

### Advantage MSRIT

- ♦ Proven track record spanning 50 years, in engineering education
- ♦ Strategically located in the heart of Bangalore City offering excellent connectivity and convenience
- ♦ State-of-the-art infrastructure and facilities comparable to international standards
- ♦ Highly qualified and committed faculty, constantly evolving teaching methodology
- ♦ Faculty to student ratio of 1:15 - among the best in the industry
- ♦ Industry-oriented instructional content to ensure strong synergy with the changing requirements
- ♦ Strong relationships with leading names in the industry
- ♦ Several departments involved in various prestigious projects
- ♦ Focus on all round development to enable professionals to deliver in a dynamic ecosystem
- ♦ Excellent placement record - 90-95% achieved year-on-year

### Various education institutions under Gokula Education Foundation (GEF)

M S Ramaiah Institute of Technology	M S Ramaiah College of Advanced Studies
M S Ramaiah Medical College	M S Ramaiah Indology Centre
M S Ramaiah Medical Teaching Hospital	M S Ramaiah Memorial Hospital
M S Ramaiah Institute of Nursing Education & Research	M S Ramaiah Narayana Hrudayalaya Heart Center
M S Ramaiah Dental College	Gokula Ayush Arogyadhama
M S Ramaiah College of Pharmacy	International Medical School Kutpm
M S Ramaiah College of Hotel Management	Gokula Curie Cancer Centre
M S Ramaiah Composite Junior College	M S Ramaiah Composite Pre-University College
M S Ramaiah College of Arts, Science & Commerce	M S Ramaiah High School
M S Ramaiah Vidyanyikethan	M S Ramaiah Drugs and allied Products Testing Laboratories
M S Ramaiah Institute of Management Studies	M S Ramaiah College of Education
M S Ramaiah College of Law	M S Ramaiah Advanced Learning Centre
M S Ramaiah Institute of Physical Medicine & Rehabilitation	M S Ramaiah Institute of Neuro Sciences
M S Ramaiah Polytechnic	M S Ramaiah Centre for Rehabilitation

#### Education

The only person who is educated is the one who has learned how to learn and change.

**Carl Rogers**

Knowledge will bring you the opportunity to make a difference.

**Claire Fagin**

Education is our passport to the future, for tomorrow belongs to the people who prepare for it today.

**Malcolm X**

#### Health Corner - Eye Care

Carrots loaded with beta carotene are helpful in maintaining healthy eyes. Broccoli, bell peppers, and brussels sprouts are great for the eyes as they contain lots of vitamin C. Wild salmon and sardines are also healthy options for your eyes as they contain omega-3 fats which are good fats for your body. Omega-3s protect tiny blood vessels in the eyes.

Sweet potatoes and spinach round out the healthy options for maintaining good eyes as they contain beta carotene. Spinach contains lots of vitamin C, lutein and zeaxanthin.

### M.S. RAMAIAH INSTITUTE OF TECHNOLOGY

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Sampige



A QUARTERLY NEWS BULLETIN OF MSRIT

Chief Editor: Dr. S.Y. Kulkarni

Editor: Dr. V. Ramachandra Murthy

Volume 1: No. 3

September 2013

#### Chief Editor

**Dr. S Y Kulkarni**  
Principal

#### Editor

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HOD, Dept. of Mathematics

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Assistant Professor, Dept. of ECE

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### From the editorial board

#### Message from the Principal and Chief Editor



*It is my pleasure to present another issue of "Sampige" with details on the activities of MSRIT and also achievements of our staff and students.*

*All efforts have been spared to compile information about the activities of the institution effectively*

*since we consider this news letter as an effective communication tool. I am also happy to note that "e-sampige" is now available on our website for the information to all our parents, students and other stake holders.*

*With you all a happy reading*

Best wishes,

**Dr. S. Y. Kulkarni**

#### Message from the Editor



*Friends,*

*I am glad to present to you our next issue of Sampige. As you know, our objective is to provide brief and accurate information on the latest activities at MSRIT and I must acknowledge the wholehearted participation and contribution from all stakeholders towards making achieving this.*

*I wish to mention that your valuable inputs and participation are welcome and will go a long way in improving the experience further.*

*Look forward to your support as always*

**Dr. V. Ramachandramurthy**



## Founder Chairman Dr. M. S. Ramaiah (1922 - 1997)



Industrious and enterprising, Dr. M. S. Ramaiah is among Karnataka's illustrious sons and an engineering contractor of national repute. He founded 'Gokula Education Foundation' in 1962 without expecting any kind of assistance from the establishment with an objective of serving the society. M.S. Ramaiah Institute of Technology (MSRIT) was born under the aegis of

this foundation in the same year, creating a landmark in technical education in India. Through the years MSRIT has imparted quality engineering education, accessible thousands from across India and abroad, facing a lack of opportunity to pursue higher education.

Widely acknowledged as a visionary, educationist, industrialist and philanthropist, Dr. M. S. Ramaiah personally ensured that the institution which began with just two disciplines, grew phenomenally over the years. MSRIT now offers Bachelors, Masters, and Doctorate programmes in several disciplines and is recognised as one of India's leading names in technical education. The institution is equipped with state-of-the-art laboratories, well stocked libraries and has highly qualified, experienced and dedicated faculty. In tune with the noble ambitions and aspirations of Dr. M.S. Ramaiah to keep the institution growing and developing continuously so as to become a 'Jnana Sagara', all departments are continuously engaged in implementing appropriate procedures to initiate, include and conduct unique programmes keeping in touch with the emerging requirements of the industry.

*Hearty Congratulations!*



Students from Mechanical Engg. participated in the SUAS-UAV competition organized by the US Navy at Maryland USA in July 2013. The team stood 5th Place among the 43 teams from across the world.



Jayethri Bardhan, student of Instrumentation Engg., department, MSRIT, receiving the Avery Dennison Foundation Spirit of Invention (InvEnt) Scholarship, an all India merit-based recognition where students will receive 1300 USD.





## ACADEMIC CALENDER YEAR 2013 – 2014

### Academic Calender for M.Tech, MBA, M.Arch & MCA

Item	M.Tech	MBA	M.Arch	MCA
Registration and Commencement of Class Work	19-9-13	19-9-13	19-9-13	19-9-13
IA Test – I	7-11-13 to 9-11-13	7-11-13 to 9-11-13	7-11-13 to 9-11-13	7-11-13 to 9-11-13
Last Date for Dropping the Course Initially Registered	18-11-13	18-11-13	18-11-13	18-11-13
IA Test – II	2-12-13 to 4-12-13	2-12-13 to 4-12-13	2-12-13 to 4-12-13	2-12-13 to 4-12-13
IA Test – III	2-1-14 to 4-1-14	2-1-14 to 4-1-14	2-1-14 to 4-1-14	2-1-14 to 4-1-14
Last Date for Withdrawal from the course Initially Registered	6-1-14	6-1-14	6-1-14	6-1-14
Last Working day of Odd Semester	8-1-2014	15-1-2014	18-1-2014	8-1-2014
Tentative Date of Commencement of Examinations	20-1-14	20-1-14	27-1-14	20-1-14
Tentative Dates for Announcement of Results	15-2-14	15-2-14	15-2-14	15-2-14
Commencement of even Semester	3-2-14	3-2-14	3-2-14	3-2-14

### Academic Calender for MCA

Item	III, V Semester	Item	II, IV Semester
Registration/ Commencement of the class work	19-8-13	Registration /Commencement of Even Semester	16-1-2014
IA Test – I	26-9-13 to 28-9-13	IA Test – I	27-2-2014 to 1-3-2014
Last Date for Dropping the Course Initially Registered	7-10-13	Last Date for Dropping the Course Initially Registered	7-3-2014
IA Test – II	7-11-2013 to 9-11-13	IA Test – II	31-3-2014 to 2-4-2014
IA Test – III	2-12-13 to 4-12-13	IA Test – III	1-5-2014 to 3-5-2014
Last Date for Withdrawal from the course Initially Registered	10-12-13	Last Date for Withdrawal from the course Initially Registered	7-5-2014
Last Working day of Odd Semester	11-12-13	Last Working day of Even semester	10-5-2014
Commencement of Examinations	23-12-13	Practical Examinations	12-5-14 to 17-5-2014
Announcement of result	14-1-14	Commencement of Examinations	21-5-2014
		Announcement of result	4-6-2014
		Fast Track classes	2-6-2014 to 12-7-2014

### Academic Calender for MBA

Item	III Semester	IV Semester
Registration/ Commencement of the class work	19-8-13	10-2-14
IA Test – I	26-9-13 to 28-9-13	10-3-14 to 12-3-14
Last Date for Dropping the Course Initially Registered	7-10-13	24-3-14
IA Test – II	7-11-2013 to 9-11-13	10-04-14 to 12-04-14
IA Test – III	2-12-13 to 4-12-13	19-05-14 to 21-05-14
Last Date for Withdrawal from the course Initially Registered	10-12-13	26-05-14
Last Working day of Odd Semester	11-12-13	31-5-14
Commencement of Examinations	23-12-13	9-6-14
Announcement of result	14-1-14	1-7-14

### Academic Calender for M.Tech

III Semester
19-8-13
26-9-13 to 28-9-13
7-10-13
7-11-2013 to 9-11-13
2-12-13 to 4-12-13
10-12-13
11-12-13
23-12-13
14-1-14

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## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING



- Department conducted three day workshop on Micro and Nano technology, under TEQIP-II, from 25th to 27th April 2013. Eminent researchers and scientists from around the country like IISc, BEL, SITAR, IBM and Intellisense delivered lectures during the workshop.
- Department has organized Industrial visit to Toyodonki Power Systems on 27th April 2013 for VI Sem Students to improve their practical knowledge & Industry competitiveness.

### Papers presented in (International / National) conferences

- Ramya. N and Pradipkumar Dixit** - "Effect of Adjustable Speed Drives (ASD's) on AC motor winding insulation", Proceedings of National Conference on Recent Advances in Electrical & Electronics Engineering (NCREE – 2013), Davangere, Paper No.39, pp.47-50, June 17th – 18th, 2013.
- Manasa G. P and Pradipkumar Dixit** - "Thermal stress on AC motor winding insulation due to harmonics", Proceedings of National Conference on Recent Advances in Electrical & Electronics Engineering (NCREE – 2013), Davangere, Paper No.39, pp.28-30, June 17th – 18th, 2013.
- Ramesh Kumar V and Pradipkumar Dixit** - "One-Day-Ahead Electrical Load Forecasting Using Artificial Neural Network", Proceedings of 2nd International Conference on Information &

Communication Engineering (ICICE-2013), ISBN: 978-93-81693-66-02, Bangalore, India, Organized by Institute for Research and Development India (IRD India), pp. 9-12, 25th August, 2013.

### Achievements - Faculty

- Dr. Pradip Kumar Dixit** - Chaired the session in the National conference on Recent Advances in Electrical and Electronics Engineering (NCRAEE) on 17th June 2013, organized by UBDTCE, Davangere.

### Achievements - Students

- Vishnu.G.N, Rashmi, Sheetal and Pradeesh** of VI Sem won best white paper award at Blaze 2013 for the paper titled "Save More Pay Less Tariff" conducted by Schneider Electric on 30th May 2013.
- Sharada Srinivasn** Secured Breaking Adjudicator position at Mount Carmel parliamentary Debate held at Mount Carmel College, Bangalore on August 30th 2013.



### Guest Lectures

- Mr Suresh H. M, Manager in ACG Engineering department** Toyodonki Power Systems, Bangalore gave a talk on "Design consideration for applications requirements of AC generators on 30th April 2013.

### Guest Lectures - delivered by the dept faculty

- Dr.PremilaManohar** "Introduction to HVDC Transmission systems" PSTI, Bangalore, on 23rd April 2013 and 4th Aug 2013.





