



# Pioneering Excellence in Engineering Education

### Prospectus

www.msrit.edu

ಎಂ.ಎಸ್. ರಾಮಯ್ಯ ತಾಂತ್ರಿಕ ಮಹಾ ವಿದ್ಯಾಲಯ M. S RAMAIAH INSTITUTE OF TECHNOLOGY (Autonomous Institute, Affiliated to VTU) (Approved by AICTE, New Delhi & Govt. of Karnataka) Accredited by NBA & NAAC with 'A' Grade



**Dr. M.S. Ramaiah** (1922 - 1997)

Founder Chairman, Gokula Education Foundation

# Tribute to a visionary

Where offer our humble tributes to our venerable founder Chairman late **Dr. M.S. Ramaiah**, renowned philanthropist, educationist, and visionary who started **M.S. Ramaiah Institute of Technology (MSRIT)** in 1962, envisioning the need for quality professional education towards taking India ahead.

As we celebrate our Golden Jubilee year in 2012, MSRIT stands tall, recognized as one of India's leading names in quality engineering education.

Going forward, we continue to be guided by **Dr. M.S. Ramaiah's** enduring philosophy and reiterate our commitment to creating world class technical professionals who strongly reflect the universal human values of integrity, honesty, and character as they go on to contribute to the nation and the world at large.

### OUR FOUNDER

Dr. M.S. Ramaiah rose from humble origins to become a highly popular and respected individual, recognized for his philanthropy, vision, and values. Realizing the importance of quality education in shaping a modern India, he started the Gokula Education Foundation(GEF) in 1962. MSRIT was the first of the many institutions created under its aegis, a pioneering effort when it came to privatization of higher education. Today GEF owns and manages several institutions offering quality education in various disciplines - Medicine, Dentistry, Pharmacy, Hotel Management, Business Management, Engineering, Law and Pure Sciences, contributing significantly towards creating an educated and self reliant community. Dr. M.S. Ramaiah was awarded an honourary Doctorate by the University of Tumkur. He was conferred a second Doctorate by VTU in 2012 in recognition of his efforts.

### MSRIT - A Momentous Journey Spanning 50 Years....



The year 2011-12 is a Golden Jubilee Year and MSRIT launched the celebration with a glittering inauguration event graced by His Excellency Prof. APJ Abdul Kalam, Former President of India. Speaking on the occasion, Prof Kalam succinctly summed up MSRIT's seminal contribution to engineering education and the nation as follows...

"During the last 50 years, MSRIT would have generated more than 35,000 engineers and technologists who are deployed in various fields in India and abroad..."

### Trustees



**Dr. M.R. Jayaram** Chairman, Gokula Education Foundation

**Sri. M.R. Seetharam** Vice-Chairman, Gokula Education Foundation and Director, M.S. Ramaiah Institute of Technology





**Sri. M.R. Ramaiah** Secretary, Gokula Education Foundation and Director, M.S. Ramaiah Institute of Technology

## Message from the Chief Executive

**Sri. S.M. Acharya IAS** (retd.) Chief Executive, Gokula Education Foundation

We at M.S. Ramaiah Institute of Technology (MSRIT) complete 54 years in 2016, a truly momentous occasion. Today we are known as one of India's leading names in engineering education, a matter of great pride for all of us.

Since inception, MSRIT has been guided by the foresight and zeal of our visionary Founder Chairman Dr. M.S. Ramaiah who nurtured this institution through its most crucial years. Dr. M.S. Ramaiah also identified and brought in professionals of impeccable character, qualification and qualities, encouraging them to participate in the institution's growth, a move that contributed significantly to our success all along. As we celebrate our Golden Jubilee, we wish to offer our grateful thanks to all those who contributed in their various capacities to help us achieve this stature.

Post the demise of Dr. M.S. Ramaiah in 1997, MSRIT has been ably led by his heirs, led by the current Chairman Dr. M.R. Jayaram who took over the helm. Under his guidance, MSRIT has seen significant investments in infrastructure & facilities and academic resources, besides notable enhancements in administrative processes.

Throughout its journey, MSRIT has been responsive to the industry's needs, be it introducing new programs, forging alliances or acquiring equipment and resources. Going forward, we realise engineering education will be strongly about value addition and the creation of multi-faceted professionals with an ability to confidently perform in a rapidly changing ecosystem. Our focus would also be to partner with the industry in pushing the envelope of innovation and address challenges that would have a wider impact on the marketplace and the number of patents we have applied for in recent years reflects this thinking.

We are now amidst an era of rapid change and are confident of managing this aspect by realigning, reorienting, restructuring and redefining all paradigms within our control efficiently and effectively to stay the pioneer we have always been.

