16 Rank: 16 Rank: 19	CGPA: 9.17 CGPA: 9.15 CGPA: 9.10 CGPA: 9.08 CGPA: 9.02 CGPA: 8.94 CGPA: 8.93 CGPA: 8.86 CGPA: 8.85
Recipient of Trust Award		Mr. Yohannan Bibin Sabilon		
		(Deiva Pulavar Thiruvalluv	ar Award)	

#### STAFF ACTIVITIES

#### \* Dr. R. BASKARAN

- A paper entitled "Application of regression modelling techniques in desalination by membrane distillation" was published in "International Journal of Engineering Science and Technology", AUGUST 2015.
- A paper entitled "solar photo voltaic Powered membrane distillation as sustainable clean energy technology in desalination" was published in "Current science", OCTOBER 2015.
- A paper entitled "statistical study using multiple regression models using reverse osmosis process" was published in International Journal of chem Tech Research, DECEMBER 2015.
- A paper entitled "Surface tension of binary mixtures" was published in Research Journal of pharmaceutical, biological and chemical sciences, JANUARY 2016.
- A paper entitled "Adsorption studies of hexavalent chromium using syzygyum cumini bark" was published in Journal of chemical and pharmaceutical sciences, 2016
- ➤ A paper entitled "Adsorption of Chromium from Aqueous Solution Using Tamarindus indica Leaves" was published in JOURNAL OF ENVIRONMENTAL BIOLOGY, 2016
- A paper entitled "Thermo physical properties of organic compounds and its impact on environment", was published in Journal of Environmental biology, 2016
- A paper entitled "Experimental Measurement of Transport properties and Thermodynamic Consistency Test of Binary Liquid Mixtures", was published in Journal of chemical and pharmaceutical sciences, 2016

#### \* Dr. N. VENKATESH

- ➤ Attended a Faculty Development Programme organized by IIT Roorkee on "water and waste water treatment recent advances" from 21<sup>st</sup> to 25<sup>th</sup> June 2015.
- ➤ A paper entitled "Nano Scale compositional analysis of medicinal plant using fiber optical spectroscopy techniques", Journal of biomedical and health informatics 2016, IEEE.

#### \* Dr. S. NACHIAPPAN

A paper entitled "Treatment of pharmaceutical effluent using novel heterogeneous fly ash activated persulfate system." was published in Journal of Environmental Chemical Engineering 2015 (Elseveir)

#### \* Mr. S. VINOD KUMAR

➤ A paper entitled "Dye sensitized solar cells sensitized with natural pigments extracted from mixed fruits" was published in Research Journal of Pharmaceutical, Biological and Chemical Sciences 2016.

#### \* Ms. B. S. RATHI

A paper entitled "Elimination of dead zones in a lid driven cavity by rounding the edges and studying their mixing characteristics" was presented in 68th Annual Session of the Indian Institute of Chemical Engineers held at the Indian Institute of Technology (IIT) Guwahati, on December 27-30, Chemcon 2015

- A paper entitled "Mixing characteristics of micro fluids in lid driven cavity using CFD simulation" was presented in 11th Annual Session Schemcon 2015 held at MIT Academy of Engineering, on September 12, 2015.
- A paper entitled "Production of neem oil methyl ester (nome) / neem oil biodiesel from azhadirachta indica by a two-step trans-esterification process using two different catalysts" was presented in 11th Annual Session Schemcon 2015 held at MIT Academy of Engineering, on September 12, 2015.

#### **❖** MS. N. DEEPA

A paper entitled "Development and performance analysis of a novel agitated vessel" was published in Korean J. Chem. Engineering, November 2015.

#### ❖ MS. APARNA A M

Attended two days International workshop on "Indo-Sweden clean energy" materials for energy harvesting and storage 21st - 22nd July 2015

# ONE DAY NATIONAL WORKSHOP ON " **SAFETY AND DESIGN ASPECTS**IN PROCESS INDUSTRIES SDPI 2015"

Engineering students need much exposure to industry related activities. To become an industry ready professional, every student must focus their attention on research work and other related areas. Workshops are a part of their continuous learning. Professors and renowned professionals from diverse fields can share their ideas, latest trends and technologies. Such lectures will enlighten the young minds in taking right career path.



On **August 21<sup>st</sup> 2015**, one day National Workshop on "**SAFETY AND DESIGN ASPECTS IN PROCESS INDUSTRIES** SDPI 2015" was organized and conducted by department of chemical engineering, St. Joseph's College of Engineering. Participants from different institutions were attended the workshop.

The following chief guest delivered the plenary lecture safety and design aspects in process industries.

- 1. Mr. D. SUNDARASEKARAN, General Manager plant (Retd.) MFL have delivered a plenary lecture on "PROCESS SAFETY"
- 2. Mr. K.M.KRISHNAN, Senior principal engineer process have delivered a plenary lecture on "SAFE INSTALLATION OF PROCESS PLANTS"

### LIST OF STUDENTS (2011 – 2015 BATCH) RECEIVED THE OFFER LETTER FOR HIGHER STUDIES

#### ADVISORY BUREAU FOR HIGHER STUDIES

The advisory Bureau for higher studies (ABHS) is functioning as a separate wing with the prime notion to serve the student community for getting higher studies admission in India and abroad. The main objective of ABHS is to enable the students to prepare for the tests like GRE, TOEFL, GMAT, IELTS, GATE, CAT etc. ABHS has the latest information, books and CD's regarding GRE, TOEFL, GMAT, IELTS, GATE and CAT.

The activities of ABHS are

- ➤ ABHS organizes guest lectures to equip the students for pursing higher studies in India and abroad.
- ➤ Various Workshops and seminars are handled by resource persons from IDP, USIEF, Cambridge University, British Council and other higher studies agencies.
- Apart from this, the students are exposed to the first hand information from Associate Director, Deans, Department heads and faculty members from many educational institutes like SUNY, University of California, University of Pennsylvania Graduate school of Education, Arkansan State University, Swinburne University, University of Sussex, Illinois Institute of Technology, Rochester Institute of Technology and Southern Illinois University.
- ➤ Many Academicians have visited our campus and also briefed the students about the application process, scholarships and requirements in their respective universities.
- ➤ The Business English Certificate (BEC), a certification from Cambridge University is a qualification in English for work. It is given under three levels Preliminary, Vantage and Higher.
- ➤ All the second year students are given BEC training for a week and then they take the BEC examination, conducted by the Cambridge University in our campus itself.
- > For the past five years, our college is getting best preparatory centre by the Cambridge University
- ➤ For the benefit of the Hostel students, coaching classes for the qualifying exams like GRE, TOEFL, GATE and CAT have been arranged in the campus.

Our students have got admission into various top ranking universities in different countries like USA, Australia, UK, New Zealand, Canada, Germany, Sweden and Singapore. To name a few, University of Texas, Stanford university, NJIT, Carnegie Mellon university, University of Massachusetts, Arizona State University, North Carolina state University, Illinois Institute of technology, University of Pennsylvania, Leeds university, University of Birmingham, NUS, NTU, University of West Virginia, MRIT, University of MTU, McGill University etc. The number of students who have got admission for higher studies during recent years is as follows:

S.No	Academic Year	No of students*
1	2015 - 2016	157**
2.	2014 - 2015	192
3.	2013 - 2014	187
4.	2012 – 2013	163
5.	2011 – 2012	131
6.	2010 – 2011	123
7.	2009 – 2010	118

• This is the number of students who have gone for higher education immediately after the completion of course.

Apart from this many students are pursuing higher studies in India like NITs, IITs, IIMs, and IIPM.

A master's degree is an academic degree granted to individuals who have undergone study demonstrating a mastery or high-order overview of a specific field of study or area of professional practice. Within the area studied, graduates are posited to possess advanced knowledge of a specialized body of theoretical and applied topics; high order skills in analysis, critical evaluation, or professional application; and the ability to solve complex problems and think rigorously and independently. The degree is awarded upon graduation from a university.

INTERNATIONAL STUDIES ABROAD: Master's Degree programs around the world allow students to enroll in a graduate program at an institution abroad while receiving the personalized support services that define INTERNATIONAL STUDIES ABROAD programs throughout the world. The majority of programs can be completed in English in as little as one year. Upon successful completion of the program, students will receive their master's diploma and academic record from the university abroad.

In the department of Chemical Engineering

S.NO	NAME OF THE STUDENT	COURSE	INSTITUTE
1.	RAVIKIRAN RELANGI	M.S	THE UNIVERSITY OF TULSA
2.	MANIBARATHI VAITHIYANATHAN	PhD	LOUISIANA STATE UNIVERSITY
3.	PRADHEEP MURALI	M.S	LAMAR UNIVERSITY
4.	VIGNESHWAR	M.S	UNIVERSITY AT BUFFALO
5.	SOWJANYA SOWRIRAJAN	M.S.	UNIVERSITY OF TORONTO, CANADA.
6.	VIGNESH SHEKHAR	M.S	NEW JERSEY INSTITUTE OF TECHNOLOGY
7.	YOHANNAN SUBIN SABILON	M.Tech	NATIONAL INSTITUTE OF TECHNOLOGY,TIRUCHIRAPALLI
8.	YOHANNAN BIBIN SABILON	M.Tech	NATIONAL INSTITUTE OF TECHNOLOGY,SURAT
9.	K.POORNIMA	M.E	BITS PILANI,HYDERABAD

<sup>\*\*</sup> The admission process is still going on.

#### CONQUISTA 2016



#### DISTRIBUTION OF 888 PLACEMENT ORDERS TO THE PLACED STUDENTS

CONQUISTA'16 – the word that makes us well with pride of our achievement. CONQUISTA is the ceremony of issuing the offer letters to the students recruited through campus placement. It was held on April 9th, 2016 with grandeur.

The function was presided by the Senior Director - HR, from Cognizant Technology Solutions, and the General Manager - Competency & Operations Group, Wipro technologies who handed over the offer letters to the students in the presence of the Managing Director and Principals of St Joseph's group of Institutions. Human resources - Campus Hiring from Cognizant and Wipro were also present as 'special invitees'.

We are proud to inform that we have achieved a placement record of 1069 so far in this year. It is indeed a golden feather in the cap of St. Joseph's Group of Institutions.

#### COMMUNICATION SKILL ENHANCEMENT PROGRAM



Centre for Training and Placement of St Joseph's is largely responsible and committed towards the identification and catering to the need of training of students so that they are able to develop a good personality; and assist them to find right job and help them place in right companies before they pass out. We realize that in order to convert a raw student in to

employable graduate, several behavioural attributes need to be addressed in addition to the development of technical skills. Some of the behavioural attributes are good communication skills, developing positive attitude towards work, and understanding of moral and ethical values.

Every academic year, our college has taken an initiative to improve the communication skill of the students by organizing 48 hours Communication skill enhancement program. The aim of this program is to empower our students to take up the future campus recruitment with confidence. All the first year students are evaluated for communication skill by the expert committee. Based on the evaluation students are categorized into **three levels** and students are given appropriate training. This communication enhancement program is conducted by corporate trainers from **Strides**, **Winspire**, **Vistamind etc.** 

# CENTRE FOR TRAINING AND PLACEMENT PLACEMENT ORIENTATION PROGRAM AND OTHER ACTIVITIES

The Centre for Training and Placement has conducted Aptitude crash course for second year & third year students by Vista Mind. Placement orientation programme-I (POP I) was also conducted for third year students. Faculties from various departments contributed for the orientation program. Department of Mathematics were instrumental in delivering aptitude,



logical reasoning sessions. Technical sessions were handled by the concerned departments and Soft skill was handled by the faculty from Business administration, English and some faculties from Engineering Departments.

Placement orientation program-II (POP II) was conducted for the final year students by

Vista Mind and trained them on soft skills, quantitative aptitude skills etc., to prepare them for placement recruitments. Also POP III, a company specific training programme was conducted by SMART to crack Cognizant, Infosys Wipro test pattern.

The Centre for Training & Placement conducted Online aptitude assessment tests on every week for all the students through the skill rack portal.

Apart from these the students have undergone mock tests in Cognizant, Wipro, Infosys and AMCAT test pattern before appearing for placements. Subsequent to the above training, Cognizant has conducted Evolve Program (Transition from College to Corporate) for the final years, which helped them to understand the expectations of the corporate world. Infosys conducted a session on "interview preparatory" & Wipro conducted a session on "employability".