- Dr.PremilaManohar "MEMS Technology" one week Faculty Development Program on "Micro and Nano Technology", 5-9 August 2013, GNDCE, Bidar.
- Dr.PradipKumar Dixit "Outdoor Insulation - A Review", Five Days faculty development program on Insulation and High Voltage Engineering, 11th to 15th June 2013, organized by Dept of E&EE, Dr. AIT, Bangalore.
- Dr.PradipKumar Dixit "A New Mathematical model to predict pollution flashover voltage of porcelain disc insulators", Five Day faculty development program on Insulation and High Voltage Engineering, 11th to 15th June 2013, organized by Dept. of E&EE, Dr. AIT, Bangalore.
- Dr.PradipKumar Dixit "EHV Transmission" L&D Program on Power System Reliability, on 4th August 2013, A customized short-term training program taken up by PSTI, Bangalore during 4th - 9th August, 2013.
- Dr.PradipKumar Dixit "Power System Outages" Three day Faculty Development Program me on 'Advances in Renewable and Power Engineering'-impulse towards Green Environment on 26th July 2013, organized by Dept. of E & E , S J B Institute of Technology, Bangalore

### DEPARTMENT OF MECHANICAL ENGINEERING DEPARTMENT



Department organized a One Day Seminar On - **Wind Energy Technology and Sustainability on 10th August 2013.**

### Publications in (International / National) Journals

- **Dr. V Ravi** - 'A Study on Heat Transfer Characteristics of Ethylene Glycol based Nanofluid and Carbon Nanotube (CNT) Mixture in Nucleate Pool Boiling', International Journal of Mechanical Engineering Research & Applications, Vol.1, Issue 4, pp 28-33, 2013.
- **Dr. Mohandas K N** - 'Prediction of Cutting Forces Developed during Hard Turning of Hard Chrome Plated Surfaces on EN24 Substrate', Journal of Mechanical Engineering, Vol.10, N1, 2013, pp49-65, 2013.
- **Dr. Mohandas K N** - 'Optimization of Surface Roughness during Hard machining of Hard Chrome Plated Surfaces on EN24 Base Substrate', International Journal of Mining, Metallurgy and Mechanical Engineering, Vol.1, Issue2, pp160-163, 2013.
- **Dr. Mohandas K N** - 'Characterization of As Cast and Heat Treated Aluminium 6061/Zircon sand/Graphite Particulate Hybrid Composites', International Journal of Engineering and Advanced Technology, pp340-344, Vol.2, N5, 2013.
- **Dr. S. Krishna** - 'Planetary gear train Mechanism for converting rotary to intermittent motion', Research India Publication, Vol-3, No.1, pp1-7, 2013.
- **Dr. Putta Bore Gowda** - 'Innovative Strategies for Sustainability of Wind Power Plants', International Journal of Advanced Engineering and Global Technology (IJAEGT), 2013.

### Achievements - Students

- **SUAS - UAV - US Navy, Maryland USA.** June 2013 - The students from Department of Mechanical Engineering, participated in the SUAS - UAV - Competition organized by US Navy at Maryland USA B/w - June - July 2013. The team stood 5th Place among the 43 teams that participated from across the world. The team stood in top position in various rounds which included Journal, Design and Fabrication, Control System Design, Oral Presentation and Flying Competition.



### ACADEMIC CALENDER YEAR 2013 - 2014

#### Academic Calender for BE

Item	I Sem	III, V, VII Semester	Item	II, IV, VI, VIII Semester
Orientation	1-8-2013 to 3-8-2013	-	Registration/ Commencement of Even Semester	16-1-2014
Registration/ Commencement of class work semester	5-8-2013	19-8-2013	IA Test - I	26-2-2014 to 1-3-2014
IA Test - I	26-9-2013 to 28-9-2013	26-9-2013 to 28-9-2013	Last Date for Dropping the Course Intitally Registered	7-3-2014
Last Date for Dropping the Course Initially Registered	7-10-2013	7-10-2013	IA Test - II	1-4-2014 to 3-4-2014
IA Test - II	7-11-2013 to 9-11-2013	7-11-2013 to 9-11-2013	IA Test - III	3-5-2014 to 6-5-2014
IA Test - III	2-12-2013 to 4-12-2013	2-12-2013 to 4-12-2013	Last Date for Withdrawal from the course Initially Registered	8-5-2014
Last Date for Withdrawal from the course Initially Registered	10-12-2013	10-12-2013	Last Working day of Even semester	10-5-2014
Last Working day of Odd Semester	11-12-2013	11-12-2013	Practical Examinations	21-5-2014 to 17-5-2014
Practical Examination	12-12-2013 to 19-12-2013	12-12-2013 to 19-12-2013	Commencement of Examinations	21-5-2014
Commencement of Examinations	23-12-2013	23-12-2013	Announcement of result	4-6-2014
Announcement of result	14-1-2014	14-1-2014	Fast Track classes	2-6-2014 to 12-7-2014





## RANK HOLDERS (2013)

## BACHELOR'S DEGREE

## CHEMICAL ENGINEERING

JYOTHI C K  
RANK - ISNEHA SURESH  
MADGAONKAR  
RANK - IILAKSHMI KUMARI R  
RANK - III

## MEDICAL ELECTRONICS

PAVITHRA P  
RANK - ISRAVANI S N  
RANK - IIPRIYANKA KAMATH K  
RANK - III

## INDUSTRIAL ENGINEERING AND MANAGEMENT

MANASWINI S  
RANK - IKALPITH NAVALAKHA  
RANK - IIJAGRITH  
JHUNJHUNWALA  
RANK - III

## BIOTECHNOLOGY

VEENA VISWANATHAN  
RANK - IANUSHA S  
RANK - IIMANOJ D A  
RANK - III

## TELECOMMUNICATION ENGINEERING

SHIKHA GUPTA  
RANK - INEHA TRIPATHI  
RANK - IISHIVANI PRASAD  
RANK - III

## BACHELOR OF ARCHITECTURE

SRUSHTI GOUD  
RANK - IANUSHA A  
RANK - IIPALLAVI UDAY KUMAR  
RANK - III

## INSTRUMENTATION TECHNOLOGY

KURIAN T R  
RANK - ICHAITRA N  
RANK - IISHREEMATHI T K  
RANK - III

## ELECTRICAL &amp; ELECTRONICS ENGINEERING

HARIS AZEEZ  
RANK - ISHRUTHI B  
RANK - IIVIJETHA K R  
RANK - III

- Two students from Department of Mechanical Engineering participated in CAD Design Competition at IIT - Madras and won the 1st Prize. They were offered a free trip to LAS VEGAS, USA to attend the Autodesk University 2013. World's largest CAD Conference. The students received a cash prize of 1, 20, 000 INR from Autodesk India.



## Guest Lecture - by Department Faculty

- Prof P. L. Srinivasa Murthy - 'Design of Machine Elements and Kinematics of Machines', A.P.S. College of Engineering, 22nd and 29th April 13.

## Funded Project

- Jaya Christiyan K G - 'Innovative development of turbocharger impeller using fused deposition modelling technique'.

Grant- Rs.75,000/-.

## Faculty who obtained Ph.D degree



Dr. Niranjan Murthy, was awarded Ph.D by JNTU- Hyderabad for his work on 'The cooling of a simulated electronic component using multiple jet impingements'.



Dr. Mohandas K N awarded Ph.D by JNTU- Hyderabad for his work on 'Optimization of process parameters using design of experimentation on chrome coated EN24 substrate by hard machining with TI-AL-N coated PCBN inserts'.

## DEPARTMENT OF CIVIL ENGINEERING



- Department has conducted a two days workshop on "Curriculum Development Using Outcome Based Education (OBE) in Engineering" on 27th & 28th June 2013 under TEQIP Phase II. During this program Dr. K. Rajanikanth was felicitated.



- Conducted a one day workshop on "Occupational health and safety management at work place" on 29th July 2013 under TEQIP Phase II.

## Publications in (International / National) Journals

- T. Geetha Kumari, C.G Puttappa, C. Shashidar, K.U. Muthu - 'Flexural characteristics of SFRSCC and SFRNC one way slabs'. International Journal of Research in Engineering and technology, Volume 2, Issue 7; July 2013.

## Faculty who obtained Ph.D degree



Dr. H. Narendra was awarded Ph.D degree by VTU for his work 'Experimental and Analytical Investigations on Structural Elements with self compacting concrete'.





## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

- The department organised Project Exhibition on May 7th and 8th, 2013 for final year students. About 200 students exhibited both hardware and software projects. The projects were based on Microcontroller and Embedded systems, Signal Processing, Image Processing, VLSI, Wireless Communication, etc. Sri. Arvind Shrivastava, IAS, Secretary to Govt. (Expenditure), Finance Department, Government of Karnataka, inaugurated the exhibition and Dr. Srish Kumar, World Bank Economist, USA was the chief guest.



- The department organized Faculty development program on 'Advances in Signal Processing and Pattern Recognition' from 29th July to 3rd August 2013. The primary objective of the workshop is to introduce the audience to various areas of signal processing and pattern recognition. The purpose of this course is to provide in-depth treatment on methods and techniques in discrete-time signal transforms, digital filter design, adaptive filtering, power spectrum estimation, multi-rate digital signal processing and pattern classification using MATLAB, which are of importance in the areas of signal processing, control, communications and biometrics. Applications of these methods and techniques are also considered. The intend audience are research students, industry professionals and faculty working in the above mentioned areas and related technical fields.



Faculty development program on  
'Advances in Signal Processing and Pattern Recognition'

William Shockley Jr. the famous American physicist and co-inventor of the transistor was a popular as speaker, lecturer, and an amateur magician. He was also an accomplished rock climber. Recalling his role in the IT revolution at a meet, an organizer said "Shockley is the man who brought silicon to Silicon Valley".



## RANK HOLDERS (2013)

### BACHELOR'S DEGREE

#### CIVIL ENGINEERING



SUMALATHA D P  
RANK - I



GAUTAM KUMAR JHA  
RANK - I



AVINASH OSWAL  
RANK - II



ABHISHEK SINGH  
RANK - III



RUDRARADHYA  
SWAMY H M  
RANK - IV

#### ELECTRONICS & COMMUNICATION ENGINEERING



VIDYA V  
RANK - I



PRATHIK P  
RANK - II



JAYADEV R DEVAGIRI  
RANK - III



NAVEEN N MURTHY  
RANK - III



SURABHI A R  
RANK - IV

#### MECHANICAL ENGINEERING



SANJAY K S  
RANK - I



V SRIKANTH  
RANK - II



NISHA PRAKASH  
RANK - III



SOUVIK GHOSH  
RANK - IV

#### COMPUTER SCIENCE AND ENGINEERING



ANITHA T S  
RANK - I



MEGHA KUMARI  
RANK - II

#### INFORMATION SCIENCE AND MANAGEMENT



SONALI BISHWAS  
RANK - I



RAKESH SHARMA  
RANK - II



SHIVANI  
RANK - III



SHASWATHI  
RANK - III



PRAVEEN  
SRIDHAR HEGDE  
RANK - III



NISHANT S P  
RANK - IV



**Industrial Engineering and Management****Mr. Deepak Kumar** - Assistant Professor

**Mr. Deepak Kumar** completed B.Tech (Production Engineering) from NIT SURAT and M. Tech (Industrial Engineering) from NIT TRICHY. Presently pursuing Ph.D at VTU, Belgaum. He has 4 years of teaching experience. His area of interest is Supply Chain Management.

**Computer Science and Engineering****Sowmya B J** - Assistant Professor

**Sowmya B J** has completed her BE from Channabasaveshawara Institute of Technology in the year 2008, and M Tech in Software Engineering from MSRIT in the year 2013. She has three years of teaching and one year of IBM ISL as an intern experience.