6



**Dr. N.V.R Naidu,** M.Tech, Ph.D Principal, MSRIT

MSRIT-An institution of repute which has celebrated its golden jubilee year recently and has been ranked very high by all the surveys being conducted by well known magazines is most sought-after for bright merited and career focused students. Academically vibrant offerings with scope for overall development of students and imparting all the attributes required for the students to meet global challenges have made this institution distinctly different from other institutions.

As an academically autonomous institution since 2007, many best practices are being followed in the institution like outcome based contemporary curriculum which is industry friendly having scope for innovation and creativity, flexibility with choice based credit system and grading system of evaluation to match to international standards.

All the departments of the institution have emerged as centers of excellence in the areas of the thrust and are committed to generating technical manpower having skills and proficiency to address and face the challenges of the competitive world with social concern.

The encouragement of the institution to promote sports and cultural activities by providing best facilities is one of the highlights. Students are also encouraged to participate in national/international events for better exposure.

MSRIT has been successful in creating more entrepreneurs and also provides incubation facility to nurture the best ideas of students.

Excellent placements by most of the reputed companies and many students opting for higher studies, civil services exams and services in armed forces shows the commitment of the institution to meet aspirations of students.

The information brochure has all relevant information about the institution to help all stake holders to know MSRIT well.

7 =



### **Governing Body**

Dr. M R Jayaram Chairman, GEF

**Sri M.R. Seetharam** Vice Chairman, GEF, Director, MSRIT

**Sri M.R. Kodandaram** Trustee, GEF

**Sri. S.M. Acharya** Chief Executive, GEF (Engg.)

**Prof. A.S Sheoran** Head, Department of Mining Engineering, MBM Engineering College. **Sri M.R. Ramaiah** Secretary, GEF, Director, MSRIT

Sri M.R. Sampangiramaiah Trustee, GEF

**Dr. V.K. Aatre** Former Scientific Advisor to PMO

**Prof. B.S. Sonde** Former VC, Goa University

**Dr. K G Chandrashekar** Principal, Govt. SKSJTI, Bangalore

**Dr. Vinod Nowal** CEO, JSW, Bellary

**Dr. R Prabhakara** HOD, Civil Engineering Department **Dr. V.D. Mytri** Principal, Appa Institute of Engineering & Technology

**Dr. T.V. Suresh Kumar** Registrar (Academics)

**Dr. N.V.R. Naidu** Principal, MSRIT & Member Secretary

### Academic Council

### Principal of the College

Dr. N.V.R. Naidu Principal - Chairman

### Nominees of VTU

Dr. T. Srinivasan HOD, Mechanical Engg., RNSIT, Bangalore.

**Dr. C. Puttamadappa** Principal, Sapthagiri College of Engineering, Bangalore.

Dr. H.C. Nagaraj Principal, Nitte Meenakshi Institute of Technology, Yelahanka, Bangalore. - Members

### Not less than four experts from outside the college representing such areas as Industry, R & O Labs, Technical Education, to be nominated by the Governing Body

### Dr. K. Gopinath

Professor, Department of Computer Science & Automation, Indian Institute of Science Bangalore - 560 012

### Dr. V. Gopalkrishna

Director, Integra Micro Systems (P) Ltd., G5, Swiss Complex, 33, Race Course Road, Bangalore 560 001

### Sri. A.T. Samuel

Director, STUP Consultants, A-1, Tower, 5th & 6th Floor, 'Golden Enclave', Airport Road, Bangalore - 560 0017

#### Dr. M. Jayant Modak

Professor, Department of Chemical Engineering Indian Institute of Science Bangalore - 560 012

### Dr. G.K. Anantsuresh

Professor, Department of Mechanical Engineering Indian Institute of Science Bangalore - 560 012

### Sri. Babu Sathain. V

Managing Director, Process Pumps Pvt. Ltd., Plot No. 86, III Phase, Peenya Industrial Area, Bangalore - 560058

### All the Heads of the Departments

- 1) Dr. R. Prabhakara Department of Civil Engineering
- 2) Dr. D. Ramesh Rao Department of Mechanical Engineering
- 3) Dr. Pradeep Kumar Dixit Department of Electrical & Electronics Engineering
- Dr. S. Sethu Selvi Department of Electronics & Communication Engineering
- 5) Dr. K.G. Srinivasa Department of Computer Science Engineering
- Dr. B.P. Vijaya Kumar
  Department of Information Science & Engineering
- 7) Dr. Premila Manohar Department of Electronics & Instrumentation Engineering
- 8) Dr. N. Sriraam Department of Medical Electronics
- 9) Dr. G.S Prakash Industrial Engineering & Management

- 10) Dr. Archna Department of Chemical Engineering
- 11) Dr. Bindu S Department of Biotechnology

- Members

- 12) Dr. K. Natarajan Department of Telecommunication Engineering
- 13) Dr. T.V.Suresh Kumar MCA Programme
- 14) Dr. P.V. Raveendra MBA Programme
- 15) Dr. V. Ramachandra Murthy Department of Physics
- 16) Dr. B.M. Nagabhushana Department of Chemistry
- 17) Dr. V. Ramachandra Murthy Department of Mathematics
- 18) Mrs. Premila Swamy Department of Humanities In-charge

### Five teachers of the college representing different levels of teaching staff by rotation on the basis of seniority of service in the college, to be nominated by the principal.