Students have also acquired BEC certifications, other value added certifications. In addition to the above certifications, IT Refresher program was conducted for all final year students by Top freshers to enhance the IT related technical skills. Also series of Mock tests, Interviews & intensive coding training have greatly improved the performance of the students in the campus recruitments to a great extent.

#### PLACEMENT DETAILS OF FINAL YEAR STUDENTS 2015-2016 BATCH

We are glad to inform that 888 Students are selected through campus recruitment processes for the year 2015 - 16 with an annual salary package, starting from **Rs 2.4 Lakhs to 10.18 Lakhs** for UG & PG students.

### No of Individual Offers: 1069

St. JOSEPH'S COLLEGE OF ENGINEERING: 888 St. JOSEPH'S INSTITUTE OF TECHNOLOGY: 181

#### **Department Wise - Individual Offers**

S. No	College	Dept	Total	S. No	College	Dept	Total	S. No	College	Dept	Total
1.		CSE	89	11.		MBA	116	1.		CSE	43
2.		IT	96	12.		ME - Applied Electronics	2	2.		ΙΤ	39
3.		ECE	140	13.		ME - Power Systems	10	3.		ECE	38
4.	C4 To combin	EEE	96	14.	C4 Tanambia	ME - Power Electronics	3	4.	C4 Innomble	EEE	33
5.	St. Joseph's College of	EIE	86	15.	St. Joseph's College of	ME - Instrumentation	6	5.	St. Joseph's Institute of	MECH	28
6.	Engineering	MECH	87	16.	Engineering	ME - Computer Science	6	6.	Technology		
7.		ICE	24	17.		ME - Software Engineering	6	7.			
8.		BIO TECH	48	18.		M. Tech - Bio Tech	10	8.			
9.		CHEMICAL	43	19.		ME -		9.			
10.		MCA	18	20.		Manufacturing	2	10.			

Company	Total	Company	Total
COGNIZANT	590	Wipro	7
WIPRO	399	99 acres	1
INFOSYS	287	Indusind Bank	16
Mu Sigma	8	Torry Harris	3
Kaar	1	Trade india	13
Soliton	3	First source	7
Verizon	5	EmbedUR	1
Volante	1	YES Bank	8
Thoughtworks	2	RBS	13
Wolters kluwers	14	Bnp Paribas	1
Zoho	19	Amex	2
Tech Mahindra	27	Flextronics	7
Mindtree	11	Thapovan	11
UST Global	8	Huawei	2
Scope International	2	VVDN	1
Polaris	3	HCL	5
FSS	1	Genpact	5
Astrazeneca	2	TVS & sons	9
Mphasis	1	MRF	3
BNY Mellon	10	CSS corp	4
Naukri	4	Scope Knowledge	29
Tychons	1	Steel stripes	3
CSS corp	2		
ICICI Securities	7	HCL Infosystems	3
	To	tal: 1562	-

### St. JOSEPH'S COLLEGE OF ENGINEERING St. JOSEPH'S INSTITUTE OF TECHNOLOGY

# PLACEMENT CIRCULAR 2016-17

We are proud to inform that 1108 students have been selected by Core/
Product Company & Day 1 sharing companies (Cognizant,
Infosys, Wipro, Soliton, ZOHO, Thoughtworks, Zifo, Kaar,
Plintron & Top freshers) through campus recruitment drive held between
July & September for the academic year 2016-17 with an annual salary
package, starting from 3.3 Lakhs to 7.5 Lakhs for UG & PG students.

Tech Mahindra & Mphasis have offered jobs to 71 students of our college.

### TOTAL OFFERS: 1179

We would like to congratulate the students for being selected. We would also like to appreciate the Dept HOD's, Dept Staff members & Department Placement Coordinators for their sincere efforts.

# PLACEMENT DETAILS OF CHEMICAL ENGINEERING STUDENTS 2015 - 2016

The Management and faculty of Chemical Engineering Department congratulate the following **students** for getting placed in reputed companies through campus interviews. We wish them all the very best for their future endeavour.

NAME OF THE STUDENT	COMPANY NAME	NAME OF THE STUDENT	COMPANY NAME
ARAVIND G		VIGNESH I	
DEEPIKA R		ROSHAN P R	
VENKATESH D	1	BHALAKRISHNAN S	
SANDANA V P		JENIHA CHRISTY J M	
ARUNACHALAM S		JACOB BENNY P	
RAJA RAJA CHOZHAN P		MERIN DIYA C	
MAHESWARI C		SIDDHARTHA U	
PRASHANTH C	COGNIZANT	SIVA S	COGNIZANT
NITHYA SIVAKAMI G	TECHNOLOGY	AVINASH K S	TECHNOLOGY
HAFILA M	SOLUTIONS.	PRAVEEN PRABHU E	SOLUTIONS.
SRIRAM R		NITISH B	
SHARADA T N	Cognizant	ARUN THALAIMALAI S	<b>Cognizant</b> Cognizant
PAUL ERICSON P		DEEPIKA S M	
PRAVIN BOSCO C	1	SIVA RAMAN A	
SWETHA V		GOVARTHAN S	
BHUVANESWARI D	-	SHEEBA JOSE	
SHERIN REGI SAM	-	JESLIN CHERIAN M	
SHRIRAM R		PRAKASH S	
		VENKATESH R	
DEEPIKA R		ARAVIND G	
VENKATESH D		RAJA RAJA CHOZHAN	VWR
SANDANA V P	-	P SHRIRAM R	VWR
	WIPRO		We Enable Science
ARUNACHALAM S	WIRO	JOKIM B	
PRASHANTH C	_	AMIRTHAVARSHINI P	
NITHYA SIVAKAMI G		GOUTHAMAN M	
HAFILA M		MANOJ CHAKRAVARTHY M	INFOSYS
SRIRAM R		ARUNACHALAM S	Info e
PRAVIN BOSCO C	WIPRO	PRASHANTH C	
SWETHA V	Applying Thought	PAUL ERICSON P	POWERED BY INTELLECT DRIVEN BY VALUES
BHUVANESWARI D	_	NITISH B	and the state of t
AMIRTHAVARSHINI P			<b>ZOHO</b>
KARTHICK K		SHERIN REGI SAM	ZQHO Work · Online

### DEPARTMENT TOPPERS

A right honor at the right time will have an impact on life forever. The students who have catalyzed their actions into accomplishments by achieving good grades in the University Exam are motivated by the management in different ways by

- **❖** Anna university rank holders will be awarded Rs.50, 000/- each and for gold medal Rs.75, 000/- on our college Graduation Day.
- ❖ Awarding University Rank Holders with Shields on Graduation Day.
- ❖ Honoring the First University Topper from each Department with a special shield incorporating the name of a famous Personality.
- ❖ Issuing extra book bank library cards for semester toppers to enhance learning skills and better understanding.
- ❖ Awarding merit certificates at the end of each semester for subject toppers as well as overall toppers.
- ❖ Hosting Special lunch for the semester toppers on that day.

#### **DEPARTMENT TOPPER'S – ABOVE 8.3 CGPA**

#### IV YEAR (2012 - 2016) - Passed out

S.No	Name of the Student	Total Grade Points out of 1920	CGPA
1.	ARAVIND.G	1795	9.35
2.	DEEPIKA.R	1757	9.15
3.	VENKATESH.D	1753	9.13
4.	SANDANA V.P.	1751	9.12
5.	RAJA RAJACHOZHAN.P	1738	9.05
6.	ARUNACHALAM	1734	9.03
7.	MAHESWARI C.	1696	8.83
8.	AMIRTHAVARSHINI	1670	8.70
9.	PRASHANTH C.	1662	8.66
10.	PAUL ERICSON P.	1653	8.61
11.	HAFILA M.	1651	8.60
12.	BHUVANESWARI.D	1650	8.59
13.	SRIRAM.R	1650	8.59
14.	SARATH.R	1649	8.59
15.	G.NITHYA SIVAKAMI	1646	8.57
16.	SHARADA T.N.	1645	8.57
17.	SWETHA.V	1639	8.54
18.	SHERIN REGI SAM	1624	8.46
19.	PRAVIN BOSCO C.	1619	8.43
20.	KARTHICK	1610	8.39

#### III YEAR (2013–2017) – Current IV Year

S.No	Name of the Student	Total Grade Points out of 1470	CGPA
1.	RAZIKA SUBHANA R		9.20
2.	JAYASHREE Y		9.05
3.	NIVEDITHA JR		8.86
4.	KAVI NILA G		8.85
5.	AMRUTHA C		8.77
6.	ROHINI N S		8.76
7.	PAVITHRA GABRIEL		8.63
8.	MADHUMATHI S		8.48
9.	RAVEENA NARAYANEE S		8.46
10.	VEENA MATHANGI G		8.45
11.	NAVANEETHA KRISHNAN K		8.44
12.	CHERYL PEREIRA		8.42
13.	KAVIPRIYA G		8.36
14.	MUTHUSELVAM E		8.34

#### II YEAR (2014 – 2018) – Current III Year

S.No	Name of the Student	Total Grade Points out of 980	CGPA
1.	PRASANTH .N	886	9.04
2.	DELIGHT AZARIAH DANIEL	883	9.01
3.	SARAN KUMAR. M	875	8.93
4.	MALATHI.	854	8.71
5.	HARITHAJENNIFER	852	8.69
6.	SNEHA JOSE	849	8.66
7.	NANDHINI	844	8.61
8.	SHIVANI	842	8.59
9.	VISHALI	837	8.54
10.	MUTHU NANDINI	836	8.53
11.	NOOR FASEEHA	834	8.51
12.	GEETHA	830	8.47
13.	NAVEEN	829	8.46
14.	SUPRIYA	825	8.42
15.	ARUN KUMAR	823	8.40

#### FIRST YEAR (2015-2019) - Current II Year

S.No	Name of the Student	Total Grade Point out of 530	CGPA
1.	MOHAMED IBRAHIM S	479	9.04
2.	RAGHAVENDAR S	478	9.02
3.	AISHWARYA M	472	8.91
4.	KAVIYA S	467	8.81
5.	SHIJOY THOMAS	467	8.81
6.	AAKASH V R	462	8.72
7.	KARTHICK RAJ S	455	8.58
8.	NANDHITHA S	453	8.55
9.	SRIGANESH PARAMESWARAN	450	8.49
10.	LAMSY ALEX	446	8.42
11.	AJAY KUMAR V	442	8.34

### **NGO (Non-Governmental Organization) Activities**

It is pathetic that there are numerous orphanages and old age homes in our society. Our visionary Director yearns for extending a supporting hand to these needy persons. Also, he wanted to invoke the service mind of our students by encouraging visits to orphanages, old age homes and homes for CP children (children with Cerebral Palsy which causes physical disability in human development chiefly in vain areas of body movement). NGO activities bring out the hidden potentials of young minds to serve the needy and to make them responsible citizens. They are exposed to downtrodden lifestyle which is a need of the hour for our country's development.

Our college offers special lunch (Both Vegetarian and Non Vegetarian with sweets, savories and ice creams) to all the inmates of orphanages, old age homes and homes for CP children. Students are provided with transport facilities to visit the homes on activity Saturdays. All the students, from First year to Final year, both UG and PG enthusiastically participated and mingled with inmates of home and spent the daytime with them and shared their happiness. They also spent their pocket money in useful manner by offering the needy things like rice bags, groceries, toys, clothes, pillows etc. for the inmates.

The department of chemical engineering has participated on Saturdays and the activity was thoroughly enjoyed and appreciated by the students and faculties.