**Department of Humanities****Mr. Udayakumar** - Assistant Professor

**Mr. Udayakumar**, Hiremath completed MA (English), M.Ed, M.Phil, PGDELT and pursuing his MBA (HR) from Canara Bank School of Business Management Studies from Bangalore University. He has 8 years of

teaching experience at UG and PG level. He has presented research papers at national and international conferences in the area of Literature, Education and published articles in international journals. He worked as an editor for Kannada monthly school magazine for three years.

**Sports****Mr. H K Kiran Kumar** - Director of Physical Education

**Mr. H K Kiran Kumar** joined as Director of Physical Education. He obtained his Bachelor's and Master's degrees from Bangalore University and M.Phil from Bharathiar University, Coimbatore. He is currently

pursuing his Ph.D degree in Physical Education in Karpagam University, Coimbatore. He has specialized himself in Athletics and Cricket. He has participated and own Silver medal in Long Jump event in All India Inter University Athletic Meet & Amateur Athletic Meet. He has represented many times state and university in the events Hand Ball, Athletics, Cricket, Basketball, Volleyball and Kabaddi. He has had a vast and illustrious experience as Physical Education Director at SJRCW, Bangalore for 6 years and at Global Academy of Technology, Bangalore for over 7years, before joining MSRIT.

I've missed more than 9000 shots in my career. I've lost almost 300 games. 26 times, I've been trusted to take the game winning shot and missed. I've failed over and over and over again in my life. And that is why I succeed.

- Michael Jordan

It's just a job. Grass grows, birds fly, waves pound the sand. I beat people up.

- Muhammad Ali

If winning isn't everything, why do they keep score?

- Vince Lombardi

Gold medals aren't really made of gold. They're made of sweat, determination, and a hard-to-find alloy called guts.

- Dan Gable

Don't look back. Something might be gaining on you.

- Satchel Paige

I regard golf as an expensive way of playing marbles.

- Gilbert K. Chesterton



- The department organized Farewell function to Final Year M.Tech students on 29th June 2013



Final Year M.Tech- Farewell function

- The department organized Farewell function to Final Year B.E students on 25th April 2013.



Final Year B.E – Best outgoing students being awarded

**Publications in (International / National) Journals**

- Maya V Karki, S. Sethu Selvi** - 'Multimodal Biometrics at Feature Level Fusion using Texture Features', International Journal of Biometrics and Bioinformatics (IJBB), vol. 7, issue 1, pp. 58 – 73, ISSN online 1985-2347, June 2013.

**Papers presented in (International / National) conferences**

- V Anandi, R Rangarajan** - 'RTL Power estimation for large design, a survey' International conference, Global Innovations in Technology and Sciences, Saint GITS College of Engg, Kottayam, Kerala, April 2013.

**Guest Lectures**

- Prof. M. A. Laxmi Tatachar, Sanskrit Scholar, Melukote** - 'Speech Recognition and Analysis using Pannian Parameters', 26th April 2013.
- Dr. R Kumaraswamy, SIT, Tumkur** - 'Basics of Signal Processing', 29th July 2013.
- Prof. Srinivasa Halavi, DSCE, Bangalore** - 'Random Signals', 29th July 2013.
- Dr. C R Pradeep, CIT, Tumkur** - 'Principal Component Analysis, 29th July 2013.
- Dr. Ashok Rao** - 'Introduction to Linear Algebra', 30th July 2013.
- Dr. K Koshy George, PESIT, Bangalore** - 'Least Mean Squares Estimation', 30th July 2013.
- Dr. J. R. Raol, NAL** - 'Data Fusion', 30th July 2013.
- Dr. VPS Naidu, NAL, Bangalore** - 'Image Fusion, 31st July 2013.
- Dr. S V Gangashetty, IIITH, Hyderabad** - 'Speech Processing', 31st July 2013.
- Dr. A G Ananth, RVCE, Bangalore** - 'Image Processing of Remote Sensing Images', 31st July 2013.
- Dr. P. S. Shastry, IISc, Bangalore** - 'Introduction to Pattern Recognition', 1st August 2013.
- Dr. H S Jayanna, SIT, Tumkur** - 'Multi Linguistic speaker identification', 1st August 2013.
- Dr. R N V Sitaram, HP Labs, India** - 'Hidden Markov Models', 2nd August 2013.
- Dr. Ravindra Dhuli, VIT, Vellore** - 'Multirate signal processing and filter banks', 3rd August 2013.

**Faculty who obtained Ph.D degree**

**Maya V Karki**, was awarded Ph.D. degree for her work on 'Multimodal biometrics based on texture features' by VTU.





## DEPARTMENT OF CHEMICAL ENGINEERING

- National Level Students Technical Symposium – RASAYAN 2013 was held on 12th April 2013 by the dept. of Chemical Engineering. The Department of Chemical Engineering is organizing this event for students of Chemical Engineering from all over India since 2003. The major attractions of the event were the paper/poster presentation, junk it and M.S. Ramaiah Memorial Technical Quiz. Students from different institutions all over India participated in larger number. The Chief Guest, Dr. Rita Saha, Scientist C, Central Pollution Control Board, Kolkatta delivered the key note address. She talked about the theme of the Seminar 'go green' for sustained development and the need to groom the younger generation towards conservation of environment.



- Three day faculty development program (FDP) on "Process modeling and simulation using aspen plus and aspen hysys" was organized by the department during 12th to 14th August, 2013. The three day FDP was inaugurated on by Sri M Raghurama, Vice President, Desmet Chemfoods India (P) Ltd. Bangalore. In his inaugural address he spoke on importance of Process simulation software and quoted industry case studies how it had made the process design

more efficient. Dr. Murali Rangrajan, Mata Amritanandamayi Institute, Coimbatore gave an introduction to Modeling and Aspen software interface. Sri Anil Kumar from Chemtex, Bangalore gave a talk on detailed heat exchanger design using Aspen Plus. Sri Mahesh S, Chemical Engineer, Sabic Innovative Plastics, focussed on detailed design and simulation of distillation column. There were lab sessions on Introduction to Aspen Interface, Property estimation and detailed design of process flow sheets using Aspen Plus.

### Publications in (International / National) Journals

- G M Madhu H.N. Chandrakala, Shivakumaraiah, Siddaramaiah** - 'Investigation on the influence of sodium zirconate nanoparticles ( $\text{Na}_2\text{ZrO}_3$ ) on the structural characteristics and electrical properties of polyvinyl alcohol nanocomposite films', Journal of Alloys and Compounds, 551, 531–538, 2013.
- G M Madhu, N C Pradhan** - 'Removal of cadmium from aqueous streams by zeolite synthesized from fly ash', Journal of Materials and Environmental Science, 4(3), 410-419, 2013.
- Rajeswari M Kulkarni** - 'Biosorption of nickel (II) from aqueous solution using Bacillus laterosporus', Prospects in Bioscience: Addressing the issues" DOI 10.1007/978-81-322-0810-5\_50.

### Papers presented in (International /National) conferences

- Archana, G. A. Shareef and Rajeswari M Kulkarni** - 'Lead removal by adsorption on ZSM-5 zeolite Equilibrium and Kinetic Studies', International Conference on Advances in Chemical Engineering (ICACE-2013) NIT, Raipur, 05th April 2013.

- Although oxygen gas is colorless, the liquid and solid forms of oxygen are blue.
- The human body contains enough carbon to provide 'lead' (which is really graphite) for about 9,000 pencils.
- Hydrogen is the most abundant element in the universe, while oxygen is the most abundant element in the earth's atmosphere, crust, and oceans (about 49.5%).



## NEW APPOINTMENTS

### Mechanical Engineering Department

**Syed Aftab Ahmed** - Assistant Instructor



**Syed Aftab Ahmed** - Joined as Assistant Instructor. He earlier worked in IIS - Pvt Ltd which deals with banking related software sales and support. He acquired Bachelors of Science Degree in CBZ.

**Pramod N V** - Mechanic



**Pramod N V** - Joined as Mechanic. He earlier worked in Denso Kirloskar. He acquired ITI - Fitter certificate in the year 2011.

### Civil Engineering Department

**Mr. Anil Kumar. R** - Assistant Professor



**Anil Kumar R** completed his B.E in Civil Engineering and M.Tech in Structural Engineering from Bangalore Institute of Technology. He has work experience of 3 years as Assistant Professor. Presently pursuing Ph.D in Structural Engineering at VTU and has published two International journal papers.

**Ms. B.N. Priyanka** - Assistant Professor



**B.N. Priyanka** completed her B.E in Civil Engineering in BMSCE and M.Tech in Water Resources Engineering and Management from NITK. Her B.E project was adjudged as one of the outstanding projects of the year 2013 by KSCST, IISc Bangalore. She has represented VTU in Kho-Kho in South-West Zone Inter University.

**Mr. Niranjan G Hiremat** - Assistant Professor



**Niranjan G Hiremath** - took his B.E in Civil Engineering in MSRIT and M.Tech in Highway Engineering from RASTA. Worked as a Senior Research Fellow (SRF) in the Department of Civil Engg. (Transportation Dept.) at IISc.

### Electronics and Communication Engineering

**S. Jayashree** - Assistant Professor

**S. Jayashree** - graduated in Telecommunication Engg.



from MSRIT and later served as Lecturer in Sapthagiri College of Engineering, Bangalore, for 1 year. She did her PG in Information and Communication Engg. from University of Applied Sciences, Giessen-Friedberg, Germany in 2012. During her

MS program she worked as an intern at TITAN Commercial Continental Services GmbH, Linden, Germany, for her dissertation entitled "Optimization of Deep Packet Inspection by Hardware Supported Regular Expressions". Her areas of interest are Digital Signal Processing, Deep Packet Inspection, Wireless Communications, Network Security, etc.

**Manjunath C Lakkannavar** - Assistant Professor



**Manjunath C Lakkannavar** received his BE in ECE from SDMCET, Dharwad in 2008 and M.Tech degree in VLSI Design & Embedded Systems from KLE CET, Belgaum in 2010. He joined & served at UTL Technologies Limited, Bangalore for 3 years. He has been a "Session Chair & Guest of Honor" for International Conferences organized by IRNet, Bhubaneswar and is an Expert Panel member of Institute for Innovations in Science & Technology (IIST). He has 8 publications in International Journals and has presented papers in national and International. His areas of interest are VLSI Design Automation, Image Processing etc.





## Sports Achievement

- MSRIT Cricket team participated in VTU Inter Zone Cricket Tournament, held at Sir MVIT, Bangalore from 5th to 10th April 2013 and won the winners trophy.
- MSRIT Basket Women team secured Second Runner up trophy in VTU Single Zone Basketball Tournament held at Sai Vidya IT, Bangalore from 12th to 14th April 2013.
- MSRIT Basket Men team secured Winners trophy in VTU Bangalore North Zone Basketball Tournament held at NHCE, Bangalore from 22nd to 23rd April 2013.
- The department held Sports Achievers Felicitation, Annual Sports Day and Prize distribution Ceremony on 4th May 2013. Sports achievers and prize winners in various sports events were felicitated by the dignitaries in the function. Mr. Nishanth Hegde, Alumni of MSRIT and a franchisee of KPL Malnad Gladiators Team was the Chief Guest of the program.



Achievers Felicitation, Annual Sports Day and Prize distribution Ceremony



Dr. S.Y. Kulkarni Principal, MSRIT, Felicitating prize winners



Shri. S.M. Acharya, CEO, MSRIT, felicitating prize winners

## Fun facts about the Olympics

- The early Olympic Games were celebrated as a religious festival from 776 B.C. until 393 A.D. The games were banned for being a pagan festival (the Olympics celebrated the Greek god Zeus).
- In 1894, a French educator Baron Pierre de Coubertin, proposed a revival of the ancient tradition, and thus the modern-day Olympic Summer Games were born.
- Host Greece won the most medals (47) at the first Olympic Summer Games in 1896.
- The first Winter Olympic Games were held in Chamonix, France in 1924.
- Norway has won the most medals (263) at the Winter Games.
- The United States has won more medals (2,189) at the Summer Games than any other country.
- The five Olympic rings represent the five major regions of the world – Africa, the Americas, Asia, Europe and Oceania, and every national flag in the world includes one of the five colors, which are (from left to right) blue, yellow, black, green, and red.
- Three continents – Africa, South America, and Antarctica – have never hosted an Olympics.
- A record 202 countries participated in the 2004 Olympic Summer Games in Athens.