Mr. C. R. Raghunath Professor, Department of Electronics & Communication Engineering

Member Secretary Dr. T.V. Suresh Kumar Registrar (Academic) Dr. M.N. Chandra Prabha

Associate Professor, Department of Biotechnology

### Dr. Annapoorna P Patil

Professor, Department of Computer Science & Engineering

= 11 ===

### **Programs offered**

MSRIT offers wide range of programs at UG, PG and doctorate level enabling students to pursue excellence in their chosen streams. All programs are recognized by the concerned bodies and Government agencies.

### **Undergraduate courses**

MSRIT offers the following 4 year bachelor's degree programs in engineering

- Civil Engineering
- Mechanical Engineering
- Electrical & Electronics Engineering
- Electronics & Communications Engineering
- Computer Science & Engineering
- Chemical Engineering

- Industrial Engineering & Management
- Electronics & Instrumentation Engineering
- Information Science & Engineering
- Telecommunication Engineering
- Medical Electronics
- Biotechnology

**Eligibility:** A candidate who has passed 10 + 2 pattern of examination (equivalent to the two year Pre University in Karnataka) with Physics and Mathematics as compulsory subjects along with Chemistry/ Biotechnology/Biology/Computer Science/Electronics as optional subjects in the qualifying examination is eligible to pursue an undergraduate degree in engineering at MSRIT. The eligibility for admission is 45% in case of General Category and 40% marks in the qualifying examination in case of SC/ST, Category-1 and OBC Category candidates. This provided that the marks obtained by the candidate in Biotechnology/ Biology/ Computer Science/Electronics in the qualifying examination will be considered in the place of Chemistry. In case the marks obtained in Chemistry is less for the required aggregate percentage for the purpose of determination of eligibility (and not for the purpose of determination of rank, in respect of engineering/technology courses).

### 5 year bachelor degree in Architecture

**Eligibility:** A candidate who has passed 10 + 2 pattern of examination (equivalent to the two year Pre University in Karnataka) with Mathematics as one of the optional subjects and secured a minimum 50% marks in aggregate in all subjects in the qualifying examination is eligible for admission to the Bachelors of Architecture program under the General Category. The eligibility for admission is 45% of marks in the case of SC/ST, Category-1 and OBC Category candidates. This provided that the candidate should also appear and secure a minimum of 40% marks in NATA (includingSC/ ST, Category-1, and OBC Category candidates) conducted by the Council of Architecture.

### Postgraduate courses

### Masters of Business Administration (MBA)

We offer a 2-year MBA program, open to candidates who have a 3-year bachelor's degree from a recognized university with not less than 50.% of the marks in aggregate of all the years of the degree examination and 45% in case of candidates from Karnataka belonging to SC/STand Category-1.

### Master of Computer Applications (MCA)

This is a 3-year program, open to candidates who have passed a 3 year bachelor's degree from a recognized university with not less than 50% of the marks in aggregate of all the years of the degree examination with Mathematics/ Statistics/ Computer Science/ Computer Programming/ Computer Applications/ Business Mathematics/ Business Statistics as one of the optional subjects/ electives at degree level. In case of candidates from Karnataka belonging to SC/ST and Category-l the minimum aggregate is 45%.

### Master of Technology (M.Tech) Programs

MSRIT offers the following 2-year M.Tech programs for which candidates with a B.E/B.Tech. degree in the relevant discipline with at least 50% marks in aggregate are eligible. The minimum aggregate marks required is 45% in case of candidates from Karnataka belonging to SC/ST Category-l.

- Structural Engineering
- Manufacturing Science & Engineering
- Computer Science & Engineering
- Digital Electronics & Communication
- Master of Architecture (Landscape Architecture)
- Software Engineering

- Computer Applications and Industrial Drives
- Digital Communication
- Computer Integrated Manufacturing
- Industrial Engineering
- Biotechnology
- VLSI Design & Embedded Systems
- Computer Network Engineering

### **Research Programs**

Research programs leading to Ph.D/M.Sc (Engg.) are available in the following departments.

- Civil Engineering • Mechanical Engg.
- Industrial Engg. & Mgmt. Electronics & Instrumentation Engg. Biotechnology
  - Information Science & Engg.
- Electrical & Electronics Engg. Physics Electronics & Communication Engg.
   Chemistry
- Computer Science & Engg. Mathematics
- Chemical Engineering
- MBA

- Telecommunication Engg.
- Medical Electronics
- MCA

Working professionals, faculty and others with a postgraduate qualification in the related discipline and in exceptional cases, professionals with B.E. are eligible to apply for a Ph.D. The required qualification for M.Sc. (Engg) programs is a 4-year engineering degree program in the related discipline.