Date	Class	Name of the organization visited	Type of organization
04/07/2015	IV YEAR	ANBIN OLI, PUZHAL, CHENNAI.	CHILDREN HOME
25/07/2015	III YEAR	VISRANTI OLD AGE HOME, PALAVAKKAM, CHENNAI.	OLD AGE HOME
22/08/2015	II YEAR	ANBIN OLI, PUZHAL, CHENNAI.	CHILDREN HOME
12/09/2015	I YEAR	YOUTH CHILDRENS HOME, OORAPAKKAM, CHENNAI.	CHILDREN HOME
06/02/2016	III YEAR	KAKKUM KARANGAL, PALAVAKKAM, CHENNAI.	CHILDREN HOME
13/02/2016	II YEAR	ANNAI BHARATHA MADHA EDUCATIONAL TRUST, REDHILLS, CHENNAI	CHILDREN HOME
19/03/2016	I YEAR	GRACE CHILDRENS HOME, CHENGALPATTU, CHENNAI.	CHILDREN HOME

We wish to continue our service forever

# STUDENTS ACTIVITIES CURRICULAR, CO-CURRICULUR, EXTRA-CURRICULUR ACTIVITIES

SL. No	Name of the Student	Year	Name of the Event	Organizer	Place Won
1.	B.SHANKARA NARAYANAN	II	AMAZING PUZZLE	DHANALAKSHMI COLLEGE OF ENGINEERING	II
2.	SINTO STEPHEN	II	PHOTOGRAPHY	DHANALAKSHMI COLLEGE OF ENGINEERING	I
3.	ASHEIN HERBERT	II	GAMING	SSN COLLEGE OF	I
4.	MOHAMMED FAIZUR REHMAN	II	JOANNING	ENGINEERING	
5.	JAYASREE Y	III	PAPER PRESENTATION	MGR University	I
6.	MAHIMA H	III		A C Tech Anna University	III
7.	JAYASREE Y	III	WORKING MODEL		
8.	ROHINI N S	III			
9.	VEENA MATHANGI	III	POSTER	SCHEMCON	I
10.	MADHUMATHI S	III	- PRESENTATION		
11.	KAVINILA G	III		SSN College of Engineering	III
12.	ALICE SNEHA GEORGE	III	WORKING MODEL	<i>Communication</i>	
13.	ARUN KUMAR R	III	PAPER	CONTINCON	
14.	JITHIN RAJ K	III	PRESENTATION	SCHEMCON	I
15.	SURIYA PRAKASH.S	III	SHORT FILM	SVCE	I
16.	SURIYA PRAKASH.S	III	SCAVNGER HUNT	SVCE	I
17.	SIVA KUMAR.R	III	SCAVNGER HUNT	SVCE	I
18.	ARUN KUMAR P	III	PHOTOGRAPHY	SVCE	I
19.	KAVIPRIYA G	III	7 DAYS 7 WINNERS	MGR UNIVERSITY	I
20.	NITISH.B	IV	PAPER	0.1	,
21.	SIVARAMAN.A	IV	PRESENTATION	Schemcon-2015	I
22.	PRAVIN BOSCO.C	IV	CHEM QUIZ	SVCE	I
23.	PRAVIN BOSCO.C	IV	POSTER PRESENTATION	SVCE	I
24.	R.SHRIRAM	IV	PAPER	SVCE	I
25.	P.RAJA RAJA CHOZHAN	1	PRESENTATION		
26.	AVINASH.KS	IV	WORKING MODEL	SSN College of Engineering	I
27.	ARUNACHALAM.S	IV		SVCE	II
28.	NITISH.B	IV	PAPER PRESENTATION		
29.	R.SRIRAM	IV	_ I KESENTATION		
30.	MADHUKAR.C.N	IV	TECHNICAL QUIZ	R.M.D Engineering College	I
31.	PRAKASH.S	IV			
32.	VIGNESH.I	IV	ADZAP		
33.	ASRAFULLA A	IV		DR. M.G.R.UNIVERSITY	II
34.	MATHAN.R	IV	1		

### SPORTS ACTIVITIES

NAME	YEAR	COMPETITION	EVENT	PLACE
D.RAJESHWARI	IV	VOLLEY BALL	PSN TROPHY	RUNNERS
			ANNA UNIVERSITY ZONE	RUNNERS
			SA TROPHY	WINNRES
			JETS	WINNRES
DEEPIKA SM	III	BASKET BALL	SA TROPHY-2016	RUNNER
			MOP VAISHNAVA TROPHY-2016	WINNER
			IIT TROPHY-2016	3 <sup>rd</sup> PLACE
			JETS -2016	RUNNER
			ZONE-III	3 <sup>rd</sup> PLACE
K.NANDHINI	III	VOLLEY BALL	PSN TROPHY	RUNNERS
PRIYA			ANNA UNIVERSITY ZONE	RUNNERS
			SA TROPHY	WINNRES
			JETS	WINNRES
R.VENKATESH	III	VOLLEY BALL	JETS	WINNRES
			SVCE	RUNNERS
			ZONE	WINNRES
			INTER ZONE	RUNNERS
			CM TROPHY STATE	RUNNERS
J.JAIN JINI JO	III	VOLLEY BALL	LAKSHMI NAGAR SPORTS	WINNRES
			CLUB VOLLEY BALL	
			TOURNAMENT	
			ONGC STATE VOLLEY BALL TOURNAMENT	RUNNERS
			ZONE -III	WINNRES
			BHARATHI VOLLEY BALL CLUB	WINNRES
			STATE LEVEL TOURNAMENT	WINNKES
			SAWYERPURAM STATE VOLLEY	
			BALL CHAMPIONSHIP	III
			ANNA UNIVERSITY INTER ZONE	RUNNERS
			KALASALINGAM STATE LEVEL	RUNNERS
			VOLLEY BALL OURNAMENT	ROTTERS
			CM TROPHY STATE	RUNNERS
			65TH SENIOR STATE VOLLEY	
			BALL	WINNERS
			CHAMPIONSHIP	
			VELTECH TOURNAMENT	WINNRES
			SAIRAM TROPHY-2016	WINNRES
			SVCE TROPHY-2016	RUNNERS
			JETS-2016	WINNERS
JAIN MATHEW	3RD	BASKET BALL	SRI RAGAVENDRA TOURNAMENT	RUNNER
			ZONE-III	WINNER
			KARUNYA UNIVERSITY	RUNNER
			TOURNAMENT	
			B.S. ABDUR RAHAMMAN TOURNAMENT	RUNNER
			SVCE TROPHY-2016	RUNNER
			JETS 2016	RUNNER
DHIVYA PRAKASH	3RD	BASKET BALL	SRI RAGAVENDRA TOURNAMENT	RUNNER
			ZONE-III	WINNER
			KARUNYA UNIVERSITY	RUNNER

			TOUDNIAMENT	
			TOURNAMENT	
			B.S. ABDUR RAHAMMAN	RUNNER
			TOURNAMENT	
			SVCE TROPHY-2016	RUNNER
			JETS 2016	RUNNER
			SRI RAGAVENDRA TOURNAMENT	RUNNER
P.KARTHIKEYAN	IV	KABBADI	TNPESU TROPHY	WINNER
			ZONE III	WINNER
			PSN TROPHY	3
			SAIRAM TROPHY	WINNER
			JETS	3
			INTER ZONE	RUNNER
			K L UNIVERSITY TROPHY-2016	WINNER
M.SATHISH	IV		ZONE III 5000MTS	I
KUMAR			INTER ZONE 1500MTS	II
		ATHLETICS	KARUNYA UNIVERSITY 1500MTS	I
			INTER ZONE 1500MTS	III
			INTER ZONE CROSS COUNTRY	III

#### **CURRICULAR ACTIVITIES**

Our final year students of Chemical Engineering have done their projects in the following major industries:

- > Orchid Chemicals and Pharmaceuticals, Chennai
- > CPCL, Chennai
- > Tamilnadu Petro products Limited, Chennai.
- > CETEX Petrochemicals Limited, Manali, Chennai.
- Madras Fertilizers Limited, Manali
- Manali Petrochemicals Limited, Chennai
- ➤ EID Parry India Ltd, Cuddalore
- > CLRI, Chennai
- > IIT Madras.

#### GUEST LECTURES

Guest Lecture is a way of enriching our students with the latest updates of the Industries and Technicalities. The Students are bestowed with knowledge about Industry needs, latest technical updates, Avenues for Higher studies etc.

Eminent personality from prestigious institutions and organizations are regularly invited to share their knowledge on various emerging fields and changing trends.

- ❖ A very informative Lecture on "RESEARCH OPPORTUNITIES IN CHEMICAL ENGINEERING" by **Dr.G.S.KANDASAMY** Retd. Professor, Anna university, Chennai on 09.07.2015
- ❖ A very informative Lecture on "COMPUTATIONAL FLUID DYNAMICS" by **Mr.KARTHIK SUNDAR RAJ** Technical manager ANSYS ltd. Chennai on 10.02.2016
- ❖ A very informative Lecture on "ROLE OF CHEMICAL ENGINEERS IN OIL AND GAS INDUSTRIES" by MR.K.SAMPATH KUMAR Retd. Associate Director, oil and gas industries, UAE on 25.02.2016

#### INDUSTRIAL VISITS

- ❖ The final year students have visited "ANCHOR LEATHERS" chrompet, Chennai on 08<sup>th</sup> July 2015 they had a very good exposure about leather and its leather processing.
- Industrial Visit
- ❖ The third year students have visited "MADRAS ATOMIC POWER STATION" Kalpakkam, Chennai on 07<sup>th</sup> August 2015. Students had a good exposure about nuclear reactors.
- ❖ The second year students have visited "**E.I.D PARRYS** (**I**) **LTD**" Nellikuppam, cuddalore on 12<sup>th</sup> September 2015 students had a very good exposure in basics of chemical reaction and chemical reactors.
- ❖ The third year students have visited "JEPPIAR MILK PRODUCTS PRIVATE LIMITED" chengam, Thiruvannamalai on 19<sup>th</sup> February 2016 students had a very good exposure of milk processing, pasteurization and packing.
- ❖ The second year students have visited "MADRAS ATOMIC POWER STATION" Kalpakkam, Chennai on 26<sup>th</sup> February 2016. Students had a good exposure about nuclear reactors.

#### STUDENTS CHAPTER ACTIVITIES

#### INDIAN INSTITUTE OF CHEMICAL ENGINEERING ACTIVITIES



❖ Chemical Engineering club has conducted working model event on "Innovation on Continuous flow Adsorption studies" for III year chemical engineering under the banner of Indian institute of Chemical Engineering (IICHE). About 20 students were actively participated the event with the models designed and fabricated by themselves by applying their engineering knowledge. The preliminary round was conducted and shortlisted batches were allowed for final rounds of competition. During the final round conducted on 17.03.2016, three best models were identified by the panel of judges comprising HODs.

MBA

#### STUDENTS COMPETITIVE EXAM RESULTS

A competitive examination is an examination where candidates are ranked according to their grades.

If the examination is open for n positions, then the first n candidates in ranks pass, the others are rejected.

They are used as entrance examination for post graduate in various university and colleges. Competitive examinations are considered an egalitarian way of choosing worthy applicants without risking influence peddling, favoritism or other concerns. The following students are qualified in the various examinations like GATE, GMAT,

The 1

S.NO	NAME OF THE STUDENT	NAME OF EXAMINATION	MARKS SECURED
1.	YOHANNAN SUBIN SABILON	GATE	35/ out of 100
2.	YOHANNAN BIBIN SABILON	GATE	34.67/ out of 100
3.	SURAGANI MUNI HEMANTH	GATE	37/ out of 100
4.	SIVARAMAN.R	GATE	41.67/ out of 100
5.	KISHORE KUMAR	GATE	20.67/ out of 100
6.	NIVESHA.S	GATE	25/ out of 100
7.	RAVIKIRAN.R	GRE	108/ out of 300
8.	PRADHEEP MURALI	GRE	145/ out of 300
9.	VIGNESH SHEKAR	GRE	51/ out of 300
10.	MAHIMA SAJAN VARGHESE	GRE	175/ out of 300
11.	MANIBARATHI.V	GRE	180/ out of 300
12.	RAVIKIRAN.R	TOEFL	75/ out of 120
13.	PRADHEEP MURALI	TOEFL	95/ out of 120
14.	VIGNESH SHEKAR	TOEFL	88/ out of 120
15.	MANIBARATHI.V	TOEFL	97/ out of 120
16.	SOWJANYA SOWRIRAJAN	TOEFL	93/ out of 120

#### **BUSINESS ENGLISH CERTIFICATES (BEC)**

Cambridge English: Business Certificates, also known as Business English Certificates (BEC), are a suite of three English language qualifications for international business.