## Guest Lecture

- Prof. Jayant M Modak** Department of Chemical Engineering, IISc, Bangalore - 'Upcoming areas of Chemical Engineering' 06.09.2013.
- Mr. Rusi Governor**, Freelance Consultant for Chemical Engineering companies-'A case study on R&D', 13.09.2013.

## Guest Lecture - by Department Faculty

- Dr. G.M. Madhu** - 'Synthesis and application of Nano Materials', Central Wood Research Institute, Bangalore, 08th April 2013.
- Dr. G.M. Madhu** - 'Outcome based education and accreditation', JNTUH, Hyderabad, 13 – 15th May 2013.

## DEPARTMENT OF INDUSTRIAL ENGINEERING &amp; MANAGEMENT

- The department of Industrial Engineering and Management conducted one week national workshop on "Optimization of Mathematical Models and their Applications" sponsored and funded (Rs. 6,50,000/-) by DST, New Delhi, from 1st to 6th July 2013. The main objective of the workshop is to promote Industry and Institute interaction and to provide academicians, practitioners and researchers the methodologies involved in Operations Research which are backbones of many business processes which intern enhance the operational performance as well as the business performance of the organization. The workshop helped to spread interest and also impart ability in the Engineering and Management Science faculty to mathematically model real-life systems to improve their effectiveness and efficiency. Expert lectures on various topics including Formulation of Mathematical models, Queuing models, Quality and reliability models, Supply chain models were delivered by the eminent speakers invited from industries and institutes. Over 60 delegates from across the country participated in the workshop. The participants congratulated the organizers and expressed that the workshop was very useful in enhancing their knowledge in the above field.



Prof. P.V. Arunachalam, Former Vice-Chancellor, Dravidian University, Andhra Pradesh inaugurated the national workshop. In his inaugural address he addressed the students and young researchers to take up the challenges that industry is facing and the role of Mathematics in tackling such related issues.



One week national workshop on 'Optimization of Mathematical Models and their Applications' funded by DST.

## Publications in (International / National) Journals

- R. Shobha** – 'Effect of 'Conventional' and 'Sever Plastic Deformation' on 8% TiB<sub>2</sub> reinforce 'In-Situ' aluminum composite'. International Journal of Emerging Technology and Advanced Engineering, in Vol 3, Issue 5, ISSN 2250 – 2459,. Pp 674- 678, May 2013.
- R. Shobha** – 'Severe Plastic Deformation and Its Influence on Mechanical Properties of In-Situ Aluminum Titanium Boride Composite', International Journal of Emerging Research and Applications (IJERA), in Vol. 3, Issue 4, pp.740-744, ISSN: 2248-9622, Jul-Aug 2013.





### Papers presented in (International / National) conferences

- **Dr. N.V.R. Naidu, M. Rajesh** - 'Optimization of levels of tire pressure, vehicle speed and windows status for fuel economy through Taguchi approach' in National Conference on Recent and Emerging Techniques in Mechanical Engineering, at Sri Krishna Institute of Technology, Bangalore, April 2013.

### Guest Lectures - delivered by department faculty

- **Dr. C. S. Chethan Kumar** - 'Mapping of Program Outcomes with Program Educational Objectives' at One week Faculty Development Program on 'Outcome Based Education' Civil Dept., MSRIT, held on 24th to 28th June 2013.

### Funded Projects

- **Dr. N.V.R. Naidu & Dr. C.S. Chethan Kumar** - DST (ongoing) project- 'Mathematical Models in the design and optimization of perishable goods supply chain with an emphasis on fruits and vegetables'.

Grant: Rs. 10.7 lakhs.

- **Dr. N.V.R. Naidu & Sri. M.R. ShivaKumar** - VTU (ongoing) project- 'Development and Characterization of glass reinforced magnesium alloy metal matrix composites', funded by VTU.

Grant: Rs.8 lakhs.

- **Dr. N.V.R. Naidu & Sri. M. Rajesh** - DST (ongoing) project - 'Enhancing fuel economy of automobiles through Design of Experiments' funded by UGC.

Grant: Rs. 9.502 Lakhs.

### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

- The department conducted one week faculty development programme on 'Computer Forensics and Cybercrime' for all TEQIP Phase II institutions during 5th to 10th August 2013. Renowned Academicians, Industry Experts, In-house Experts, Staff Members, UG and PG Students attended actively in the workshop.

- Vocational training programmes were conducted for interested UG students on Introduction to Python, Advanced Java Programming and Competitive Programming for 4-6 weeks during July-August 2013. Dr. K G Srinivasa, J Geetha Reddy, Rajarajeshwari and Pramod Sunagar were the resource persons.

- The Association of Computer Engineers (ACE) has conducted project exhibition in embedded systems on 14th May 2013. Many students actively participated and exhibited their projects in the event. The association also conducted CSE tech fest "Portal" during 26th to 29th April 2013. Several technical events were held and prizes were distributed to the winners. The farewell function was arranged for the 2009-13 batch UG students and 2011-13 batch PG students on 16th May 2013 under the association.

### Publications in (International / National) Journals

- **S. Rajarajeshwari, Sai Ram Prasad Reddy S and Adithya Venkatesh** - 'Improving Real-Time Route Suggestions in Automotive Navigation Systems using Vehicle Cluster Behavior', International Journal of Computer Applications, 76(5), 40-44, Aug 2013.
- **Monica R Mundada, et, al.** - 'Hybrid Energy Efficient Protocol for Stable Concentric Clustering in Heterogenous Wireless Sensor Networks', International Journal Of Computer Applications, Vol 73, No.2, July 2013.
- **S. Rajarajeshwari, Shree Devi B N and Sushma G** - 'Optimal Feature Selection of Speech using Particle Swarm Optimization Integrated with mRMR for Determining Human Emotion State', International Journal of Computer Applications, 74(10), 48-52, July 2013.
- **Annapurna P Patil, Abhinandan Goti** - 'Virtual-IP Routing Architecture Using Open Flow', International Journal of Advanced Research in Computer Science, Vol 4, June 2013.
- **Monica R Mundada, Nishanth Thimmegowda** - 'Clustering in Wireless Sensor Networks: Performance Comparison of EAMMH and LEACH Protocols using MATLAB', Advanced Materials Research, Vol. 705, 337-342, Jun 2013.

Exams were conducted by the volunteers and people were awarded with certificates. This certificate is a proof that the person has excelled in that particular course and hence it is their asset which can provide them with employment. The volunteers were headed under the supervision of Dr. Putta Bore Gowda.



### SPORTS

The department of sports organized VTU state level Men and Women Tennis Tournament from 29th April to 2nd May 2013. The tournament was inaugurated by Mrs. Akshitha B.Raj, Alumni student of MBA department, MSRIT and former VTU and State Tennis player, in the August presence of Sri S.M. Acharya, Chief Executive, GEF (Engg), Dr. S Y Kulkarni, Principal, MSRIT and Dr. R Prabhakar, Vice Chairman, Sports Committee. The four day long tournament witnessed the active participation of 20 men team and 15 women team all over the state. Fianly NIE, Mysore and MSRIT teams emerged as Winners and Runners respectively in the mens section and MSRIT and RVCE, Bangalore teams emerged as Winners and Runners in the women section respectively. Dr. S.Y. Kulkarni, Principal MSRIT distributed the trophies and prizes to the winning teams in the prize distribution ceremony on the concluding day.



Inauguration of VTU State Level Men & Women Tennis Tournament



NIE, Mysore Men's Tennis team with Winners Trophy



MSRIT Men's Tennis team with Runners Trophy



MSRIT Women's Tennis team with Winners Trophy



Vidya Vikas Inst. of Engg. & Tech. Women's Tennis team with Winners Trophy





While nothing can be done to reduce this number, making an attempt to reduce the emissions from these vehicles seems to be a possible solution to reducing air pollution.

### Tree plantation



Following up on one of the most important mottoes of NSS which is "Go Green", a tree plantation programme was organized on 18th August at CQAE, Jalahalli Camp Road. The event began at 10 o'clock in the morning and went on till 5 o'clock in the evening.

Apart from the usual activity of digging and planting trees, the volunteers also helped out in clearing weeds, chopping old branches, uprooting trees. This was a wonderful educational opportunity for the volunteers as well as they learnt the use of different tools, thus giving them an insight into the world of gardening.

### Books Distribution



Before the Special camp started, the student volunteers worked tirelessly on making books for students from unused parts of books used by college students. A little over 4000 new books were made which were ultimately distributed to all the students of the schools adopted under the camp. Additionally, the volunteers distributed dictionaries, geometry set boxes etc which were received by the students heartily.

### Orphanage/Old age home visits



The student volunteers body was divided in groups each group visited an orphanage/orphanage around the campus. This was especially useful for the first year students as it was the first event for them and this helped them understand the nature of activities undertaken by NSS. Several interactive sessions were organised for the kids like drawing competitions, dancing, singing etc and, for the elderly, the students were sympathetic enough to listen to them keenly and distributed clothes, bed sheets and other insulation materials.

### Skill development

Skill development program is one of the regular activities conducted in NSS. This program includes Basic computer course (MS Office, Internet) for under privileged people of the society. The classes were conducted by trained NSS volunteers. The subjects consist of concepts which are useful in developing their practical knowledge. This is a perennial activity wherein after a batch of students there is another batch of students for taking up the course. The volunteers interact with each and every student of the batch to know their ability and capacity and conduct the classes accordingly.



- **T.N.R. Kumar** - 'Location and Detection of Text in a Video', International Journal of Engg. Science & innovation, Vol 2 Issue 5, 20-25, May 2013.
- **Annapurna P Patil, Abhinandan Got I** - 'Green Computing in Communication Networks', International Journal of Computer Applications (0975 - 8887), Vol 68, No 23, April 2013.
- **Seema S, Hamida Honnali** - 'Review on Classification of Genes and Biomarker Identification', International Journal of Computer Applications, Volume 68, 7-14, April 2013.
- **Monica R Mundada, et, al** - 'Cluster Head Location based Base Station Mobility in Wireless Sensor Network', Journal Of Computer Applications 67, NO.17, 45-68, April 2013.
- **Sai Ram Prasad Reddy S, et al** - 'Improving Real-Time Route Suggestions in Automotive Navigation Systems using Vehicle Cluster Behavior', International Journal of Computer Applications, 10.5120/13247-070976(5) 40-44, August 2013.
- **Shree Devi B N, et al.** - 'Optimal Feature Selection of Speech using Particle Swarm Optimization Integrated with mRMR for Determining Human Emotion State', International Journal of Computer Applications, 10.5120/12924-999174(10) 48-52, July 2013.
- **Raveena Kumar, et al.** - 'Chaotic Time Series Prediction for Rock-Paper-Scissors using Adaptive Social Behaviour Optimization (ASBO)', International Journal of Computer Applications, Published by Foundation of Computer Science, New York, USA 10.5120/12931-987874(11) 30-33, July 2013.
- **Mangala K Pai, Jayalakshmi D S** - 'Survey on Privacy and Data Security Issues in cloud computing', International Journal of Engineering and Advanced Technology, ISSN: 2249 - 8958, Volume 2, Issue 5, June 2013.
- **Shobha K, Mamatha V** - 'Simulation of a secure efficient dynamic routing in wireless sensor networks', International Journal of Engineering and Advanced Technology, Vol 2, Issue 5, June 2013.
- **Usha R, Annapurna P Patil** - 'Capacity crunch: can MoSoNets Offload data to solve this', IJCSI Volume 10, Issue 3, May 2013.
- **Siddesh G M and Srinivasa K G** - 'An Efficient Grid Based Replication and Fault Tolerant Middleware, "GRFM", International Journal of Computational Science and Engineering, Inderscience Publishers, Vol.8, No.2, 133-147, April 2013.
- **Pallavi B Kamble, et al.** - 'Cluster Head Location based Base Station Mobility in Wireless Sensor Network', International Journal of Computer Applications. DOI:10.5120/11491-7198 Volume 6711491-7198, April 18, 2013.
- **Nishanth Thimmegowda et al.** - 'Clustering in Wireless Sensor Networks: Performance Comparison of EAMMH and LEACH Protocols using MATLAB' Advanced Materials Research, DOI:10.4028/www.scientific.net/AMR.705.337, Vol. 705337-3422013.