### **Scholarships**

Deserving students can avail several scholarships awarded by the Government of Karnataka. Here is a list of the scholarships and the corresponding applications that can be obtained from the Admission and Scholarship section during the month of September every year.

- Post Metric Scholarship to SC/STs
- Fee-reimbursements to SC/STs
- Fee- concession to Category-l, II, and III
- Extra boarding and lodging allowance to Category-I, II, & III
- Defence Scholarship
- MSRIT Alumni Scholarship

List of Private and Public sectors awarding merit scholarships

- MSR Charities
- Karnataka Minorities Development **Corporation (Loan Scholarship)**
- Department of Minorities
- Sitaram Jindal Trust
- Indian Oil Corporation

Various other scholarships are available and students are advised to find more about them through the various other means.

M.S. Ramaiah Institute of Technology is located in the heart of Bangalore City on a sprawling campus spread across 25 acres. The institution has world class infrastructure - well equipped laboratories; high tech auditoriums; library with subscription to leading journals and magazines; digital library with subscription to several online e-journals; air-conditioned, high tech conference halls; dedicated sports complex; canteens serving hygienic food; and excellent hostel facilities for boys and girls.

M.S. RAMAIAH INSTITUTE OF TECHNOLOGY MSR Nagar, MSRIT Post, Bangalone - 560 054. 









The library has a physical book section (with over 100,000 books) and a digital section with subscription to several leading e-journals and magazines.

MSRIT provides separate hostel facilities for boys and girls with hygenic food, hot water facilities, common vegetarian mess, TV lounge and a health centre and has a capacity of 1000 stidents.



### Snapshot

- Located in Bangalore, India's IT nerve centre and among the fastest growing cities
- Centrally located with easy access from different parts of the city
- VTU and UGC have conferred the prestigious Autonomous Status in 2007
- Departments accredited by the National Board of Accreditation
- ISO-9001:2008 compliant Quality Management System (photograph)
- Campus-wide Internet connectivity and dedicated browsing center
- Active research activity with live projects from reputed organisations
- Proctoral system for guidance and counseling to students and feedback to parents
- Full-fledged Placement Centre that is active and successful
- Center for Advanced Training and Continuing Education
- Center for Research and Industrial Consultancy
- Entrepreneurship Development Cell

= 17 =

### **Civil Engineering**



The Civil Engineering Department was started in the year 1971. Post graduate program M Tech in Structural Engineering was started in the year 1984. Another milestone was achieved in the year 1994; the department was recognized as Research Center. Over four decades the department has carved its niche in the areas of academics, research, consultancy, collaborative projects, and publications. The department was awarded distinction of 5 years of accreditation by NBA when it was evaluated for third time. Over 12 research scholars have been awarded Ph D degree and more than 18 research scholars are pursuing Ph D and M Sc degree in Engineering. Over 250 technical papers in the reputed journals and conferences are the outcome of active research of the department. The Department holds a patent for Total Replacement of Sand in Concrete by Pond Ash (Patent No 244063). The department has been actively involved in conducting conferences, workshops, FDP's, Site Visits, Project Tours and several students related programs (SAMEEKSHA) to provide a platform for sharing and spreading the latest developments in the field of Civil Engineering.





Dr. R. Prabhakara Professor & Head

### Paper Presented

(National and International journals and conferences- 2008 – 14) 201

### **Recent projects**

(UGC/AICTE/DEST/VTU)-7

### Research and consultancy activity - 7

The department has also conducted several conferences at national and international level

### Sameeksha 2014

The department of Civil Engineering hosted its second inter college Civil Tech Fest- Sameeksha April 2014 in the college. More than 300 students from various colleges of Bangalore participated in highly competitive technical events.

### **Civil Aid Endowment Lecture-2014**

Department of Civil Engineering organized "ICI (KBC)- CivilAid (Bureau Veritas)" Endowment Lecture on 23rd April 2014. Mr. M Anand, Principal Counselor, delivered a lecture on "True Potential of a Green Building and How Do We Harness?" covering the need, importance and technologies for the need of green buildings. Faculty and students of civil engineering department participated in the program

### Seminar On Highway Technology

The Department of Civil Engineering conducted a two day seminar on "Research And Application Of Innovations In Highway Technology" March, 2014. The aim of the seminar was to encourage long-term innovation in terms of the design, construction, maintenance, evaluation, rehabilitation and safety of Roads in the country.