#### Cambridge English: Business Preliminary (BEC Preliminary) – CEFR Level B1

Cambridge English: Business Preliminary, also known as Business English Certificate (BEC) Preliminary, is the first of the three certificates. It is an intermediate level exam.

#### Cambridge English: Business Vantage (BEC Vantage) – CEFR Level B2

Cambridge English: Business Vantage, also known as Business English Certificate (BEC) Vantage, is the second of the three certificates. It is an upper-intermediate level exam.

#### Cambridge English: Business Higher (BEC Higher) – CEFR Level C1

Cambridge English: Business Higher, also known as Business English Certificate (BEC) Higher, is the third of the three certificates. It is a high level exam.

They will help you to achieve your ambitions to:

- work abroad
- ❖ work with international organizations in your own country
- Study business-related subjects taught in English.

They show that you can use English confidently in international business environments.

The results of BEC are

ASSESSMENT NAME	RESULT	NO OF STUDENTS	ASSESSMENT NAME	RESULT	NO OF STUDENTS
BEC VANTAGE	PASS AT GRADE A	1	BEC PRELIMINARY	PASS	17
BEC VANTAGE	PASS AT GRADE B	2	BEC PRELIMINARY	PASS WITH MERIT	4
BEC VANTAGE	PASS AT GRADE C	19	BEC PRELIMINARY	PASS WITH DISTINCTION	1
BEC VANTAGE	COUNCIL OF EUROPE LEVEL B1	14	BEC PRELIMINARY	COUNCIL OF EUROPE LEVEL A2	8

BEC VANTAGE: 36 STUDENTS BEC PRELIMINARY: 30 STUDENTS

#### INTRA DEPARTMENT SYMPOSIUM 2015

The department of Chemical Engineering conducted an intra-department symposium for all II, III and IV Year CHEMICAL STUDENTS on 23-07-2015. The students participated in various events Viz. HOW WASTE STUFF WORKS, SHIPWRECK, LOGO QUIZ, ADZAP and TECHNICAL QUIZ. Prize amount of ₹ 10,000 was distributed to the prize winners of all the above mentioned events.

	I PRIZE (RS. 10	JUU)	II PRIZE (RS.	600)	III PRIZE (RS. 40	0)
Event	Name of the Student(s)	Year	Name of the Student (s)	Year	Name of the Student (s)	Year
ADZAP	PRASHANTH C GOUTHAMAN M D. VENKATESH PRAVIN BOSCO.C	IV	N. PRASANTH S. KISHOR T. VINEETH ANTON JOSE K. THAILA	П	C.SARAVANAN RM. RAAM ANANDHAN R. SHYAM SUNDAR G. PARVEZ NAFEEZ	III
TECHNICAL QUIZ	ARAVIND.G JAFFIN SAM RAJ	IV	ANTO FELIX SOTVIK.G.S NANTHA KUMAR.T	III	JENIL RAJA SINGH.T M.MANOJ CHAKRAVARTHY	IV
LOGO QUIZ	B.JOKIM M.MANOJ CHAKRAVARTHY	IV	R.SHIBIRAM ALLAN ROY FERNANDO	III	B.SHANKARANARA YANAN W.DELIGHT AZARIAH DANIEL	II
SHIPWRECK	NITISH B	IV	ARVINTH V	III	NITHUN SREE HARI	II
HOW WASTE	ALICE SNEHA GEORGE KAVI NILA.G		K.NAVANEET HA KRISHNAN E.MUTHU SELVAN T.P.BALAJI		SRIRAM.R NITHISH.B ARUNACHALAM.S PAUL ERICSION	IV
STUFF WORKS		III		III	ASHEIN HERBERT BALAJI S MOHAMED FAIZUR RAHMAN.S	II
	ADZAP  TECHNICAL QUIZ  LOGO QUIZ  SHIPWRECK  HOW WASTE STUFF	ADZAP  PRASHANTH C GOUTHAMAN M D. VENKATESH PRAVIN BOSCO.C  ARAVIND.G JAFFIN SAM RAJ  B.JOKIM M.MANOJ CHAKRAVARTHY  SHIPWRECK  NITISH B  ALICE SNEHA GEORGE KAVI NILA.G	ADZAP  PRASHANTH C GOUTHAMAN M D. VENKATESH PRAVIN BOSCO.C  ARAVIND.G JAFFIN SAM RAJ  IV  LOGO QUIZ  B.JOKIM M.MANOJ CHAKRAVARTHY  NITISH B  IV  ALICE SNEHA GEORGE KAVI NILA.G  HOW WASTE STUFF  III	ADZAP  PRASHANTH C GOUTHAMAN M D. VENKATESH PRAVIN BOSCO.C  RECHNICAL QUIZ  ARAVIND.G JAFFIN SAM RAJ  IV  R.SHIBIRAM AUMAR.T  R.SHIBIRAM ALLAN ROY FERNANDO  SHIPWRECK  ALICE SNEHA GEORGE KAVI NILA.G  HOW WASTE STUFF  R. NAME of the Student (s)  N. PRASANTH S. KISHOR T. VINEETH ANTON JOSE K. THAILA  RAYIND.G T. VINEETH ANTON JOSE K. THAILA  ANTO FELIX SOTVIK.G.S NANTHA KUMAR.T  IV  ARVINTH V  K.NAVANEET HA KRISHNAN E.MUTHU SELVAN T.P.BALAJI	ADZAP  PRASHANTH C GOUTHAMAN M D. VENKATESH PRAVIN BOSCO.C  ARAVIND.G JAFFIN SAM RAJ  IV  ANTO FELIX SOTVIK.G.S NANTHA KUMAR.T  III  B.JOKIM M.MANOJ CHAKRAVARTHY  SHIPWRECK  NITISH B  ALICE SNEHA GEORGE KAVI NILA.G  RAWINTH S. KISHOR T. VINEETH ANTON JOSE K. THAILA  III  ANTO FELIX SOTVIK.G.S NANTHA KUMAR.T  III  K.NAVANEET HA KRISHNAN E.MUTHU SELVAN T.P.BALAJI III  III	ADZAP  PRASHANTH C GOUTHAMAN M D. VENKATESH PRAVIN BOSCO.C  ANTO FELIX SOTVIK.G.S NANTHA KUMAR.T  III  ARAVINDJOSE K. THAILA  ANANOHAN R. SHYAM SUNDAR R. SHYAM ANANDHAT M.MANOJ CHAKRAVARTHY  III  B.SHANKARANARA YANAN YANAN W.DELIGHT AZARIAH DANIEL  SHIPWRECK  ALICE SNEHA GEORGE KAVI NILA.G  ARVINTH V  III  SRIRAM.R NITHISH.B ARUNACHALAM.S PAUL ERICSION T.P.BALAJI III  ASHEIN HERBERT BALAJI S MOHAMED FAIZUR

**TOTAL PRIZE AMOUNT Rs.10,000/-**

#### INTRAMURAL SPORTS

In our college intra department sports was conducted to encourage the students to participate in sports activities. Various houses were formed among all departments and it is mentioned by different names. In our house CHEMICAL, BIOTECH and ICE are grouped together and named as CRANE.

#### For II year it is conducted on July 16<sup>th</sup> 2015

- ❖ Basketball (men) RUNNERS UP
- ❖ Basketball (women) RUNNERS UP
- ❖ Handball (men) RUNNERS UP
- ❖ Handball (women) WINNERS

#### For III year it is conducted on July 15<sup>th</sup> 2015

- ❖ Volley ball (men) RUNNERS UP
- ❖ Ball Badminton (men) RUNNERS UP
- ❖ Ball Badminton (women) WINNERS
- ❖ Football (men) WINNERS

For IV year it is conducted on July 14<sup>th</sup> 2015 Table tennis single (singles- men) - WINNERS



### NATIONAL TECHNICAL SYMPOSIUM - JET CHEM 2015

On September 8<sup>th</sup>, 2015, the 18<sup>th</sup> National Students' Symposium" JET CHEM 15" was conducted by the Department of Chemical Engineering. Rs 25,000 prize money was awarded to the winners of all the events. Students from various institutions VIZ, A C College of Technology, Anna University, Chennai and Trichy, S S N College of Engineering, Chennai, Vel Tech High Tech Engineering College, Chennai, Sathyabhama University, Chennai, Sri Venkateswara College Of Engineering Chennai participated in the symposium.