### Papers presented in (International /National) Conferences

- **Raksith, Annapurna P Patil** - 'An Improved Perspective to Agile methodology', 2013 IEEE International Conference on System Engineering and Technology (ICSET 2013), Malaysia, 19-20, August 2013.
- **Jagadish S Kallimani, Srinivasa K G, Eswara Reddy B** - 'Extraction and Interpretation of Charts in Technical Document's', Second International Conference on Advances in Computing, Communications and Informatics (ICACCI 2013), IEEE Catalog Number: CFP13CAF-CDR, ISBN: 978-1-4673-6215-3, SJCE, Mysore, August 22-25, 2013,
- **Varsha Embar, Surabhi Deshpande, Vaishnavi A K, Vishakha Jain, Jagadish Kallimani, Saramsha** - 'Kannada Abstractive Summarizer', Second International Conference on Advances in Computing, Communications and Informatics (ICACCI 2013), IEEE Catalog Number: CFP13CAF-CDR, ISBN: 978-1-4673-6215-3, SJCE, Mysore, August 22-25, 2013.





- **G S Veena, H Sneha, K Ramya, Anupama A Athreyas** - 'Handwritten kannada character recognition using SVM', Second student research symposium (SRS-13), second international conference on advances in computing, communications and informatics, SJCE, Mysore, 22-25 August 2013.
- **Rajarajeswari S, Shalini P Sawkar, Vasudha Viswamurthy Ramya R** - 'Dynamic Evacuation of Route during fire using Ant Colony Optimization and Probability Distribution', International Conference ICHCI'13, Aug 2013.

#### Achievements - Faculty

The institute has started Computer Society of India (CSI) student branch on 19th November 2013. It is also an educational institution member (Membership No. IO2189) of Computer Society of India.

- Annapurna P Patil has been recognized as senior member of IEEE
- **Dr. K G Srinivasa** has been recognized as senior member of IEEE and senior member of ACM.
- Two specialized laboratories with 65 desktop Dell machines with necessary IBM/SAP software to facilitate UG student projects were established in different application domains like IBM Centre of Excellence, Cloud Computing Laboratory and SAP University Alliance.
- The existing R&D Laboratory has been enhanced with the following facilities: one iMac Book 504 Air Core 2 Duo, two Lenovo Think Centre M90 Desktop, three Dell Precision T1500 Workstation with Intel Core i5, one Lenovo Z650-59 Notebook, twenty five GeForce GTX 480 Graphics Cards, one Tesla C2070 High Performance Graphics Card, one Tesla K20 High Performance Graphics Card, one ASUS Maker Power House Model HPC Machine and one Apple Make iMac Desktop.
- Aditya Venkatesh has participated and awarded as best adjudicator in Debate competition at VIT, Vellore and NLSIU, Bangalore during March 29th to 2nd April 2013.
- Many students have got the industry internships at Microsoft, RedHat, McAfee, Intuce, Commvault, SAP, Akamai, SDG Software Pvt. Ltd and buzzhospitals during Jan-Jul 2013 for their internship and project works.

#### Guest Lectures

- **Dr. Badrinath Ramamurthy**, Technical Architect, HP Labs, Bangalore - 'High Performance Computing, 24th August 2013.
- **Mr. Chiranjeev**, SAP India Ltd-'SAP events and SAP Hana', 9th July and 23rd August 2013.

#### Funded project

- **Srinivasa K G** has obtained CUDA Research Centre by Nvidia 2013, in which TESLA K20 GPU and other hardware Accessories are sanctioned.

### DEPARTMENT OF INSTRUMENTATION ENGINEERING

#### Publications in (International / National) Journals

- **A. Saravanan & P. Nagarajan** - 'Artificial Neural Intelligent Visual Inspection for Process Improvement', International Journal of Innovative Research and Development (IJIRD), ISSN: 2278 - 0211, Vol 2, Issue 4 pp 768- 778, April, 2013.
- **H.S. Niranjana Murthy and Dr. M. Meenakshi**, 'ANN Model to predict Coronary Heart Disease based on risk factors', Bonfiring International Journal of Man Machine Interface, ISSN 2277 - 5064, DoI: 10, 9756/ BIJ MHI. 4473, Vol 3, No.2, June 2013

#### Papers presented in (International /National) conferences:

- **A. Saravanan** - 'Control Chart Patterns Using Neural Networks For Real Time Data' 'NCECT 2K13' National conference on Electronics and communication technology, Gojan School of Business And Technology, Chennai, 6th April 2013.

#### Achievements - Students

- The Department renewed ISA (International Society of Automation) student chapter for the benefit of student community and organized invited talk on "Automation" by Dr. K L S Sharma, senior member ISA.
- The third year student Marut Pattanaik participated in National level competition on future India under the title "Setback in Agricultural Productivity" conducted at New Delhi.



### NATIONAL SERVICE SCHEME

#### Special Camp 2012-2013



The inauguration ceremony of the special camp by the NSS wing of MSRIT was held at the MSR High School Ground on the 5th of August, 2013. The ceremony was graced by the presence of the M.R Seetharam, Vice Chairman GEF and Director of MSRIT. Rigorous teaching and interactive sessions were held for the students of adopted schools (MSR High School MSR Nagar, Government Boys PU college, Malleswaram, P.V.P High School, MSR Nagar, Government Girls High School, BBMP PU College). These sessions comprised of English classes, computer classes, craft sessions, elocution training, career counselling sessions, self defence. In addition, the volunteers organised a sports day for the students. The camp was concluded with the prize distribution ceremony and the valedictory ceremony which was held in the MSRIT premises.



#### Eye Check up and spectacles distribution

Free eye check up was conducted by the doctors of Shankara Eye Hospital, Bangalore for the students of the above adopted schools.



Spectacles were made according to the prescription for the students with vision problems and were distributed.



#### Emission testing

"Cleaner air for a greener future". This message is more apt today than it ever was, particularly in huge cities like Bangalore where about a 1000 new motor vehicles are registered every day.





## DEPARTMENT OF PLACEMENT & TRAINING



### "MSRIT IS RECESSION PROOF"

#### Our winter placements was excellent

During sixth semester vacation we have provided **FREE Soft Skills Training** for the students. We started our placement activity for this 2014 batch on **22nd Aug 2013**.

We had campus drives by Mu Sigma, L&T Infotech, Akamai, Bristlecone, Skanray Health Care, SAP Labs, Mahindra, JP Morgan, Unisys, HP, Capgemini, L&T Construction, Hindustan Uniliver, ABB, Bosch, Volvo, SapientNitro, Arincen, Oracle, Tesco, Ernst & Young, Societe Generale, Juniper Networks, Aryaka, Genpact, Atkins, Avtec, Moonraft Innovation Labs, Infotech Enterprises, Century Link, National Instruments, Bally Technologies, L&T Integrated Engineering Services and so on

#### The below listed companies are our **First time visitors**

Cisco, Cybage software Pvt Ltd, Pune, Thorogood, Infibeam, The Oberoi, Indegene Life Systems, Pearson, Cerner, Dharma Life Sciences, Jaro Education, CloudThat, Nucleus Software, Gallup, FORD, Stoke, Securifi Embedded Systems(India) Pvt Ltd, Raremile, Alcatel-Lucent, Linked-in, Kalki Technologies Pvt. Ltd, PEOL, Pega Systems, Directi, Xsysys, MarkerElligent, Delta-X, Antiz Technologies (P) Ltd, Dover India Pvt Ltd, Edureka, Gokaldas Exports, TWB(The Writers Block), Bangalore needs You, Khimji Ramdas, Muscat,Oman,99acres.com, Orient Cement Pvt Ltd, Tricon, Infotech, Maveric

All put together we were able to get **36** new clients.

Over all at this juncture of time, **172** companies have visited us, for recruitments.

We had recruitment drives by mass recruiters like CTS, Infosys, Accenture, Capgemini and so on. Our campus recruitment drives are very versatile. We cater to all type of students. We had mass recruiters, start ups, pay masters and also companies who are mainly into serving the society. We had campus drives by below mentioned unique organisations

Teach for India (TFI), Gandhi fellow ship, Bangalore needs you (BNY)

#### We had campus drive by **Armed forces**:

The Indian Navy, The Indian Army, Air force

Our student Mr Vishwabandhu Kumar is selected by the prestigious Indian Navy. He is one among 8 in the entire country and **ONLY** one from the State to get selected by Indian Navy.

#### Internship:

Internship opportunity was provided to the students at the below mentioned companies.

Cisco, Robert Bosch, Infosys, Accenture, Sapient Nitro, Gokaldas Exports, Bangalore needs you (BNY) & so on

#### Start ups:

**Placement Opportunity was given by the below mentioned startup companies.**

Delta-X, Market Elligent, ACI Worldwide, PEOL Solutions, Stoke, Cybage Software, Dharma Life Science, CloudThat & so on

#### **Dream offers was given to below mentioned companies**

Commvault, Google, Linkedin, Directi, Inmobi, Khimji Ramdas, Muscat, Oman, PNC Architects, Dubai, Emrill, Dubai. Mr Pratheek Bhat got selected by Linked-In with the highest CTC of 16.5 LPA

#### International placements

**We were able to get Khimji Ramdas from Muscat, Oman, Emrill, Dubai & PNC Architects, Dubai**

At this juncture, we have successfully made **1192** offers, inspite of recession in the job market.

Our placement percentage is **95.72**



## DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

A workshop on mobile application development on Java 540 and Windows Phone was conducted by the Department on 13 June 2013. The workshop served as a starting point for a month-long internship program for students and staff of MSRIT as a part of Nokia internship program. Talking in the inaugural function Prof. VijayKumar, HoD ISE drew attention towards the increasing demand for mobile application development professionals, especially on Windows based handsets.