### Faculty

**Professor & HOD** Dr. R.Prabharakara – M Tech, Ph D

### Professors

Dr. C. G. Puttappa – ME, Ph.D Dr. C. Raj Gopal Reddy – ME, Ph.D Dr. Srikanth M. Naik – ME, Ph.D

### **Associate Professors**

Dr. H.Narendra – M Tech, Ph.D Mr. B. G. Jagadeesha Kumar – ME, (Ph.D) Mr. K.V. Manjunath – MTech, (Ph.D) Dr. Umadevi .B – ME, Ph.D

### Assistant Professors

Mr. V. Harish – ME, (Ph.D) Mrs T. Geetha kumari - ME, (Ph.D) Mrs. Usha C – M Tech, (Ph.D) Mrs. B. Suguna Rao – M Tech(Ph.D) Mrs. N. Srilatha - M Tech, (Ph.D) Mr. R. Mourougane - ME, (Ph.D) Mrs. Jyothi Roopa S K - M Tech, (Ph.D) Mrs. Jangam Sumalatha – M Tech (Ph.D) Ms. Swathi T S – M Tech Mrs. Jyothi MR – MTech Mr. Manjunath R – M Tech (Ph.D) Mr. Prashanth Sunagar – M Tech (Ph.D) Mr. Anil Kumar R – M Tech (Ph.D) Mr. Niranjan G Hiremath – M Tech (Ph.D) Dr. Raghavendra . H. U.- MSc, Ph.D Mr. Basavana gowda G. M.- M Tech (Ph.D) Mr. Santhosh D - M Tech (Ph.D) Mr. Nambiyanna B - M Tech (Ph.D) Mr. Raje Gowda – M Tech (Ph.D) Mr.Harish M. L – M Tech (Ph.D) Mr.Vinod Kumar H. A – M Tech (Ph.D) Mr. Charan Prasad M - M.E Mrs. Shilpa D.N - M.Tech Mrs. Nagashree B - M.Tech

### **Mechanical Engineering**



The Department of Mechanical Engineering started in the year 1962 with an intake of 60 students. The department has grown strong over the last 52 years and today has an intake of 180 students and 47 teaching staff. All the faculty members are well qualified with Post graduate degree and 20 of them possessing doctorate degree.

The department offers four year degree course and also offers two Master's Degree in Manufacturing Science & Engineering and Computer Integrated Manufacturing, with an intake of 18 each. The Department also offers research program which includes MSc Engineering by research and PhD degree from Visvesvaraya Technological University. The faculty members have taken up number of research projects funded by external agencies like DRDO, DST, AICTE and Visvesvaraya Technological University. Faculty members from the department have published number of technical papers in International/National Journals and Conferences including Patents and books on different domains of Mechanical Engineering and are recommended by Visvesvaraya Technological University Board of Studies as reference text books.







Dr. D. Ramesh Rao Professor & Head

### Papers Published/Presented

(National/International journals and conferences) more than-240

### **Recent Funded Projects:**

(UGC/AICTE/DST/VTU)-7

### **Research and Consultancy activity:**

- Investigation of the strengthening mechanisms in Aluminium reinforced Carbon Nanotube composites—Funded by DRDO, NewDelhi-sanctioned amount of Rs 18.22 Lakhs.
- CFD and experimental investigation of combustion of biofuels in I.C.Engines- Funded by AICTE-sanctioned amount of Rs 6.9 Lakhs.
- Investigation of enhanced pool boiling methods for cooling of microelectronic devices Funding Dept of Science and Technology sanctioned amount Rs 19.90 Lakhs.
- Synthesis, characterization & modeling of functionally graded metal ceramic composites Funded by AICTE- Sanctioned Amount of Rs 8 Lakhs.
- Synthesis & Characterisation of Copper reinforced carbon nanotube composite-funded by VTU- sanctioned amount of Rs 7.5 Lakhs.

### Associations

The Department has close associations with organizations such as HAL, BHEL, MICO, HMT and national laboratories like NAL, CPRI.

### Industry-oriented programs

One of the highlights of the department activity is the final year students project exhibition arranged at the end of every academic year which is open to public and Industries.

Department arranging Industrial visits periodically, conducts various teaching programs and arranges technical lectures from eminent persons from industries & R&D organizations.

### Faculty

**Professor & HOD** Dr. D.Ramesh Rao M.E. Ph.D. FIE.,MISTE

### Professors

Dr. N.D. Prasanna - M.E, Ph.D Dr. Raji George - M.E, Ph.D Dr. A. T. Venkatesh- M.E, Ph.D Dr. P. Dinesh - M.E, Ph.D Dr. Putta BoreGowda - M.Tech, Ph.D Dr. S. Krishna - M.E, Ph.D Dr. K.R. Phaneesh - M.E, Ph.D

### **Associate Professors**

Dr. P.L.Srinivasa Murthy - M.E, Ph.D, F.I.E Mr. K.L. Vishnu Kumar - M.Tech. Mr. P.N. Girish Babu - M.E, (Ph.D) Dr. Veeranna B. Nasi - M.E, Ph.D Dr. C.M. Ramesha - M.Tech, Ph.D Mr. B.P.Hari Chandra - M.E,(Ph.D) Dr. P.B. Nagaraj - M.E, Ph.D Dr. Niranjan Murthy - M.Tech, Ph.D