❖ Total no. of Colleges Participated

-06

No. of Participants

**-77** 

		articipants		
Sl. No	Event	I prize	II Prize	III prize
		PRAVEEN MANI A	KARTHICK E	S SAKTHIVEL
-		UDHAYAVAN V	ARUN RAJ A	V KING EBENEZER
	CHEM	VEL TECH HIGH TECH DR	VEL TECH HIGH TECH DR	A. C.TECH TRICHY
	CHARADES	RANGARAJAN DR	RANGARAJAN DR	
		SAKUNTHALA ENGINEERING	SAKUNTHALA	
		COLLEGE	ENGINEERING COLLEGE	
		Prize amount:1500	Prize amount:1000	Prize amount:500
	MINUTE TO WIN IT	SIVA SUBRAMANI T KALIRAJ M	VISHAAL G NAVEEN KUMARAN	RAKSHANA SHARMILA
2	(Engineering	SSN COLLEGE OF	SRI VENKATESWARA	SRI VENKATESWARA
	Tasks)	ENGINEERING	COLLEGE OF ENGINEERING	COLLEGE OF ENGINEERING
		Prize amount:1500	Prize amount:1000	Prize amount:500
		NUTHANA KAVI GURU	PRASANNA	M KHIZER AHMED
		TINKU KUMAR	VENKATESH K R P	HRITHIK AJMERA
	CEREBRO		AADITYAN A	
3	(Quiz)	SRI VENKATESWARA	SRI VENKATESWARA	
		COLLEGE OF ENGINEERING	COLLEGE OF ENGINEERING	SATHYABAMA UNIVERSITY
		Prize amount:1500	Prize amount:1000	Prize amount:500
		PRATIK R SHAH	SURAJ S	SIDDARTH S
	GET IT RIGHT	NIKHIL R KHATRI	S V RAMANAN	MUGILAN R
4	(Technical)	SRI VENKATESWARA	SSN COLLEGE OF	SSN COLLEGE OF
•	(Technical)	COLLEGE OF ENGINEERING	ENGINEERING	ENGINEERING
		Prize amount:1500	Prize amount:1000	Prize amount:500
		S NAVEEN KUMAR	MUCHAND	LAXMI
		P TAMILVANNAN	MUGILAN R	NARAYANAN KS
			SIDDARTH S	MARSH WHESLEY TP
5	TECHNICAL			VEL TECH HIGH TECH DR
3	QUIZ	SSN COLLEGE OF	SSN COLLEGE OF	RANGARAJAN DR
-		ENGINEERING	ENGINEERING	SAKUNTHALA ENGINEERIN
				COLLEGE
		Prize amount:1500	Prize amount:1000	Prize amount:500
ł		SAMUEL CHRISTOPHER	M BALUMAHENDRAN	B.SHARMILA
	FINDING THE	VINEETH Y	R P AGNISHWAR	NIRANAJANI.S
6	CHEMICAL	VINEETH Y VIKRAM S	RAMJI	NIRANAJANI.S
6		VINEETH Y	RAMJI KALASALINGAM	NIRANAJANI.S  SRI VENKATESWARA
6	CHEMICAL	VINEETH Y VIKRAM S SATHYABAMA UNIVERSITY	RAMJI KALASALINGAM UNIVERSITY	NIRANAJANI.S  SRI VENKATESWARA COLLEGE OF ENGINEERING
6	CHEMICAL	VINEETH Y VIKRAM S SATHYABAMA UNIVERSITY  Prize amount:1500	RAMJI KALASALINGAM UNIVERSITY Prize amount:1000	NIRANAJANI.S  SRI VENKATESWARA COLLEGE OF ENGINEERING Prize amount:500
6	CHEMICAL	VINEETH Y VIKRAM S SATHYABAMA UNIVERSITY  Prize amount:1500 M.BALUMAHENDRAN	RAMJI KALASALINGAM UNIVERSITY Prize amount:1000 VIDHISHA R	NIRANAJANI.S  SRI VENKATESWARA COLLEGE OF ENGINEERING Prize amount:500 PRAVEEN MANI A
6	CHEMICAL	VINEETH Y VIKRAM S SATHYABAMA UNIVERSITY  Prize amount:1500 M.BALUMAHENDRAN J.JOSEPH REYNOLD	RAMJI KALASALINGAM UNIVERSITY Prize amount:1000 VIDHISHA R VEDHA	NIRANAJANI.S  SRI VENKATESWARA COLLEGE OF ENGINEERING Prize amount:500  PRAVEEN MANI A UDHAYAVAN V
	CHEMICAL COMPOUNDS	VINEETH Y VIKRAM S SATHYABAMA UNIVERSITY  Prize amount:1500  M.BALUMAHENDRAN J.JOSEPH REYNOLD M.RAMJI	RAMJI KALASALINGAM UNIVERSITY Prize amount:1000 VIDHISHA R VEDHA VAISHNAVI R	NIRANAJANI.S  SRI VENKATESWARA COLLEGE OF ENGINEERING Prize amount:500  PRAVEEN MANI A UDHAYAVAN V SUJITH.A
	CHEMICAL COMPOUNDS HOW WASTE	VINEETH Y VIKRAM S SATHYABAMA UNIVERSITY  Prize amount:1500 M.BALUMAHENDRAN J.JOSEPH REYNOLD	RAMJI KALASALINGAM UNIVERSITY Prize amount:1000 VIDHISHA R VEDHA	NIRANAJANI.S  SRI VENKATESWARA COLLEGE OF ENGINEERING Prize amount:500  PRAVEEN MANI A UDHAYAVAN V SUJITH.A  VEL TECH HIGH TECH DR
	CHEMICAL COMPOUNDS	VINEETH Y VIKRAM S SATHYABAMA UNIVERSITY  Prize amount:1500  M.BALUMAHENDRAN J.JOSEPH REYNOLD M.RAMJI	RAMJI KALASALINGAM UNIVERSITY Prize amount:1000 VIDHISHA R VEDHA VAISHNAVI R	NIRANAJANI.S  SRI VENKATESWARA COLLEGE OF ENGINEERING Prize amount:500  PRAVEEN MANI A UDHAYAVAN V SUJITH.A  VEL TECH HIGH TECH DR RANGARAJAN DR
	CHEMICAL COMPOUNDS HOW WASTE	VINEETH Y VIKRAM S SATHYABAMA UNIVERSITY  Prize amount:1500  M.BALUMAHENDRAN J.JOSEPH REYNOLD M.RAMJI	RAMJI KALASALINGAM UNIVERSITY Prize amount:1000 VIDHISHA R VEDHA VAISHNAVI R	NIRANAJANI.S  SRI VENKATESWARA COLLEGE OF ENGINEERING Prize amount:500  PRAVEEN MANI A UDHAYAVAN V SUJITH.A  VEL TECH HIGH TECH DR RANGARAJAN DR SAKUNTHALA ENGINEERIN
	CHEMICAL COMPOUNDS HOW WASTE	VINEETH Y VIKRAM S  SATHYABAMA UNIVERSITY  Prize amount:1500  M.BALUMAHENDRAN J.JOSEPH REYNOLD M.RAMJI  KALASALINGAM UNIVERSITY	RAMJI KALASALINGAM UNIVERSITY Prize amount:1000 VIDHISHA R VEDHA VAISHNAVI R A.C.TECH., TRICHY	NIRANAJANI.S  SRI VENKATESWARA COLLEGE OF ENGINEERING Prize amount:500  PRAVEEN MANI A UDHAYAVAN V SUJITH.A  VEL TECH HIGH TECH DR RANGARAJAN DR SAKUNTHALA ENGINEERIN COLLEGE
	CHEMICAL COMPOUNDS HOW WASTE	VINEETH Y VIKRAM S SATHYABAMA UNIVERSITY  Prize amount:1500 M.BALUMAHENDRAN J.JOSEPH REYNOLD M.RAMJI KALASALINGAM UNIVERSITY  Prize amount:1500	RAMJI KALASALINGAM UNIVERSITY Prize amount:1000 VIDHISHA R VEDHA VAISHNAVI R A.C.TECH., TRICHY Prize amount:1000	NIRANAJANI.S  SRI VENKATESWARA COLLEGE OF ENGINEERING Prize amount:500  PRAVEEN MANI A UDHAYAVAN V SUJITH.A  VEL TECH HIGH TECH DR RANGARAJAN DR SAKUNTHALA ENGINEERIN COLLEGE Prize amount:500
	CHEMICAL COMPOUNDS HOW WASTE	VINEETH Y VIKRAM S SATHYABAMA UNIVERSITY  Prize amount:1500 M.BALUMAHENDRAN J.JOSEPH REYNOLD M.RAMJI KALASALINGAM UNIVERSITY  Prize amount:1500 KISHORE KUMAR S	RAMJI KALASALINGAM UNIVERSITY Prize amount:1000 VIDHISHA R VEDHA VAISHNAVI R A.C.TECH., TRICHY	NIRANAJANI.S  SRI VENKATESWARA COLLEGE OF ENGINEERING Prize amount:500  PRAVEEN MANI A UDHAYAVAN V SUJITH.A  VEL TECH HIGH TECH DR RANGARAJAN DR SAKUNTHALA ENGINEERIN COLLEGE Prize amount:500  UDHAYAN V
	CHEMICAL COMPOUNDS HOW WASTE	VINEETH Y VIKRAM S SATHYABAMA UNIVERSITY  Prize amount:1500 M.BALUMAHENDRAN J.JOSEPH REYNOLD M.RAMJI KALASALINGAM UNIVERSITY  Prize amount:1500	RAMJI KALASALINGAM UNIVERSITY Prize amount:1000 VIDHISHA R VEDHA VAISHNAVI R A.C.TECH., TRICHY Prize amount:1000	NIRANAJANI.S  SRI VENKATESWARA COLLEGE OF ENGINEERING Prize amount:500  PRAVEEN MANI A UDHAYAVAN V SUJITH.A  VEL TECH HIGH TECH DR RANGARAJAN DR SAKUNTHALA ENGINEERIN COLLEGE Prize amount:500  UDHAYAN V SUJITH A
	CHEMICAL COMPOUNDS HOW WASTE	VINEETH Y VIKRAM S SATHYABAMA UNIVERSITY  Prize amount:1500 M.BALUMAHENDRAN J.JOSEPH REYNOLD M.RAMJI KALASALINGAM UNIVERSITY  Prize amount:1500 KISHORE KUMAR S	RAMJI KALASALINGAM UNIVERSITY Prize amount:1000 VIDHISHA R VEDHA VAISHNAVI R A.C.TECH., TRICHY Prize amount:1000	NIRANAJANI.S  SRI VENKATESWARA COLLEGE OF ENGINEERING Prize amount:500  PRAVEEN MANI A UDHAYAVAN V SUJITH.A  VEL TECH HIGH TECH DR RANGARAJAN DR SAKUNTHALA ENGINEERIN COLLEGE Prize amount:500  UDHAYAN V SUJITH A A PRAVEEN MANI
7	CHEMICAL COMPOUNDS  HOW WASTE STUFF WORKS	VINEETH Y VIKRAM S  SATHYABAMA UNIVERSITY  Prize amount:1500  M.BALUMAHENDRAN J.JOSEPH REYNOLD M.RAMJI  KALASALINGAM UNIVERSITY  Prize amount:1500  KISHORE KUMAR S NAGAPPAN N	RAMJI KALASALINGAM UNIVERSITY  Prize amount:1000 VIDHISHA R VEDHA VAISHNAVI R  A.C.TECH., TRICHY  Prize amount:1000 ADITYAN A	NIRANAJANI.S  SRI VENKATESWARA COLLEGE OF ENGINEERING Prize amount:500  PRAVEEN MANI A UDHAYAVAN V SUJITH.A  VEL TECH HIGH TECH DR RANGARAJAN DR SAKUNTHALA ENGINEERIN COLLEGE Prize amount:500  UDHAYAN V SUJITH A A PRAVEEN MANI VEL TECH HIGH TECH DR
7	CHEMICAL COMPOUNDS  HOW WASTE STUFF WORKS  WORKING	VINEETH Y VIKRAM S  SATHYABAMA UNIVERSITY  Prize amount:1500  M.BALUMAHENDRAN J.JOSEPH REYNOLD M.RAMJI  KALASALINGAM UNIVERSITY  Prize amount:1500  KISHORE KUMAR S NAGAPPAN N  SRI VENKATESWARA	RAMJI KALASALINGAM UNIVERSITY Prize amount:1000 VIDHISHA R VEDHA VAISHNAVI R A.C.TECH., TRICHY  Prize amount:1000 ADITYAN A  SRI VENKATESWARA	SRI VENKATESWARA COLLEGE OF ENGINEERING Prize amount:500 PRAVEEN MANI A UDHAYAVAN V SUJITH.A VEL TECH HIGH TECH DR RANGARAJAN DR SAKUNTHALA ENGINEERIN COLLEGE Prize amount:500 UDHAYAN V SUJITH A A PRAVEEN MANI VEL TECH HIGH TECH DR RANGARAJAN DR
7	CHEMICAL COMPOUNDS  HOW WASTE STUFF WORKS	VINEETH Y VIKRAM S  SATHYABAMA UNIVERSITY  Prize amount:1500  M.BALUMAHENDRAN J.JOSEPH REYNOLD M.RAMJI  KALASALINGAM UNIVERSITY  Prize amount:1500  KISHORE KUMAR S NAGAPPAN N	RAMJI KALASALINGAM UNIVERSITY  Prize amount:1000 VIDHISHA R VEDHA VAISHNAVI R  A.C.TECH., TRICHY  Prize amount:1000 ADITYAN A	NIRANAJANI.S  SRI VENKATESWARA COLLEGE OF ENGINEERING Prize amount:500  PRAVEEN MANI A UDHAYAVAN V SUJITH.A  VEL TECH HIGH TECH DR RANGARAJAN DR SAKUNTHALA ENGINEERIN COLLEGE Prize amount:500  UDHAYAN V SUJITH A A PRAVEEN MANI VEL TECH HIGH TECH DR

### செயிண்ட் ஜோசப்ஸ் பொறியியல் கல்லூரி செயிண்ட் ஜோசப்ஸ் கல்லூரிக் குழுமம் தமிழ் மன்றம்

### பட்டிமன்றம் அறிக்கை - 2016

செயிண்ட் ஜோசப்ஸ் பொறியியல் கல்லூரியில் டாக்டர். எம்.ஜி.ஆர். அவர்களின் பிறந்த நாள் விழாவை முன்னிட்டு 20.02.2016 அன்று செயிண்ட் ஜோசப்ஸ் பொறியியல் கல்லூரி தமிழ் மன்றம் சார்பில்

### "திருமணத்திற்குப் பின் அதிகம் விட்டுக் கொடுத்து வாழ்வது ஆண்களே! பெண்களே!"

என்ற தலைப்பில் பட்டிமன்றம் நடைபெற்றது.

கல்லூரித் தலைவர் கர்னல். டாக்டர். ஜேப்பியார், நிர்வாக இயக்குனர் டாக்டர். பாபு மனோகரன், இயக்குனர் திரு. ஜெயகுமார் கிறிஸ்து ராஜன், முதல்வர் டாக்டர். வட்டி சேஷகிரி ராவ் ஆகியோர் முன்னிலையில் நடைபெற்ற இந்த பட்டிமன்றத்தில் முனைவர். உரு. இராஜேந்திரன் நடுவராக பொறுப்பேற்று "திருமணத்திற்குப் பின் அதிகம் விட்டுக் கொடுத்து வாழ்வது பெண்களே!" என்று தீர்ப்பு வழங்கினார். ஆசிரியர்களும், மாணவர்களும் நடுவரது நகைச்சுவையான பேச்சைக் கேட்டு மகிழ்ந்தனர்.

பெண்களே! என்ற அணியில் மாணவர்கள் M. சுவாதி (I EIE), J. ஆஸ்டின் ஞான செல்வன் (I ECE), J.R. ஸ்ரீ வித்யா (I IT), S. கமலஸ்ருதி (I ICE), J. நூரூல்அமீன் (I CIVIL) ஆகியோரும்,

ஆண்களே! என்ற அணியில் மாணவர்கள் S. அருண் (I CHEM), K. பொன் நந்தினி (I ICE), R. கௌதம் குமார் (I CSE), V. சௌந்தர்யா (I IT), E.M.தினேஷ் (I ICE) ஆகியோரும் பங்கேற்று வாதிட்டு அனைவரது பாராட்டுக்களையும் பெற்றனர்.