### Publications in (International / National) Journals

- **Srinidhi H, Myna A N** - 'An Adaptive Technique for Intrusion Detection using Randomised Intrusion Tolerant Protocols', International Journal of Computer Science and Information Technology Research Excellence , Vol.3 No. 2, ISSN No 2250-2734, pp. 32-36, March-April, 2013.
- **Suma N, Myna A N** - 'Robust and Scalable Multicasting form Mobile Adhoc Networks', International Journal of Computer Science and Information Technology Research Excellence, Vol.3 No. 2, ISSN No 2250-2734, pp. 49-53, March-April, 2013.
- **Nimeesha K M, Rajaram M Gowda** - 'Brain Tumor Segmentation Using K-Means And Fuzzy C-Means Clustering Algorithm', International Journal of Computer Science and Information Technology Research Excellence,, Vol.3 No. 2, ISSN NO. 2250-2734(Print), EISSN No.-2250-742, Pp 60-64, Mar-Apr 2013.
- **Kirankumar Kataraki, Sumana M** - 'Ontology Extraction from Heterogeneous Documents', International Journal of Modern Engineering Research, Vol.3 No.2, ISSN:2249-6645, pp. 985-989, March-April 2013.
- **Sowmya B, JMohan Kumar S, Jagadeesha S N** - 'Video Streaming Using Wireless Multi-hop in Android Phones', International Journal of Computer Engineering and Technolgy (IJCET), Vol.4, No.2 ISSN 0976-6464, pp.482-492,, March-April 2013.
- **Dayananda. P, Dr. Rajashree Shettar** - 'A Novel Approach Towards Developing a Statistical dependent and Ranking measure for keyword search over XML data', International Journal of Computer Engineering & Technology (IJCET), ISSN 0976 - 6367, May-June 2013.
- **Megha P Arakeri** - 'An effective and efficient approach to 3D reconstruction and quantification of brain tumor on magnetic resonance images',ISSN:2005-4254, International Journal of Signal Processing, Image Processing and Pattern Recognition (IJSIP), vol 6, pp.111-128, June 2013.
- **Shruti Hulasogi, Pushpalatha M N** - 'Digital Repository for Sharing and Collaboration of Wisdom', International Journal of Scientific and Engineering research, Volume 4, Issue 7, pp.739-746, July 2013.
- **Lincy Mathews, Dr. E Sathiyamoorthy** - 'Intricacies of an Automatic Text Summarizer', International Journal of Engineering and Technology, Vol.5 No.3 ISSN: 0975-4024, pp.2871-2878, June-July 2013.
- **Rashmi Mothkur, George Philip C** - 'Security in Wireless Sensor Networks using Assymetric Key based Techniques', International Journal of Smart Sensors and Ad Hoc Networks (IJSSAN), , Vol. 3, No.1,ISSN: 2248-9738, pp. 44-49, July 2013.
- **G M Siddesh, K G Srinivasa** - 'SLA-Driven Dynamic Capacity Forecasting and Resource allocation with Risk Analysis on Clouds', International Journal of Communication Networks and Distributed Systems, Vol.11, No.3, pp. 327-346, July 2013.
- **Ashwini N S, Tamilarasi T, Dr.Vijaya Kumar B P** - 'A Framework for Accountability and Auditing in Cloud', Proceedings of International Conference on Computer Science and Engineering (pp.44-48), Interscience Open Access Journals,Bangalore, 7th April , 2013.
- **Rashmi Mothkur, George Philip C** - 'An Efficient Cryptographic Technique for Improving Security in Wireless Sensor Networks', Proceedings of International Conference on Electrical Engineering and Computer Science, pp.80-85, Interscience Open Access Journals, Coimbatore, 21st April , 2013.





- **Kavitha R, N. Ramesh** - 'Fine grained access control(FGAC) for authorizing third party applications using Oauth ( a survey )', ASAR-International Conference on Electrical, Electronics and Computer Engineering (ASAR-ICEECE), Universal Paper ID:EECEMYS-221, Asian Society for Academic Research (ASAR-Mysore Chapter), 12th May, 2013.
- **Harishitha B, N. Ramesh** - 'A survey of Different Types of Network Security Threats and Its Counter Measures', ASAR-International Conference on Electrical, Electronics and Computer Engineering (ASAR-ICEECE) Universal Paper ID:EECEMYS-217, Asian Society for Academic Research (ASAR-Mysore Chapter), 12th May, 2013.
- **Dr. Vijaya Kumar B.P, Dilip Kumar SM,** 'Neural Based Efficient Multiple Multicasting Routing for Mobile Networks, International Journal of Information and Electronic Engineering, Vol 4, PP-145-152, 2014.

#### Papers presented in (International /National) conferences:

- **Dr. Vijayakumar B.P, Bharathi MA, Mallikarjuna M,** 'Robust and cost effective security algorithm for pre-stage and post-stage of Data Aggregation', IEEE International Conference on Computing, Communication and Networking Technologies, July 2013

#### DEPARTMENT OF MEDICAL ELECTRONICS

- An orientation programme on the Awareness of the Breast Cancer was conducted on 27th April 2013 along with the IEEE EMB Bangalore Chapter at the M.S Ramaiah Memorial Hospital Auditorium. Ms.Usha Shekhar, Vice President-Projects, Cognizant Application Services was the Chief Guest. Dr. Ram Prakash, MD, Central Diagnostic Research Foundation Pvt. Ltd, Bangalore and Mr. Vinayak Patil Kulkarni, Managing Director, Openstream Inc, Bangalore were the Guest of Honour for the programme. Over 65 participants from various institutes attended and benefitted.



The Breast Cancer Screening programme between 21st May to 31st May 2013 was started in the Anjana diagnostic center, Indiranagar. The programme was organized by IGCAR-Chennai, National Engineering College, Kovilpatti, IEEE EMBS, IEEE Bangalore Chapter, Anjana Diagnostic Center, MSRIT along with the Rotary Club, Bangalore. The screening was done free for all registrants and everyday 15 ladies participated in the 10 days workshop. Dr. Ram Prakash and Dr. Asha Rajendra from Anjana Diagnostics have done Thermography and Ultra sound method for the detection of Breast cancer.

The chief guest for the victory function for the Breast Cancer Screening were Mr. Khader, The honorable minister for Health and Family welfare, Government of Karnataka, Dr. Venkataraman, Director IGCAR, Chennai, Dr. Shenbagavalli, HOD E&C, National Engineering College, Kovilpatti, Dr. H.V.RamPrakash, Managing Director, Central diagnostic Research Foundation Pvt Ltd, Bangalore, Mr.Mahadeva Prasad, President, Rotary High Grounds, Dr. S.Y.Kulkarni, Principal, MSRIT and Dr.Sriraam.N, HOD.



- Ten days of Summer school on Medical Device Design and Innovation from 24th July to 3rd August 2013 was started by the Medical Electronics Department and IEEE EMBS Bangalore Chapter in association with Forus, Skanray, Tiny Chip Embedded solutions and Swissnex India in ESB



- **S. Ajitha, Dr.T.V. Suresh Kumar, Dr.K.Rajanikanth** - 'A Quantitative Framework for early prediction of Cooperation in Multi-Agent System', ICTACT Journal on Soft Computing volume: 3 , Issue: 4 ,July 2013,pages 587-595.
- **S. Ajitha, Dr. T.V. Suresh Kumar, Dr. K. Rajanikanth**- 'Artificial Neural Network Approach for predicting performance of MAS using SPE approach'. International Journal of Software Engineering, Volume6,No.2,pages 3-20, July 2013.
- **Niranjanamurthy M** - 'The study of E-Commerce Security Issues and Solutions' International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE) ISSN (Online): 2278-1021 - Vol. 2, Issue 7, July 2013

#### Papers presented in (National /International) conferences

- **M Mrunalini, T V Suresh Kumar, K Rajani Kanth** - 'Assessing the Performance and Security Trade-offs at the Early Stages of Software Development', National Conference- In proceedings of IndiaCom 2013 during 7th and 8th March 2013, New Delhi, India, pp 353-360.
- **S. Ajitha, Dr. T. V. Suresh Kumar, Dr. K. Rajanikanth** - 'Load Balancing in MAS: An SPE approach', 2nd National Conference on Advancement in the era of Multi Disciplinary Systems AEDMS-2013 during April 6-7 at Kurukshetra, Published by Elsevier.
- **Manish Kumar, Dr. M Hanumanthappa, Dr. T V Suresh Kumar** - 'Holes Around The World-Seating on the Edge of Critical Vulnerability', CSI-Communications, May 2013,

#### DEPARTMENT OF MBA

- A Management Fest "**SPANDANA**" was conducted in the department on 17th & 18th May 2013. Ms. Roopashree, HR Manager, EMC2 was the Chief Guest for the Management Fest. More than 30 Teams from various Institutions registered for the Management Fest. Five events were conducted with a Cash Prize Rs. 2000 namely Best Manager, Business Quiz, Best Project Award, New Product Launch and Investment Game. MBA department

Faculty Members were the Co-ordinators for all the events. 22 Teams registered individually and 6 teams registered for all 5 events. Mr. Amit Angadi, Manager, Dexter was the Judge for the event 'New Product Launch'.



#### Guest Lectures

- **Dr. Y.S.N. Rajhans**, Founder President, Universal Peace Foundation, 'Developing Positive attitude and concentration', 13-04-2013.

#### Guest Lectures delivered by department faculty

- **Dr. P. V. Raveendra** - 'Entrepreneurship and its Importance' Teacher's Orientation Programme', Nitte Meenakshi Institute of Technology, Bangalore, 11-07-2013.

#### LIBRARY

The Library Department at MSRIT is well equipped with thousands of books, periodicals, magazines, journals, case studies and other technical and management publications of international repute. Towards enabling the students and faculty to keep in touch with the latest developments in their fields, the library subscribes to online publications such as Elsevier Sciencedirect, IEEE- All Society Periodicals ePackage (ASPP), ASCE Digital Library, ASME Journals Online, ASTM DIGITAL LIBRARY Online, Springerlink, McGraw Hill Access Engineering, JET: Journal in Engineering & Technology, JSMS : J-Gate Management Sciences, Art and Architecture Complete, GREENR, Emerald Management and NDigital Library.

The library has well established Digital Libraries with over a 100 high-end computers connected to a robust 20 MBPS pipeline provided with headphones enabling students to access and leverage from these resources towards achieving their academic objectives.





- **B. M. Nagabhushana** - 'Solution Combustion Technique: A Facile Method of Synthesis of Nano materials'. National conference on Recent Advances in Nano Science and Technology' held at Acharya Institute of Technology, 3-5-2013.
- **B. M. Nagabhushana** - 'Solution combustion: A versatile Synthesis Route to Materials', to commemorate 25 years of solution combustion synthesis- Initiated at IPC, IISc. Held at IPC, Indian Institute of Science, Bangalore, 12-7-2013.
- **B. M. Nagabhushana** - 'The challenges in treatment of water - Novel water filter for Rural India'. Visvesvarapura College of Science, K.R. Road, Bangalore, 4-8-13.

## DEPARTMENT OF PHYSICS

### Publications in (International / National) Journals

- **R. M. Melavanki** - 'Static and dynamic model fluorescence quenching of laser dye by carbon tetrachloride in binary mixtures', Spectrachimica acta 117 (2014), 630-634.
- **R. M. Melavanki** - 'Solvent effects on the dipole moments and photo physical behavior of 2, 5-di(5-tert-butyl-2-benzoxazolyl) thiophene dye, Canadian Journal of physics, 91: 1107-1113 (2013).
- **K. L. Sandhya et al** - 'Super lattice structure observed in the extraordinary phase sequence as analysed by phenomenological Landau and partially molecular models', Phys. Rev.E.87, 062506, 2013.
- **K. L. Sandhya et al** - 'Degeneracy lifting due to thermal fluctuations around the frustration point between antclinic antiferroelectric SmCA and SmC\*'. Phys.Rev.E.87, 012502, 2013.

## DEPARTMENT OF MCA

- The Department of Computer Applications organized a state level project Exhibition/competition for final year MCA students on 21st June 2013 and got a very positive response from colleges in and around Bangalore. The idea of having such an event was to exhibit potential talents of MCA students by providing a platform.

50 participants from various colleges participated for this event. All the projects were very innovative and employed the latest technologies making the event a grand success.



State level project Exhibition/competition for final year MCA students



Five-day Faculty Development Workshop on "Computer Forensics and Cybercrime"

- The Five-day Faculty Development Workshop on "Computer Forensics and Cybercrime" was held under TEQIP-II during 5th-10th August, 2013. The programme was organized by the Department of Computer Science and Engineering and Department of Computer Applications. Over fifty participants participated in the FDP.