### **Assistant Professors**

Mr. D. Venkatesh - M.E. (Ph.D) Mr. Sridhar B.S - M.Tech, (Ph.D) Mr. Nagesh. S. N - M.Tech, (Ph.D) Mr. Vishwanth Koti - M.Tech, (Ph.D) Mrs . Jyothilakshmi .R - M.Tech, (Ph.D) Dr. Siddaraju - M.Tech, Ph.D Mr. T. Anil Kumar - M.Tech, (Ph.D) Mr. R. Kumar - M.Tech, (Ph.D) Mr. Sunith Babu. L - M.Tech, (Ph.D) Mr. Naveen Kumar BK - M.Tech Mr. Jaya Christian - M.Tech, (Ph.D) Mr. Arun Kumar P.C - M.Tech, (Ph.D) Mr. Rajesh.S - M.Tech, (Ph.D) Mrs. Hemavathy. S - M.Tech, (Ph.D) Mr. Manjunatha. G - M.Tech, (Ph.D) Mr. Mahesh. V.M - M.Tech, (Ph.D) Mrs. Bijayalakshmi Das - M.Tech Mr. D.K. Vishwas - M.Tech, (Ph.D) Mr. Mahantesh.S Matur M.Tech, (Ph.D) Mr. G. V. Kulkarni - M.Tech, (Ph.D) Dr. Mohandas. K.N - M.Tech, Ph.D Mr. K. Lokesh - M.Tech, (Ph.D) Dr. N.S Prasanna Rao - M.Tech, Ph.D Mr. Bharath. M.R. - M.Tech Mr. Rajendra. P - M.Tech Mr. Pradeep Kumar. K.V. - M.Tech Mr. Ashok Kumar K - M.Tech Mr. Pradeep S - M.Tech Mr. Balasubramanya - M.Tech Mr. Vinayak Talugeni - M.Tech Mr. Bhardwaj Gururaj Anilkumar - M.Tech Mr. Nishanth R Acharya - M.Tech Dr. Prakrathi S - Ph.D Mr. Gururaj Lalagi - M.Tech Mr. Vijaya Kumar S.L - M.Tech

### **Electrical & Electronics Engineering**



The department of Electrical and Electronics Engineering was started in the year 1962 along with the college. Subsequently, in the year 2004, an M.Tech program in Computer Applications in Industrial Drives was started. Further, the department is recognized as a Research Centre in the year 2003 and has produced 6 doctorates in the last 10 years. The department is actively involved in R & D activities in the areas of HVDC Transmission, Power Electronics & Drives, MEMS, High Voltage Engineering, Power Systems and Renewable Energy Sources. The Department is accredited by NBA for a duration of 5 years from July 2015.





Dr. Pradipkumar Dixit Professor & Head

### Activities

#### **Publications**

- 1. Premila Manohar and Wajid Ahmed, "Application of superconducting fault current limiter in multi terminal HVDC systems", CIGRE SC B4 Meeting and International Tutorials and Colloquium on HVDC and Power Electronics, 21-26 Sept 2015, Agra, India.
- Chandrashekhar Badachi and Pradipkumar Dixit, "Analytical Model to Predict Pollution Flashover Voltages of Porcealin Disc Insulators", Acta Electrotechnica et Informatica, Vol. 15, No. 1, DOI: 10.15546/aeei-2015-0007, ISSN 1335-8243 (print) © 2015 FEI TUKE, ISSN 1338-3957(online), www.aei.tuke.sk, pp. 42-49, May 2015.
- 3. Dawnee S and Navakanta Bhat, "Fabrication of CMOS ISFETs with different sensing layers for pH measurement", Proc. of 18th International Workshop on Physics of Semiconductor Devices (IWPSD-2015), Indian Institute of Science, Bangalore, December 7-10, 2015..
- Gurunayk C Nayak, "Analysis of 2-Periodic Discrete Time Controller", 2015 IEEE Conference on Process & Control 18th -20th Dec. 2015, Kaul Lumpur, Malasiya.
- Kusumika Krori Dutta, Satheesh Kumar Raju Konduru, Anil Kumar, B Sunny Arokia Swamy "Double Handed Indian Sign Language to Speech and Text", 2015 3rd International Conference on Image Information Processing (ICIIP-2015), 21st – 24th Dec 2015, Jaypee University of Information Technology, Himachal Pradesh.
- Suryatapa Roy, Biswajeet Bedanta, S. Dawnee "Advanced Metering Infrastructure for Real Time Load Management in a Smart Grid", accepted for publication at International Conference on Power and Advanced Control Engineering (ICPACE 2015), Aug 12 – 14, 2015, Bangalore.