இவர்களில் **J.R. ஸ்ரீ வித்யா** மற்றும் **E.M.தினேஷ்** ஆகியோரை சிறந்த பேச்சாளர்களாக தேர்வு செய்து, கல்லூரித் தலைவர் அவர்கள் ரொக்கப்பரிசு ரூபாய் 1000 அளித்து பாராட்டினார். பங்கேற்ற அனைவருக்கும் பங்கேற்பு சான்றிதழ் வழங்கப்பட்டது.

#### VALUE ADDED COURSES

Our college is always one-step ahead in motivating and shaping up our students towards their career development. In this aspect, we are conducting value added courses, which are courses beyond their curriculum, designed to enhance the knowledge of the students in their core fields and specialize themselves in the latest technologies pertaining to their chosen field of studies. Completing such value added courses makes the students to:

- Enhance their learning skill, technical creativity and innovative ideas.
- Gain exposure towards recent trends in core fields augmenting their employability.
- Endeavor them for higher studies in India and abroad.
- Compete with the fellow students globally.
- Carryout innovative projects thereby contributing to research and development.

Our institution has signed Memorandum of Understanding (MoU) with many leading organizations to organize value added courses to students, to take up specialized courses, which are currently being used in the industries. The students have the option to choose the courses according to their desires and inclinations. During the last academic year, students have undergone various value-added courses based on their interest. In our department many students were benefited and the details are given below.

Department	Year	Value added Courses	No of Students
CHEMICAL ENGINEERING	III	ANSYS CFD	70
CHEMICAL ENGINEERING	III	ONLINE course C LANGUAGE	55

Totally 7 days (21<sup>st</sup> -28<sup>th</sup> march 2016) practical classes were conducted on **ANSYS CFD** by **ARK** (**MIND BOX**).

70 students gained knowledge about ANSYS CFD

#### ONLINE COURSE C AND C++ COURSE

• 55 students from 3<sup>rd</sup> year Chemical Engineering attended ONLINE course on C language conducted online by IIT, Bombay through spoken tutorial program, Anna University, Chennai, conducted at St. Joseph's College of Engineering.

#### II YEAR VALUE ADDED COURSES -- C, C++

Value Added Courses are provided to students with an aim to teach and train in programming skills.. The goal is to accelerate the programming capability needed for solving scientific and real time problems demanded by the corporate world. Students have options to choose the courses according to their desire and inclination. It is great boon to our students, in expertise various Value Added Courses which enables them to face the formidable challenges.

C/C++ course was provided by **Eye open Technologies and NIIT** from 14/03/2016 to 19/03/2016 and around **72 students are benefited by the course.** 

#### **Course Objective – C/C++**

To facilitate the fundamentals of structured and Object Oriented programming concepts and to enhance the programming aspects in C/C++.

#### The outcome of this course is to enable the students to

- Identify the usage of complex data types to solve scientific and real world problems.
- Identify the major elements in an object-oriented programming language.
- Implement operator overloading.
- Select the proper class protection mechanism.
- Derive classes using inheritance in C++.
- Demonstrate the use of virtual functions to implement polymorphism.
- Write programs utilizing the I/O classes in C++.
- Understand some advanced features of C++ including templates, exceptions, and multiple inheritance.

It is a matter of pride that the courses are taught by the experts from industries using the laboratory facilities available in our institutions to meet the requirements of industry

On successful completion of such value added courses make the students to:

- ✓ Accelerate the programming skills
- ✓ Carryout innovative projects
- ✓ Compete with the fellow students during placement and interview process.

#### BEST OUT GOING STUDENT AWARD LIST 2015 - 2016

Success is not the destination that we reach. Success is the quality of our journey. The quality of the journey depends upon the goals we set and the mentors we choose. The quality of the mentor lies in appreciating even the smallest efforts as appreciation is the only tool which enables us to build the impossible. Mankind's greatest achievements have come about by constant encouragement. Our greatest hopes could become reality in the future if our efforts are recognized. With this the possibilities are unbounded. All we need to do is to appreciate and encourage the young minds as most achievers are people who have made a strong and deep dedication to pursue a particular goal. St. Joseph's recognizes this dedication by awarding the student with "The Best Outgoing Student Award". The most prestigious and most awaited award ceremony of the year "The Best Outgoing student Award" for this year was held in the St. Joseph's indoor Auditorium.

The criteria of best outgoing students are

- \* Good in academics (CGPA)
- \* Good communication skills
- \* Best managerial skills
- \* Active participation in extracurricular & co- curricular activities.
- \* Attendance (not taken more than 4 days in a semester)
- \* Got placed or got admission for higher studies (secured good score in GRE or GATE exam if admission is not confirmed)
- \* Brought laurels to the department or college
- \* Organized activities at department level or college level
- \* Not undergone any disciplinary proceedings and maintaining neat dress code
- \* Quality of final year project.

The students from various departments were selected as best outgoing students by the faculty members of the respective department. The faculty members select the best students by voting. The student who gets the highest number of votes would be awarded the best student award for the year. The Best outgoing students were felicitated by the Managing Director Dr. B. Babu Manoharan.

The following table shows the names of students from various departments selected as best outgoing student

Department	Name of	the Student			
CSE	Mr. R. ABHILASH	Ms. N.B. SOUNDARYA			
ECE	Mr. D. ALLEN PAUL	Ms. R. NANDINI			
EEE	Mr. S. VENKATA SUBRAMANIAN	Ms. S.S. SHANU			
IT	Mr. G. KANTHIVEL	Ms. R. ABINAYA			
MECH	Mr. R. KARTHIK				
CHEMICAL	Mr. G. ARAVIND				
BIO	Ms. M. ABHINAYA				
ICE	Ms. R. KAVIYA				
EIE	Mr. M.N. MATHEWS EMMANUEL SORIS Ms. Y. NIKITA				
MCA	Mr. M. RAVICHANDRA	ΔN			
MSC	Ms. G. SIVARANJANI				
MBA	Mr. A. SINGARAM Ms. D. KEERTHANA				
COGNIZANT BEST OUTGOING STUDENT AWARD R. ABHINAYA B. Tech (IT)					
N.	Best Sports Person Award NARASIMHA PRIYA S BIO TECH				

#### ACHIEVERS DAY 2016

Achievers day is celebrated every year during the month of April, in which students who brought laurels to the College during the academic year are honoured and rewarded.

Achievers Day for the Academic year 2015-16 was celebrated on 9. 04. 2016. The students who won various competitions have been invited. The invitees were



- Total Sports and Games Teams : 312 Players
- Inter-collegiate Paper presentation, Symposium, Conference position winners: 1463
   Students
- **Blood donors** from **Youth Red Cross**: **53** Students
- Members of **Tamil Mandram**: **20** Students
- Members of Our College **Student Orchestra** Team : **44** Students
- Inter-collegiate **Cultural Competition** Winners: **43** students

No. of Students Hounoured	Total Amount Distributed
1876	Rs. 17.13 Lakhs

On the whole 1876 Students of our college belonging to various categories mentioned above were honored by distributing cheques and certificates on this special occasion.

This special function started at 6.30 P.M. with the High Tea followed by the distribution of Gifts. This event was made even more startling by our College Orchestra team and Dance Program by the students. The event ended at 9.00 P. M. with Splendid Vegetarian and Nonvegetarian Dinner.

#### OVERALL SPORTS ACHIEVEMENTS

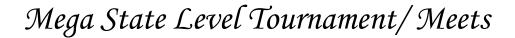
We proudly announce

that we have achieved

## Over All Championship

for the past 13 years

In the following



Conducted for all the

Engineering Colleges/ Arts Colleges in Tamilnadu

#### 1. ANNA UNIVERITY INTER ZONAL TOURNAMENTS

From 2003 to 2015

Conducted for 631 Engineering Colleges in Tamilnadu

### 2. TIES (TAMIL NADU INTER ENGINEERING SPORTS)

From 2003 to 2015

Conducted for 631 Engineering Colleges in Tamilnadu

#### 3. JETS

From 2003 to 2016

Conducted for Arts, Science and Professional Colleges in South India

### 4. St. JOSEPH'S INTER COLLEGIATE ATHLETICS MEET

From 2003 to 2015

Conducted for Arts, Science and Professional Colleges in South India

### SPORTS ACHIEVEMENTS: 2015-16

VOLLEY BALL -	WOMEN	VOLLEY BALL - M	IEN	
XXI State Level Volley Ball	III Place	Lakshmi Nagar Sports Club Volley	Winnres	
Tournament	III I lace	Ball Tournament(Nanganallur)	Willines	
Zone-III	Runners	ONGC State Volley Ball	Runners	
		Tournament(Thiruvarur)		
SA Trophy	Runners	Bharathi Volley Ball Club State	Winners	
T J		Level Tournament(Pondy)		
PSN Trophy(Thirunelveli)	Runners	Zone-III	Winners	
JETS-2016	Winners	Sawyerpuram State Volley Ball	III Place	
		Championship(Tuticorin)		
HOCKEY (M	MEN)	Anna University Inter Zone	Runners	
,		(Trichy)		
Zone III	Winner	Kalasalingam State Level Volley	Runners	
		Ball Tournament(Srivilliputhur)		
Inter Zone	Runner	CM Trophy State(Chennai)	Runners	
CM Trophy-2015	Runner	65 <sup>th</sup> Senior State Volley Ball	Join Winners	
		Championship(Ooty)	With Iob	
IIT Trophy-2015	Runner	Veltech Tournament(Chennai)	Winners	
Park CET Trophy-2016	Runner	Sairam Trophy-2016	Winners	
IIT Trophy-2016	Winner	BADMINTON - WO	MEN	
		Zone III	Runner	
FOOT BALL (	(MEN)	Sairam Trophy-2015	Runner	
		WEIGHT LIFTIN	G	
TNPESU Trophy-2015	Runner	Inter Zone (Weight Lifting)	Runner	
Saveetha Trophy-2016	Runner	Inter Zone (Power Lifting)	Runner	
JETS-2016	Runner	Inter Zone (Best Physique)	Runner	
HANDBAI	LL	KABADDI - WOMEN		
ZONE III	Runner	Inter Zone	3 <sup>rd</sup> Place	
D A DIMINITION	MEN	TNPESU Trophy	Winner	
BADMINTON	– MIEN	Karunya University Tournament	3 <sup>rd</sup> Place	
Zone III	Sairam Trophy-	PSN Trophy-2016	3 <sup>rd</sup> Place	
	2015	Jets -2016	Winner	
Sairam Trophy-2015	Runner	KABADDI - MEN	Ň	
JETS-2016	Winner	TNPSEU Trophy	Winner	
TENNIS – W	OMEN	Zone III	Winner	
Interzone	3 <sup>rd</sup> Place	Inter Zone	Runner	
TENNIS – M		PSN TROPHY-2016	3 <sup>rd</sup> Place	
Zone III	Runner	Sairam Trophy -2016	Winner	
SA Trophy 2016	Runner	JETS -2016	3 <sup>rd</sup> Place	
Saveetha Trophy2016	Winner	K L University Trophy-2016	Winner	
IIT Trophy2016	Runner	BALL BADMINTON-	MEN	
CHESS – WO	MEN	Zone III	Winner	
MOP Trophy-2016	Runner	7 <sup>th</sup> All India Ball Badminton		
		Tournament		
Jets-2016 (Women)	3rd Place	Bertram Layola Trophy-2016	Winner	
CHESS –(COM	BINED)	Inter Zone	Winner	
Zone III	Runner	Ms & Mrs Baulraj Memorial Ball	Runner	
SSN Trophy-2015	Runner	Badminron 'B' Grade Tournament		
S A Trophy-2016	Runner	State Level 2 Sr. Ballbadminton	Winner	
JETS-2016 (Men)	Runner	Tournament For Men		
BALL BADMINTON	N - WOMEN	R S Puram 2 Sr.Ballbadminton Men	Winner	
Zone III	Runner	Tournament		
		1	Ъ	
Sairam Trophy-2015	Runner	B S Abdur Rehman Tournament	Runner	
Sairam Trophy-2015  TABLE TENNIS		B S Abdur Rehman Tournament  Jets-2016 'A' Team	Winner	