### Publications in (International / National) Journals

- **Niranjanamurthy M, Mr S. Jagannatha** - 'Analysis of E-Commerce and M-Commerce: Advantages, Limitations and Security issues' International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE) ISSN (Online): 2278-1021 - Vol. 2, Issue 6, June 2013.
- **S. Jagannatha, D.E. Geetha, Dr. T. V. Suresh Kumar, Dr Rajanikanth** - 'Load Balancing in Distributed Database System using Resource Allocation' published in the International Journal of Advanced Research in Computer and Communication Engineering" ISSN (Print) :2319-5940 ISSN (Online) : 2278 - 1021 IJARCCCE publication in Volume 2, Issue 7, July 2013.



## DEPARTMENT OF TELECOMMUNICATION ENGINEERING

### Publications in (International / National) Journals

- **Dr. B.K. Sujatha, Mohammed Riyaz Ahmed** - 'A Review of Reinforcement Learning in Neuromorphic VLSI Chips using Computational Cognitive Neuroscience' Int. Journal of Advanced Research in Computer & Communication Engineering (IJARCCE), Vol. 2, Issue 8, Aug 2013.
- **Dr. B. K. Sujatha, Mohammed Riyaz Ahmed** - 'Reinforcement Learning based on Computational Cognitive Neuroscience in Neuromorphic VLSI Chips', Int. Journal of Advanced Research in Computer Science and Software Engg. (IJARCSSE), (Impact Factor: 2.080). Vol. 3, Issue 8, Aug 2013.

### Papers presented in (International /National) conferences

- **Spoorthy P. G, P. Parimala** - 'Target Tracking and Fusion with Randomly missing Measurements', 5th National Conference on Recent Trends in Electronics and Communications, NCRTEC - 13, National Conference at SJBIT, Bangalore, 4th May'13
- **Dr. B. K. Sujatha, Shashidhar D. G** - 'Automatic accident notification system using GPS', Proceedings of 2nd National Conference on Computational Control Systems & Optimization - CCSO 2013, pp 124-126 ISBN: 978-93-8233-86-35, May 2013.
- **Sandeep S.V, P. Parimala** - 'Biometric Authentication combining Finger Print and Finger Vein', Technisium-13- A national level technical symposium, SIT Tumkur, 30th April 2013.
- **Dr. B. K. Sujatha, D. K. Nayana** - 'Introduction to New SN Reversible Gate and its Applications in Designing Arithmetic Circuits' International Conference on Electronics and Communication Engineering, April 2013, Volume 2. pp 139-146, ISBN: 978-93-81583-89-05.

Seminar Hall at 10.15am. The chief guest for the programme was Dr. Rajeswari Sundarajan, Prof in Electrical & Computer Engg, Purdue University, USA and the Guest of Honor was Dr. Margrit Leuthold, Executive Director, Swissnex India. It was presided by Dr. S.Y. Kulkarni, Principal, MSRIT. A visit to Skanray Medicals, Mysore was organized and all participants along with Dr. Sriraam, HOD, Mrs. Prabhu Ravikala and Ms. Supriya Babu visited the factory.



### Publications in (International / National) Journals

**Sriraam. N, Pradhapan. P, Swaminathan. M and Salila Vijayalal Mohan, H.K** - 'Comparison of MLP and REN classifiers for detection of hemodynamic stress using photoplethysmograph', Int. J. Biomedical Engineering and Technology, Vol. 12, No. 1, pp.97-112, August 2013, USA.

### Achievements - Faculty

**Dr. N. Sriraam** has been appointed as reviewer for the Journals - Journal of Neural Engineering, IOP, Europe and Information Science, Elsevier, UK.

### Guest Lectures

**Dr. Sameer Sarwarkar** CEO, Neuro Synaptic Communications, Bangalore - 'Applications of telemedicine on the rural area'.





- **Dr. B. K. Sujatha, Srikanth** - 'Implementation of a Baseband Transmitter for Human Body Communication', proceedings of 2nd International Conference on "Recent Trends in Engg. & Tech. (ICRTET) Mechanics, Simulation & Control" (ICMSC) published by IT Society of India, Vol-2 pp 35-39, ISBN: 978-93-81583-89-09, April-2013.
- **Dr. B. K. Sujatha, Murthy S. V. N** - 'An introduction to High Efficiency Video Coding (HEVC) standard compared to Advanced Video Coding (AVC) standard', proceedings of International Conference on Emerging Research in Computing, Information, Communication & Applications (ERCICA) MOU with: ELSEVIER. Vol-2 pp 35-39, ISBN: 978-93-81583-89-09, April-2013.
- **Dr. B. K. Sujatha, D.K. Nayana** - 'Introduction to New SN Reversible Gate and its Applications in Designing Arithmetic Circuits', International Conference on Electronics & Communication Engg., pp139-146, ISBN: 978-93-81583-89-05, April 2013.
- **Krishna Prasad** - 'Binary offset Carrier Modulation for Wireless Radio Communication', Proceeding in International conference, Inter science Research Network, Bangalore, pp: 154-157, 28th April 2013.

#### Achievements - Faculty

- **Dr. K Natarajan**, Professor & Head of the department has been nominated as the VTU BoS member in Nano Technology.
- **Dr. K Natarajan**, Professor & Head of the department has been appointed as a Board Member for NP Mass National Program on "Micro & Smart Systems".

#### Guest Lectures

- **Dr. Viswanath Talasila, Associate Professor & Mr. S G Shivaprasad Yadav, Assistant Professor** - 'Intel atom architecture and its applications' during five day workshop on real time embedded system design under TEQIP-II during 5th to 9th Aug 2013
- **Dr. Viswanath Talasila, Associate Professor & Mr. S G Shivaprasad Yadav, Assistant Professor** - 'Intel atom architecture and its applications' during three day workshop at Sahyadri Engineering College, Mangalore during 23-25 July 2013.

### DEPARTMENT OF BIOTECHNOLOGY

- The department organized a 1 day national symposium on "Exploring the potential applications of Nanoscience in Biotechnology" on 26th April 2013 for the benefit of faculty and research scholars of TEQIP and other institutes under VTU. This symposium was aimed at bringing together researchers and scientists from academia and industry to share their expertise in exploring the applications of nanoscience in Biotechnology. Applications of the developing technology of nanoscience in various fields like environmental, medical and agriculture biotechnology were highlighted.



- As part of SRIGEN activities Department of Biotechnology conducted creative modeling event "Wealth from Waste" on 19th April 2013. The event was coordinated by Dr. Sravanti V.



#### Publications in (International / National) Journals

- **Karadi R V, Lokesh K N, Channarayappa, Marikunte Venkata Rangana, and Siva Kiran** - 'Statistical Screening and Optimization of the Medium Components for Production of Novel Flavolipid Biosurfactant by Flavobacterium, sp. MTCC 2495', Research Journal of Pharmaceutical, Biological and Chemical Sciences.4,3: 736-753.



- **B. S. Shankar, N. Shashidhar, Yogesh Prakash Patil, P. Murali Krishna and Munirathinam Nethaji** - '(2E)-2-(2-hydroxy-3-methylbenzylidene)-N-methylhydrazinecarbothioamide', Acta Cryst. (2013). E69, o61
- **N. Shashidhar Reddy, B. S. Shankara, P. Murali Krishana, C. Basavaraj, and B. Mahesh** - 'Synthesis, Characterization, and Antibacterial Activity of Co(II), Ni(II), Cu(II), Zn(II), Cd(II), and Hg(II) Complexes of Schiff's Base Type Ligands Containing Benzofuran Moiety', International Journal of Inorganic Chemistry, vol. 2013, Article ID 614628, 10 pages, 2013. (doi:10.1155/2013/614628).
- **P. Murali Krishna, B. S. Shankara, N. Shashidhar** - 'Synthesis, characterization and biological studies of binuclear copper(II) complexes of (2E)-2-(2-hydroxy-3-methoxybenzylidene)-4N-substituted hydrazinecarbothio amides', International Journal of Inorganic Chemistry, vol. 2013, Article ID 741269, 11 pages, 2013. (doi:10.1155/2013/741269)
- **B. Sreekanth, P. Murali Krishna, N. B. Gopal Reddy, Jagan Mohan Reddy, V.Sridhara** - 'Synthesis, haracterization, Anti-Microbial and DNA Binding Studies on Mn(II) and Zn(II) Metal Complexes Containing Mixed Ligands', International Journal of Chem Tech Research, Vol.5, No.5, pp 2540-2547, July-Sept 2013.
- **Sreekanth, Gopinath S M, Veena Pillai V, Ismail Shareef M, Jagan Mohan Reddy, Vishnuvardhan T K, Murali Krishna P, and Sridhara V** - 'DNA Binding and Antimicrobial Studies on Co (III) and Fe (II) Metal Complexes Containing Mixed Ligands', Res J Pharm Biol Chem Sci, 4(4), 2013, 217-225

#### Papers presented in (International / National) conferences

##### Dr. B.M. Nagabhushana research group

- Green luminescence of Tb<sup>3+</sup> doped CdSiO<sub>3</sub> nanophosphor - International conference on Recent Advances in Physics 2013, held at Sri Vidya Mandir Arts and science College, Krishnagiri, Tamilnadu, 12-13-August, 2013, (Received Best Poster presentation)

- Effect of flux on thermoluminescence studies of Sr<sub>2</sub>SiO<sub>4</sub>:Eu<sup>0.01</sup> nanophosphor AIP Conference Proceedings 1536 (2013) 135-136.
- Nano zinc ferrite prepared by wet chemical method: the feasibility in solar cell application, International Conference on nanomaterials for Frontier Applications (ICNFA-2013) July 10-12, 2013 At Coimbatore Institute of Technology, Tamil Nadu
- Adsorption of malachite green dye using nanocrystalline zinc titanate powder" in "International conference on merging Trends in Chemical and Pharmaceutical Sciences (ICETCPS-2013)" held at department of chemistry, JNTUA college of engineering, Anapatur, Andra Pradesh on 28-30, June 2013.
- Synthesis characterization of nano ZnO for solar light photocatalytic degradation of an anionic azo dye Brilliant Yellow, National conference on Recent Advances in Nano Science and Technology (NCRNT-13), held at Acharya Institute of Technology, Bangalore during 3rd and 4th May 2013.
- Influence of fuel on structural, photo and thermoluminescence properties of solution combustion derived nano Y<sub>2</sub>O<sub>3</sub>, NCRNT-13, 3rd and 4th May 2013 (Received Best oral presentation).
- Nano zinc ferrite compound and its application in Biotechnology, NCRNT-13, 3rd and 4th May 2013 (Received Best oral presentation).
- Nagaraju Kottam - Synthesis, characterization and photocatalytic activity of ZnO nanoparticles" at National conference on 'scope of advanced materials in energy and environment' conducted at CMRIT, Bangalore during 7th and 8th August 2013.

#### Guest Lectures - delivered by department faculty

- **B. M. Nagabhushana** - 'Synthesis and tuning the size of nano-materials for technological applications', TEQIP sponsored three days 'National Seminar on Advanced Materials for Industrial Applications' Dr. Ambedkar Institute of Technology, 27-4-2013.





## DEPARTMENT OF CHEMISTRY



Dr. Filip Bures, Professor of Physical Chemistry, University of Pardubice, visited the department on 08-04-2013 in connection with collaborative research work.



In association with Luminescence Society of India: Karnataka Chapter (LSIKC) Silver Jubilee Celebration of Solution Combustion Synthesis (K.C. Patil's Method) was celebrated on 25-08-2013.



In association with Luminescence Society of India: Karnataka Chapter (LSIKC), an innovative program called 'My Research Journey' was held on 30-6-2013. In which research scholars secured Ph.D degree from LSIKC group, share their research experience with young research scholars.



One day training program for Research Scholars program on Powder X-ray diffraction: Rietveld analysis' was held on 28-7-2013.