### **Funded Projects**

- 1. Hybrid HVDC systems for multi infeed applications funded by Central Power Research Institute, Bangalore for a period of two years, 2016-18 . The sanctioned amount is 17 Lakhs. The principal investigator is Dr. Premila Manohar.
- 2. Electric Field Computations to reduce RoW funded by KPTCL, Bangalore from September 2015. Sanctioned amount is 1 lakh per year. The principal investigator is Dr. Pradipkumar Dixit.
- 3. Test support, evaluation of LCA LRUs and Augmentation of Lightning Test Facility funded by Aeronautical Development Agency, Bangalore for duration of 3 years from May 2013 to June 2016. Sanctioned amount is 47.2 lakhs. The principal investigator is Dr. Pradipkumar Dixit.

### Students' Achievement

1. Project Belaku- An initiative of four alumni (2015 batch) of the department of E&E worked with 15 students of sixth semester, E&E to install solar powered lights in all the houses in two villages viz: Ghatakunang and Gowliwada, in the Joida Taluk, in Karnataka. This project was fully funded by MSRIT

### Faculty

**Professor (Emeritus)** Dr. G.R. Nagabhushana - Ph.D

**Professor & HOD** Dr. Pradipkumar Dixit –<u>M.Tech, Ph.D</u>

### Associate Professors

Dr. Snehaprabha .T.V- M.E, Ph.D Mrs. K.N. Prasanna –M.E

### Assistant Professors

Sri. C. Ravindra Kumar- M.E Sri. Victor George- M.Tech,(Ph.D) Sri. Vinayaka V Rao- M.Tech, (Ph.D) Smt. S. Dawnee- M.Tech, (Ph.D) Sri. Kodeeswara Kumaran-M.Tech, (Ph.D) Sri. K. Ramakrishna Murthy- M.Tech, (Ph.D) Smt. Kusumika Krori Dutta-M.Sc(Engg.) Sri. Narsimpur Tushar Suresh-M.Tech Smt. Archana Diwakar-M.Tech Smt. Aruba Rajan-M.Tech Smt. Aruba Rajan-M.Tech Sri. Gurunayk Nayak –M.Tech Sri. Chandrashekar Badachi - M.Tech Ms. Mamatha G.M - M.Tech

Sri. Omsekhar Indela - M.Tech

### Associations

- The department has forged strong associations with leading organizations such as IISc, CPRI, PRDC, ABB, Honeywell, ADA and IBM on R & D activities.
- The department has an MOU with Schneider Electric Company and a Centre of Excellence has been established in 2010 for Automation and Process Control, consisting of advanced equipment and facilities.
- The department has signed an MOU with National Instruments in 2015, to establish NI Labview academy.
- The department has signed an MOU with Ekovehicles Pvt. Ltd in Dec, 2015 to encourage students to take up projects on electric vehicles.
- A number of Guest Lectures and training programs were conducted under the banner of IEEE-PES student chapter.

### **Electronics & Communication Engineering**



The Department of Electronics and Communication Engineering was started in 1975 and has grown over the years in terms of stature and infrastructure. The department has well equipped simulation and electronics laboratories, and is recognized as a VTU approved research center. The department currently offers a BE program with an intake of 120,and two MTech programs, one in Digital Electronicsand Communication, and one in VLSI Design andEmbedded Systems, with intakes of 30 and 18 respectively. The department has aCenter of Excellence in the field of food grain and security technology sponsored by VGST, Govt. of Karnataka. Past and current research sponsoringagencies include DRDO, VTU, VGST, and AICTE. The department has modern research ambience to develop innovative solutions and products, and to pursue various research activities focused towards national development in various advanced fields such as signal processing, embedded systems, cognitive sensors &RF technology software development and mobile technology.





Dr. (Mrs.) S. Sethu Selvi Professor & Head

#### Papers presented (2011 – 2015) National/International Journals and Conferences – 105

### **Recent projects** (AICTE/DRDO/VGST)

The Vision Group of Science and Technology (VGST) has selected the department for the CESEM Award providing a grant of Rs 60 lakhs for 3 years duration to establish a Centre of Excellence on "Food Grain Characterization using RF Techniques and Security Technology". This project utilizes multidisciplinary advanced technologies to reduce wastage of food grains during storage.

The department has received the following funded projects:

- AICTE New Delhi through Research Promotion Scheme (RPS) has funded Rs 8.00 lakhs for executing a project in "Multimodal Biometrics".
- DARE (DRDO, Ministry of Defence) have sanctioned Rs 7 lakhs for "Study of Propagation of RF Microwave Signal in Sand, Dust and Plasma Media."
- Defence Metallurgical Research Laboratory (DRDO Ministry of defence) had sanctioned Rs 9.8 lakhs for "Microwave characterization of ceramics and ceramic matrix composite by complex dielectric constant at elevated temperature".