Sairam Trophy-2015 Winner		BASKET BALL - WOMEN		
SA Trophy-2016	3 <sup>rd</sup> Place	Zone-III	Runner	
JETS-2106	Winner	Sa Trophy-2016	Winner	
TABLE TENNIS – WOMEN		MOP Vaishnava Trophy-2016	3 <sup>rd</sup> Place	
Zone III	Winner	IIT Trophy-2016	Runner	
Inter Zone	Winner	JETS -2016	3 <sup>rd</sup> Place	
Sairam Trophy-2015	Winner	BASKET BALL (MEN)		
SSN Trophy-2015	Winner	St.Joseph's Ragavendra Basket Ball	RUNNER	
		Men & Women Tournament		
MOP Trophy-2016	Winner	ZONE-III	Winner	
JETS-2106	Winner	Karunya University Tournament	Runner	
WEIGHT LIFTING, PO	WER LIFTING,	B.S.Abdur Rahamman Tournament	Runner	
BEST PHYSIQUE(MEN)				
Inter Zone (Weight Lifting)	Runner	SVEC Trophy-2016	Runner	
Inter Zone (Power Lifting)	Runner	JETS-2016	Runner	
Inter Zone (Best Physique)	Runner			

### ANNA UNIVERSITY BLUES 2015-2016

S. No	Name	Year/ Branch	Game	S. No	Name	Year/ Branch	Game
1	M.D.AASIPSHARIF	I (MBA)		17	A.A.PRASANNA RAJ	III (EIE)	
2	B.ARAVINDAN	II (MBA)	BALL	18	J.JAIN JINI JO	IV CHEM)	
3	S.MUTHUKUMAR	I(MBA)	BADMINT ON	19	K.PRAVEEN KUMAR	III (EIE)	Volley Ball
4	BOKKA SOMA SEKAR BABU	II (MBA)		20	S.PALANI	III (EIE)	
5	D.KARTHIKEYAN	IV (CHEM)		21	K.PRAMOTH	III (EIE)	
6	A.RANJITHKUMAR	III (EIE)	KABBADI	22	B.DHANUS KUMAR	II (IT)	Badminton
7	A.NALINI	IV(ICE)		23	M.PERUMAL	I (MBA)	***
8	M.NANDHINI	III (EIE)		24	J.SATHISH RAJ	I (EIE)	Weight Lifting
9	S.AJAY ESWARAN	II (ICE)		25	M.R.KANNAN	I (MBA)	Litting
10	C.SARATH BABU	II (ECE)	HOCKEY	26	S.ELAVARASAN	II (CIVIL)	
11	V.HARIS KUMAR	III (EIE)	110011	27	U.ALLEN PRABDU	I (MBA)	Power Lifting
12	R.ATHITYAN	II (CIVIL)		28	P.VIJI	I(MBA)	
13	S.SANMATHI	II (CSE)		29	K.NAGARAJAN	I(MBA)	
14	RAVEENA DEENADHAYALAN	II (B.TECH)	TABLE TENNIS	30	P.VENUGOPAL	I (ME)	Best
15	S.DHAKSHIN RAJ	II (IT)		31	M.NITHYANAND AM	I(MBA)	Physique
16	S.SRIJITH	II (CSE)	TENNIS	32	M.S.PAVAN GUPTA	I (ECE)	Swimming

### ATHLETICS ACHEIVEMENTS: 2015-16 (MEN)

NAME	YEAR	COMPETITION	EVENT	PLACE
M.SATHISH	IV		ZONE III 5000MTS	I
KUMAR			INTER ZONE 1500MTS	II
		ATHLETICS	KARUNYA UNIVERSITY 1500MTS	I
			INTER ZONE 1500MTS	III
			INTER ZONE CROSS COUNTRY	III

#### SPECIAL OCCASIONS

**IFDHAR** Our College celebrated Ramzan on **15<sup>th</sup> July 2015**. All the Muslim students in our college undergone fasting within the campus. The early morning food called as "sahar" according to the muslim custom, was served with delicious items by the college in the mess at 4.30 a.m. In the evening, the Muslim students are well served for the "ifthihar" that is for breaking the fasting at 6.30 p.m, dates and cool drinks along with the porridge. The hostel students attended Namaz in their respective hostel rooms. Special Namaz was conducted at 1.00 p.m on Fridays. During Ramzan fasting period, prayers were conducted in our college mosque.

Onam The festival of rice harvest was celebrated on 21<sup>st</sup> August 2015 with great spirituality and delight. All Malayali students came with full rejoice to participate on this special occasion. Our Beloved Managing Director attended this festival with his family and conveyed his wishes to all the students. Malayali students dressed up in their traditional wear, particularly girls wearing the kasavu saree and performed kaikottikali, Malayalam pattu and Nadakam. The celebration was called off with the grand dinner where the menu includes aviyal, erussery, pulissery, nenthram pazham and different types of payasams.

**Teachers Day** Our College celebrated the Teachers day as a special occasion from  $2^{nd}$ ,  $3^{rd}$ ,  $4^{th}$  **September 2015**. The students entertained the respective departments faulty members with unique shows on that special day. Our Management gave gifts to all the teachers of our college as a token of appreciation.

Vinayaka Chathurthi Our college celebrated Vinayaka chathurthi on 17<sup>th</sup> September 2015. Lord Vinayaka's birthday was celebrated by decorating the Ganesha Statue in our college temple with flowers. Pooja was grandly performed in the temple in the presence of our beloved Managing Director's family. Delicious food was offered to the lord and Kozhakatai was distributed to the students. Many students came forward to participate on that occasion and filled in with all blessings of Ganesha.

**Ayudha pooja** Our College celebrated Ayudha Pooja on **20**<sup>th</sup> **October 2015.** The traditional Ayudha pooja celebrations took place by arranging Kolu for 9 days in our college from the day of Mahalaya Amavasya till Vijayadasami. On this special day, all the laboratories and office were beautified with plantain trees, mango leaves and glazing papers which was followed by a pooja in the presence of Chairman and Managing Director's family. The remarkable parts on this celebration were the mouthwatering lunch, sweets and ice creams that were served for all the students and staff. Gift vouchers for deepavali were distributed on the day of ayudha pooja to administrative staff, technical staff, nontechnical staff, drivers, sweepers, scavengers, workers in the mess and daily wage workers.

**Deepavali** The festival of lights is celebrated with full delight and enthusiasm. Deepavali is the most expected festival by all. This year the festival of lights was celebrated on 7<sup>th</sup> **November 2015.** On this special eve, a grand lunch with exotic dishes ranging from mouth lingering sweets till delicious deserts was served.

**Deepam** Kaarthigai Deepam is celebrated on the full moon day in the Tamil month of Kaarthigai. This festival is known for brighten lights. The deepam celebrations took place in our college on

24<sup>th</sup> November 2015 with lamps lighted by the divine flame that is believed to fend off evil forces and escort ecstasy and prosperity.

**Padi pooja** The festival was celebrated in our college on 12<sup>th</sup> **December 2015** by decorating the holy steps of Ayyappa with flowers and silk clothes and lighting traditional lamp. Managing Director, Staff and Students attended the pooja and "irumudi" was tied to those who went to sabarimala. Traditional songs were sung in pooja and a grand feast was given to those who attended pooja.

**Christmas** Christmas is the season of joy, of holiday greetings exchanged, of gift-giving, and, of families united. The Christmas celebrations took place in our college campus on **18**<sup>th</sup> **December 2015**. On Christmas day, a special mass was conducted in our college chapel. The celebrations included a rythmic performance from our college choir and an add-on surprise package by the Santa clause. The staffs and students were completely spellbound with the Christmas gratification and the day was called off with a hearty lunch.

**Pongal** Pongal is an occasion that is believed to chime in the opulence. It is renowned as a thanksgiving festival for various Hindu deities. "Thai" is the first month of the Tamil Almanac. This joy-filled Pongal occasion was celebrated in our college on the **8**<sup>th</sup> **January 2016**. The day's lunch was served with different varieties of Pongal. Indeed, Pongal is a festival of freedom, peace, unity and compassion crystallized in the last hymn on unity in the Indian spiritual text the Rig Veda.

Hostel Day Hostel day is one of the most awaiting occasion of the year in St. Joseph's college of Engineering. This wonderful day was celebrated in our college on 19<sup>th</sup> March 2015 with lots of events conducted for both boys and girls. The Hostel was decorated with colour lamps and balloons making it more eye-catching. Cricket, Volleyball, Basketball, kabaddi matches were held and the winners and runners were awarded with cash prizes. Cultural events such as Singing, Skit and Dance were performed in the presence of our beloved Chairman, Managing Director and Director. Matches and other events were conducted 3 days prior to hostel day. Special Dinner and snacks was provided to the hostilities. At last, the day ended with whole masthi and fun.

Easter Our College celebrated Easter on 23<sup>rd</sup> March 2016. Easter is the springtime holiday marking the rebirth of Jesus and the renewal of the Christian faith. A special program was conducted by St. Joseph's College Fellowship in our college Placement Cell which was attended by students and staff. The celebrations started with worship songs and prayer. Heartfelt wishes were shared among everyone and end off with holy blessing of God.

**Ugadi** Our college celebrated Ugadi on 8<sup>th</sup> **April 2016**. The Telugu New year festival popularly called as Ugadi comes close on the heels of Holi. This day of celebration is marked by religious fanaticism and social jollity. Special dinner was served for the hostel students. Exotic dishes made with raw mango went on well with the occasion. Ugadi which is considered to be the most auspicious time to start new ventures was indeed a cheerful and a memorable celebration to be remembered by the staffs and students of our college.

**Tamil New Year** Our college celebrated Tamil New year on **15**<sup>th</sup> **April 2016.** The Tamil New year festival popularly called as Puthandu. It is the celebration of the first day of the traditional Tamil calendar. The day is marked with feast and decorated with kolams. Special lunch was served to all.

#### ARTICLES

#### **MICROFLUIDICS**

Microfluidics refers to the behavior and control of liquids constrained to volumes near the µL range. They were first invented in 1980s, mainly used for inkjet printers. It is an multidisciplinary field with an wide variety of applications. A microfluidic channel is same as that of width of human hair, 70µm.All processing steps are done on a chip, no user interaction required. Advantages include low sample and reagent consumption, and also makes use of effects in the micro domain like capillary forces, laminar flow. Some of the applications include use of magnetic particles in systems for drug delivery, resonance imaging. Microfluidics is still in development, the solutions to these emerging technique require more imagination and ingenuity.

#### -NANDHINI G

II Year chemical

#### MICRO FLUIDS IN DRUG DELIVERY

Micro fluidics i.e. the science engineering of fluid flows in microscale, can be the answer for a more effective and targeted drug administration. Indeed, one of microfluidics' main application, the socalled lab-on-a-chip (LOC) can provide a platform for both drug synthesis and delivery. These two aspects are crucial and strictly related for a good release into the Furthermore, the uses organism. microfluidic devices for drug administration have other advantages, such as the reduction of both pain and risk of

side effects. Finally, beside the aforementioned advantages, microfluidics brings further improvements in cost, user-friendliness, safety and portability.

#### -SINTO STEPHEN

II Year chemical

# APPLICATION OF MICRO FLUDICS IN PH CONTROL

The ultimate goal in micro fluidics is to so-called laboratory-on-aachieve the chip, i.e. integrate all those activities which are usually performed laboratory within a single micro fluidic chip. In the last years, huge steps towards this direction have been made: micro fluidic devices are used indeed in a handful of applications, ranging from physics to biomedicine. Moreover, the implantation of several functions in a single chip not only gives obvious advantages over portability and costs, but miniaturization also allows to biochemical phenomena down to cellular scale.