## Publications in (International / National) Journals

- **D. V. Sunitha, B. M. Nagabhushana** - 'Structural, ionic and thermoluminescence properties of heavy ion (100 MeV Si<sup>7+</sup>) bombarded Zn<sub>2</sub>SiO<sub>4</sub>:Sm<sup>3+</sup> nanophosphor', Journal of Luminescence, 143 (2013) 409-417
- **H. B. Premkumar, B. M. Nagabhushana** - 'Investigation of structural and luminescence properties of Ho<sup>3+</sup> doped YAlO<sub>3</sub> nanophosphors synthesized through solution combustion route', Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 115 (2013) 234-243.
- **R.S. Raveendrar, B.M. Nagabhushana** - 'Synthesis, Characterization & Antibacterial Activity of Zinc Ferrite Nanopowder', International Journal of Science Research Volume 01, (2013) Issue 04
- **D.V. Sunitha, B. M. Nagabhushana** - 'Luminescent characteristics of Eu<sup>3+</sup> doped di-calcium silicate nano-powders for white LEDs', Journal of Alloys and Compounds, 575 (2013) 434-443.
- **Tiju Thomas, Nagaraju Kottam** - 'Combining "Chimie Douce" and green principles for the developing world: improving industrial viability of photocatalytic water remediation'. Chemical engineering science, 102 (2013) 283-288. DOI: 10.1016/j.ces.2013.08.004.
- **P. Murali Krishna, N. B. Gopal Reddy, Nagaraju Kottam and B. C. Yallur** - 'Design and Synthesis of Metal Complexes Of (2E)-2-[(2E)-3-PHENYLPROP-2-EN-1-YLIDENE] Hydrazinecarbothioamide And Their Photocatalytic Degradation Of Methylene Blue'. Hindawi Publishing Corporation, The Scientific World Journal, Volume 2013, Article ID 828313.



- **M Prabha, V Ravi, N R Ramachandra Swamy** - 'Activity of Hydrolytic Enzymes in Various Regions of Normal Human Brain Tissue', Indian Journal of clinical Biochemistry, July 2013, Vol 28, Issue 3, pp 283-291.
- **M N Chandraprabha and K A Natarajan** - 'Role of outer membrane exopolymers of Acidithiobacillus ferrooxidans in adsorption of cells onto pyrite and chalcocopyrite', International journal of mineral processing, 123 (2013), 152-57.
- **Viday C, Shilpa Hiremath, M N Chandraprabha, M A Lourdu Antonyraj, Indu Venu Gopal, Aayushi Jain and Kokil Bansal** - 'Green synthesis of ZnO nanoparticles by Calotropis Gigantea', International journal of current engineering and technology, 2013, 118-120.
- **Shilpa Hiremath, Viday C, M A Lourdu Antonyraj, M N Chandraprabha, Priya Gandhi, Atishu Jain and Kunal Anand** - 'Biosynthesis of ZnO nano particles assisted by Euphorbia tirucalli (pencil cactus)', International journal of current engineering and technology, 2013, 176-179.
- **S Karthick Raja Namasivayam, K. Samrat and S. Ganesh** - 'Preparation of chitosan stabilized ofloxacin- gold nano conjugate for the improved anti bacterial activity against human pathogenic bacteria, Innovare' Journal of Medical Science, Vol 1, 23rd July 2013, (Revised and Accepted), 7-11.

## Achievements - Faculty



- **Dr. Channarayappa** - Prof. & Head, was awarded "Shiksha Rattan Puraskar" Gold plaque & Certificate of Excellence, For Meritorious Service, Outstanding Performance and Remarkable Role. The award was presented by General (Retd.) Joginder Jaswant Singh, PVSM, AVSM, VSM, Former Chief of Army staff and Former Governor of

Arunachal Pradesh and "Glory Of India Gold Medal" and certificate of excellence, For Individual Excellence in Recognition of Sterling Merit Excellent Performance and Out Standing Contribution for the Progress of the Nation and Worldwide. The award was presented by Dr. Bhishma Narain Singh, Former Governor of Tamil Nadu and Assam. The event was graced by Maj. Ved Prakash, AICC Secretary, at a seminar on Economic Growth and National Integration, Organized by India International Friendship Society, at New Delhi on 24th August, 2013.

- **Dr. Ravi Kumar Y S**, Assistant Professor, was awarded Fulbright Nehru Postdoctoral Fellowship for the year 2012-13. He has successfully completed research on Liver Targeted Delivery of Anticancer Drugs at Johns Hopkins University, Baltimore, MD, USA from September 2012 to August 2013.

## Guest Lectures

- **Dr. Kalidas Shetty** - Associate Vice President for Global Outreach & Professor, Department of Plant Science, delivered guest lecture on the topic 'Opportunities for Higher Education at NDSU' on 8th April 2013.
- **Ms. Vandana Gaikwad** - APAC operations Biopractice, India delivered guest lecture on the topic 'Introduction to Industrial training program' on 12th April 2013.
- **Dr. Balakrishna Gowda** - Professor and Coordinator, Biofuel Park, GKVK, Bangalore delivered guest lecture on the topic 'Contemporary Issues in Biofuels' on 21st June 2013.
- **Prof. Hema Sharada** - Professor & Director South Asia relations, Vice-Chancellor, University of Western Australia, delivered a lecture on 'Opportunities for higher education at University of Western Australia' on 29th August 2013.

## Guest Lectures - delivered by department faculty

- **Dr. Channarayappa** - 'Basics of Molecular Biology' in CDE programme.
- **Dr. Channarayappa** - 'Molecular Biology for Research in Dental Sciences- Opportunities and





Avenues', M. S. Ramaiah Dental College & Hospital and Division of Research and Patents, M S. Ramaiah Academy of Health & Applied Sciences, Bangalore, 14th June 2013.

- **Dr. Channarayappa** - Biofuels: A potential alternative to fossil fuels (Lead speaker) in national conference of "Emerging Trends in Bioprocessing and Simulation, Biotechnology Department, PESIT, September 12th, 2013.
- **Dr. Dhamodhara P** - 'Applications of Molecular biology in oral health research: a case report, Symposium on Molecular biology for research in Dental sciences - opportunities and avenues, M.S.RamaiahDental college, 14th June 2013.

#### Funded projects

- **Dr. Bindu S** - DST Project (ongoing), Govt. of India, (2013-2015), 'Control of Candida biofilms causing vulvovaginitis in women using household spices and herbs,

Grant: Rs.24.74/- lakhs.

- **Dr. B. G. Harish** - Vision Group of science and Technology Project (ongoing), Govt. of Karnataka, (2012-2014) 'Inhibitory effect of Fruit extract on the formation of heterocyclic amines in meat'

Grant: Rs. 4.00/- lakhs.

#### Oil Eating bacteria to clean up oil spills

Oil-spills are one of the biggest issues environmental, health, agricultural and financial sectors have been tackling for years and scientists in Europe have sequenced the genome for an oil-eating bacterium which could lead to faster, more efficient ways to clean up oil spills.

Back in 1989, bacteria were used experimentally in attempts to clean up the 11 million gallons of crude oil spilled by the Exxon Valdez after it ran aground off the coast of Alaska. Though it made little to no difference back then, now that researchers have a complete blueprint for the oil-hungry bacteria: *Alcanivorax borkumensis*, they'll have the ability to optimize the conditions for these bugs, enabling them to soak up the hundreds of millions of liters of oil that enter our waters each year!

## ARCHITECTURE



State level workshop, "INSPIRIT: PARALLEL WORDS"

- The school of Architecture conducted a two day state level Design fest/ workshop, "INSPIRIT: PARALLEL WORDS" on 16TH & 17TH of April, 2013. During the workshop the department magazine - Render was inaugurated by the chief guest Ar. Shahrukh Mistry
- The school of Architecture organized IGA OPEN STUDIO WORKSHOP for 4th sem. Students on April 2013.
- The school of Architecture has started Cultural clubs like Photography, Music, Dance, Graphics, Literature, Product design, Art and Architecture and quiz club to tap the talents of the students by conducting various activities under the mentioned clubs.
- Inauguration of duly registered Alumni Association MA CUBE meet was held at Gold Finch hotel on 14th April, 2013. During the Alumini meet Dr. Harimurthy, Ar. Jagadeesha Chandra, Dr. Anuradha N, Ar. Vishwas Hittalmani, Ar. K L Pai, Ar. Nalini N.S. were felicitated. Ar. Pratima Seethur presented "Architecture Indulgence"- Looking Back at the Road less travelled in the meet.

#### Publications in (International / National) Journals

- **R. Anu Padma** - 'Chemical weathering of a granite stone sample from the Peruvudaiyaar Koil, Thanjavur, Tamil Nadu, India', IOSR Journal of Applied Geology and Geophysics (IOSR-JAGG) e-ISSN: 2321-0990, p-ISSN: 2321-0982.Vol. 1, Issue 2, PP 39-53, Jul. -Aug. 2013.



#### Invited Lectures

- **Ar. Shahrukh Mistry** - 'parallel worlds" 17th, April 2013.
- **Ar. Syed Mohammed** - 'Net Zero Now, 23rd August 2013

#### Guest Lectures delivered by department faculty

- **Prof. B S Jagadeesha Chandra** - 'Landscape Architecture and its relevance for today's context', School of Architecture, BVB college of Engineering, Hubli on April 2013.
- **Prof. B S Jagadeesha Chandra** - 'Building Services and its Importance in Interior Design', CAD Center, Bangalore, May 2013.
- **Ar. Dinakaran K** - 'Graphic Design', Rajalaxmi school of Architecture, Chennai, August 2013.
- **Ar. Dinakaran** - 'Animated Oxymoron', April 2013.
- **Ar. Rajshekhar Rao** - 'Aesthetics in Architecture', April 2013.
- **Ar. AnuPadma** - 'The lost Temples of India' (video documentary)', April 2013.

## DEPARTMENT OF MATHEMATICS



Four day workshop on Advanced Linear Algebra and its Applications to Engineering, July 17-20, 2013

The department organized Four day workshop on 'Advanced Linear Algebra and its Applications to Engineering' during 17th to 20th July, 2013 under the TEQIP-II program. The main objective of the workshop was to familiarize and update faculty and students of departments of Engineering and science with the new

developments in Linear Algebra and its application to the field of engineering and Technology. Resource personalities from reputed institutes and industry were invited to deliver the lectures. As part of the workshop Lab session was held to have hands on experience for the participants. About 60 participants from all over the state registered and attended the workshop. Beneficiaries, the participants appreciated the effort made by the department in organizing the workshop.

#### Publications in (International / National) Journals

- **Dinesh P.A.et al** - 'Combined effects of couple stress and MHDE on Squeeze film lubrication between two parallel plates', Int. J. of Mathematical Archive, No.12, Vol.7, PP165-171, 2013.

#### Papers presented in (International /National) conferences

- **Dr. S.H.C.V. Subba Bhatta et.al** - 'Radiation Effects on MHD Thermal Convection flow of a Rivlin-Ericksen fluid through a porous medium in a vertical channel induced by Travelling thermal wave', 26th Int. Conf. of Jangjeon Mathematical Society, South Korea in Association with Acharya Inst. of Graduate studies, Bangalore, 01-04, Aug., 2013.
- **Dr. A. Sreevallabha Reddy** - 'Study of Couple Stress Fluid flow Through a Composite Medium in a Parallel Plate Channel with Porous Lining', 26th Int. Conf. of Jangjeon Mathematical Society, South Korea in Association with Acharya Inst. Of Graduate studies, Bangalore, 01-04, Aug., 2013.
- **Mr. Ramaprasad** - 'Peristaltic two-phase fluid flow consisting of viscoelastic fluid and dusty fluid in a flexible channel through a porous media', 26th Int. Conf. of Jangjeon Mathematical Society, South Korea in Association with Acharya Inst. of Graduate studies, Bangalore, 01-04, Aug., 2013.

#### Funded Projects

- **Dr. Neeraja & Dr. Dinesh P. A.** - 'Two phase model of blood flow by inserting a catheter under the influence of external forces', VTU (ongoing project), Belgaum

Grant: 1 lakh