#### -SUPRIYA B

II Year chemical

#### **MICROFLUIDICS**

Microfluidics is a science that deals with the flow of liquids inside micrometer size channels. With the inherent advantages associated with its scale of operation, and its flexibility in being incorporated with other microscale techniques for manipulation and detection, microfluidics has become a major enabling technology. The chemical and life sciences sectors are engaged in developing a wide range of analytical and diagnostic applications which demands that microfluidics be

incorporated Microfluidics has been used in materials science mainly for improvement of nanoparticle synthesis, namely metal, metal oxide, semiconductor nanoparticles. It is both a science and a technology. It offers great revolutionary and new capabilities for the future. It is also in its infancy, and a great deal of work needs to be done before it can be claimed to be more than an active field of academic research. However, fundamentals of the field are very strong much of the world's technology requires the manipulation of fluids, and extending those manipulations to small volumes, with precise dynamic control concentrations, while discovering exploiting new phenomena occurring in fluids at the micro scale level, must, ultimately, be very important.

# - VISHALI G II Year chemical

#### **MICROFLUIDICS - MICRO SCALE**

Microfluidics is the science that deals with the flow of liquids inside micrometer-size channels. Imagine an entire laboratory that can fit inside the palm of your hand. Microfluidics has paved the way for labon-a chip. This chip includes integrated pumps, electrodes and valves with the help of which fluid flow can be analyzed in micrometer to pico-meter range. When the dimensions of a device or system reach a certain size as the scale becomes smaller, particles particles of fluid, or suspended in the fluid, become comparable in size with the apparatus itself. This dramatically alters system behavior and Capillary action changes the way in which fluids pass through micro scale-diameter tubes, as compared with macro scale

channels. This has opened new doors of research in the field of DNA analyses, cell biology, droplet generation and manipulation, drug carriers. Its main advantages are, very small sample, cost efficiency, parallelization, diagnostic speed, greater sensitivity and reduction in work space. This field of science is a new dawn which will be recorded in the pages of history.

#### -YAMUNA E

II Year chemical

# APPLICATION OF MICROFLUIDICS IN CHEMICAL ENGINEERING

Chemical engineering refers to an applies engineering branch that physical/biological sciences, mathematics, and economics to the development of production processes that convert raw materials to valuable products on an industrial scale. These processes established by combining different basic steps (unit operations), such as fermentation, filtration and drying. With advances in science and engineering, new products require processes to increase in both production scale and complexity with integrated processing steps. For decades, scaling up from benchtop via a pilot plant to a full blown one has been the standard practice of the development of industrialscale production processes. However, this practice is now faced with challenges from more stringent requirements, such as size and cost reductions in equipment, lower energy consumption and waste emission, and a safer operation environment, due to the new trend of using sustainable production schemes in these processes. To address these challenges, an approach called "process intensification" has been adopted

to develop improved production processes. It focuses on developing new equipment and methods that lead to more costeffective and sustainable processes Since the dawn of microfluidics in the 90s, it has made significant progress as demonstrated by the piling up research results. Microfluidics has found many biological applications, such gene/protein as and analysis, manipulation cell-based systems, biosensors, and drug discovery and delivery. Microfluidic devices have recently come into attention as a powerful tool for process intensification because of their low fabrication costs and reagent consumption, small form factors for safe operation in a controlled environment, and capability of integrate multiple basic steps onto one chip. A lot of work has been the directed to development microreactors for chemical and biological processes. For downstream processing, microfluidic devices have been used to develop systems for separation of cells and purification of therapeutic compounds. The results so far are very promising for miniaturized processes. More information on process miniaturization can be found in the literature.

#### - SNEHA

III Year chemical

#### MAGNETIC MICROROBOT AND ITS APPLICATION IN A MICROFLUIDIC SYSTEM

Microrobot is a hot research field in robotics. Using microrobots as a tool to surgery *in vivo* has the advantages of small trauma, safety, reliability, and significant reduction of medical costs and rehabilitation duration, so entering the liquid environment of the human body and making *in vivo* detection and treatment are an important developing

direction of microrobots. Recently, many researches on microrobots have carried out a lot of various actuation methods for microrobots, such as electromagnetic chemical bubble actuators actuators swimming tail actuators bacterial actuators and so on. Especially, the electromagnetic driving method has many advantages. First, electromagnetic field can be used to drive the microrobot with high controllability through changing the currents of the electromagnetic coils. Second, magnetic field will not cause harm or side effects to humans.

#### - ROHINI

III Year chemical

# APPLICATIONS OF MICROFLUIDIC DEVICES IN FOOD ENGINEERING

The design of novel food micro-structures aimed at the quality, health and pleasure markets will probably require operations where the scale of the forming device is closer to the size of the structural elements (i.e., 1–100µm). One emerging possibility is microfluidics or devices that employ small amounts of fluids (10-6 to 10–91) flowing in channels where at least one dimension is less than 1mm. However, under these conditions, the predominant effects are not necessarily those present in conventional macroscopic unit operations. **Dominant** physical effects microfluidic scale are introduced through the use of dimensionless numbers. Different types of geometries to generate multi-phase flows in micro-channels, techniques and materials to construct the micro-devices, principally soft lithography and laser ablation, as well as methods used to modify surface properties of channels, are reviewed. The operation of microdevices, the role of flow regimes, rheological behaviour of fluids in microchannels and of transient time is discussed. Finally, systems developed to generate emulsions and foams, fluid mixing and dispersion, and future applications of these devices in food processing and food analysis are presented.

#### - SRIVIDYA

III Year chemical

# MICROFLUIDIC EMULSIFICATION IN FOOD PROCESSING

Microfluidic systems, characterized by micro-meter sized channels, are used in a variety of applications. In foods, the most common application is in the preparation of emulsions where they provide accurate control over droplet size, and shape of internal structures. This paper gives an different microfluidic overview of emulsification techniques i.e., shear driven spontaneous droplet generation, and together with their current limitations. Next a comparison is made on the basis of various parameters affecting the process of emulsification. At the end, an outlook is scale-up of microfluidic given on emulsification for preparation of foodrelated products.

# - SATHISH KUMAR III Year chemical

# MEASUREMENT OF CO<sub>2</sub> DIFFUSIVITY FOR CARBON SEQUESTRATION: A MICROFLUIDIC APPROACH

Predicting carbon dioxide CO<sub>2</sub> security and capacity in sequestration requires knowledge of CO(2) diffusion into reservoir fluids. A microfluidic based

the approach to measuring mutual diffusion coefficient of carbon dioxide in water and brine. The approach enables formation of fresh CO<sub>2</sub>-liquid interfaces; the resulting diffusion is quantified by imaging fluorescence quenching of a pHdependent dye, and subsequent analyses. This method was applied to study the effects of site-specific variables-- CO<sub>2</sub> pressure and salinity levels--on coefficient. diffusion In contrast established, macro-scale pressure-volumetemperature cell methods that require large sample volumes and testing periods of hours/days, this approach requires only microliters of sample, provides results within minutes, and isolates diffusive mass transport from convective effects.

#### - BALAJI

III Year chemical

#### MICROFLUIDICS-BASED BIOCHIPS

MICROFLUIDICS-BASED biochips for biochemical analysis are receiving much attention nowadays. These composite microsystems, also known as lab-on-a-chip bio-microelectromechanical system (MEMS), offer a number of advantages over conventional laboratory procedures. They automate highly repetitive laboratory tasks by replacing cumbersome equipment with miniaturized and integrated systems, and they enable the handling of small amounts, e.g., micro- and nanoliters, of fluids. Thus, they are able to provide ultrasensitive detection at significantly lower costs per assay than traditional methods, and in a significantly smaller amount of laboratory space. Advances in microfluidics technology offer exciting possibilities in the realm of enzymatic analysis (e.g., glucose and lactate assays), deoxyribonucleic acid (DNA) analysis

[e.g., polymerase chain reaction (PCR) and nucleic-acid sequence analysis], proteomic analysis involving proteins and peptides, immunoassays, and toxicity monitoring. emerging application An area microfluidics-based biochips is clinical diagnostics, especially immediate point-ofcare diagnosis of diseases. Microfluidics also be used for countering can bioterrorism threats. Microfluidics-based devices, capable of continuous sampling and real-time testing of air/water samples biochemical for toxins and other dangerous pathogens, can serve as an always-on "bio-smoke alarm" for early warning.

# - NAVANEETHA KRISHNAN III Year chemical

#### MICRO AEROSPACE SOLUTIONS

Micro Aerospace Solutions has been working on a micro-scale Fluorescent Activated Cell Sorter (FACS). This device is designed to be hand held and allow sorting of cells that have fluorescent characteristics such as green fluorescent protein (GFP) or live/dead staining. It could also be applied to any antibody or other staining system that takes advantage of fluorescence. The FACS system takes advantage of microfluidics to create a cell sorter that can fit in the palm of the hand. The system can also be tailored to counting other cell-types, molecules and particles. Applications include lab-on-achip systems, field-based medical instruments and small satellite/spacecraft scientific instruments. Applications for hand-held medical diagnostic devices in developing areas of the world are of high interest.

- MUTHU SELVAM

III Year chemical

#### MICROFLUIDIC FUEL CELLS

A microfluidic fuel cell is defined as a fuel cell with fluid delivery and removal, reaction sites and electrode structures all confined to a microfluidic channel. Microfluidic fuel cells typically operate in a co-laminar flow configuration without a physical barrier, such as a membrane, to separate the anode and the cathode. This article review summarizes the development of microfluidic fuel cell technology, from the invention in 2002 until present, with emphasis on theory, fabrication. unit cell development, performance achievements. design considerations, and scale-up options. The main challenges associated with current status of the technology provided along with suggested directions for further research and development. Moreover. microfluidic fuel cell architectures show great potential for integration with biofuel cell technology. Microfluidic biofuel cell developments to date and presents opportunities for future work in this multi-disciplinary field.

# - GOVARDHAN III Year chemical

# MICROFLUIDIC AEROSOL MONITOR

microfluidic The particle separator particles based separates on the aerodynamic particle diameter. **Particle** separation concept has been demonstrated separation of micron for the particles. The separation efficiency is limited by lateral dispersion. The separation efficiency can be improved through design optimization. Integration of the optical detector

#### - JAYASHREE

III Year chemical

#### LEADING THE NANO-REVOLUTION IN PARTICLE SIZE REDUCTION

Since 1982, Microfluidics has been setting the standard for nanoemulsion and nanoparticle applications. Whether you're working in the pharmaceutical, biotech or another sector, our technology provides targeted size reduction at lower pressures, attaining superior particle distribution profiles and guaranteed lab-to-production scale performance.

Our Microfluidizer leads the industry with higher yields of active ingredients and greater control over process repeatability.

Smaller Particles, Bigger Results

No other high-pressure processor is capable of generating the shear levels routinely achieved by Microfluidizer®. Our machines consistently achieve superior results significantly greater particle reductions and remarkably distributions. particle size you nanotechnology depend on for innovative products with unprecedented properties and undeniable advantages over your competition — Microfluidics on for pressure homogenizers that are leading the global nano-revolution.

# - RAJA RAJA CHOZHAN.P IV Year chemical

#### **OIL AND GAS**

Microfluidic technologies are ideal for the development of new test methods to extract crude which can be trapped in porous rock, mixed with contaminants, or

be in a dynamic state where the extraction method may have to be altered quickly.

Microfluidic chips allow easy mixing, filtration and optical measurements, high temperature/pressure analysis as well as modelling of fluid flow in porous rock.

Dolomite offers a range of products ideal for: Modelling fluid flow in porous rock Quick and easy asphaltene measurements in crude

#### - ARAVIND.G

IV Year chemical

#### MICROFLUIDICS FOR FOOD, AGRICULTURE AND BIOSYSTEMS INDUSTRIES

Microfluidics. a rapidly emerging enabling technology has the potential to food, agriculture revolutionize biosystems industries. Examples of potential applications of microfluidics in food industry include nano-particle encapsulation of fish oil, monitoring pathogens and toxins in food and water supplies, micro-nano-filtration for improving food quality, detection of antibiotics in dairy food products, and generation of novel food structures. In addition. microfluidics enables applications in agriculture and animal sciences such as nutrients monitoring and plant cells sorting for improving crop quality and production, effective delivery of biopesticides, simplified in vitro fertilization for animal breeding, animal health monitoring, vaccination and therapeutics. Lastly, microfluidics provides new approaches for bioenergy research. This synthesizes paper information of selected microfluidicsbased applications for food, agriculture and biosystems industries.

#### -NANDHINI PRIYA

IV Year chemical

Department Of Chemical Engineering	Microfluidics