### **Recent Student Achievements**

- VI semester students won the Texas Instruments Innovation Challenge Chairman's Award worth \$10,000 out of about 11,000 students who participated from all over India
- VGST had sanctioned Rs. 0.7 lakhs towards the projects, "Phytomonitoring system for crop growth, microcontroller and sensor based network" and "3D Potter: A Revolutionary 3D Printer"

### Faculty

**Professor & HOD** Dr. S. Sethu Selvi, M E Ph.D

### Professors

Dr. K. Indira, M E Ph.D Dr. Maya V Karki, M.E. Ph.D Prof. M.S. Srinivas, M.Tech Prof. C R Raghunath, M.Tech

### **Associate Professors**

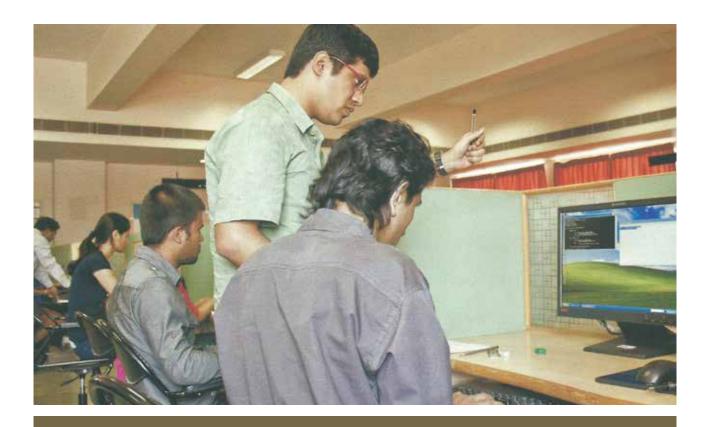
Smt. B. Sujatha, M.E. (Ph.D) Smt. S. Lakshmi, M.E. (Ph.D) Dr. V Anandi, M.S. Ph.D Dr. T.D. Senthilkumar, M.Tech Ph.D Dr. S Raghuram, M S. Ph.D

### **Assistant Professors**

Smt. H. Mallika, M.S. (Ph.D) Smt. A R Priyarenjini, M.Tech Sri. S.L. Gangadharaiah, M.Tech (Ph.D) Sri. M. Nagabhushan, M.Tech (Ph.D) Sri. C G Raghavendra, M.Tech (Ph.D) Sri. Sadashiva V Chakrasali, M.Tech (Ph.D) Smt. C Sharmila Suttur, M.Tech (Ph.D) Smt. Mamtha Mohan, M.Tech (Ph.D) Sri. V Nuthan Prasad, M.Tech (Ph.D) Sri. Shreedarshan K, M.Tech (Ph.D) Smt. Reshma Verma, M.Tech (Ph.D) Smt. Lakshmi Srinivasan, M.Tech (Ph.D) Smt. Flory Francis, M.Tech Smt. Sarala S M, M.Tech Smt. Punya Prabha V, M.Tech (Ph.D) Smt. Suma K V, M.Tech (Ph.D) Smt. Jayashree S, M S Sri. Manjunath C Lakkannavar, M.Tech Ms. Chitra M, M.Tech Ms. Akkamahadevi M B, M.Tech Smt. Veena G N, M.Tech Smt. Pavitha U S, M.Tech Ms. Sara Mohan George - M.Tech

Ms. S.Imaculate Rosalinc - M.E

### **Computer Science and Engineering**



The Department of Computer Science and Engineering was established in 1984 with MSRIT among the earliest institutes in Karnataka to introduce the CSE programme in the curriculum. The Department has received funding for research from AICTE and Board of Research in Nuclear Sciences (BRNS). The post graduate programme was introduced in 1999. The department consists of highly qualified and experienced faculty members who have won several accolades and recognition in the industry. Members have won 'Best Teacher' awards, reputed Fellowships, and few of them are listed in the Marquis Who's Who in Science and Engineering.





Dr. K.G. Srinivasa Professor & Head

### **Papers presented**

(National/International journals and conferences - 2010-15) - 106

### Recent projects (UGC/AICTE/DST/VTU)

- Machine Learning Techniques for Data Mining based Intrusion Detection Systems. Funding: Defense Research and Development Organization (DRDO), India.
- Design and development of Assistive Internet of Things (IoT) Framework for Physically Challenged People funded under SERC Fast Track Scheme for Young Scientists Scheme, DST.
- Empirical Analysis of Public Data Sources to Understand the Development Methodologies of free and Open Source Software Engineering funded by University Grants Commission, New Delhi.

### Associations

- MOU with SAP Lab, India
- IBM Centre of Excellence to provide training on IBM technologies and certification
- CUDA Research & Teaching Centre by Nvidia

Department Hosts Dr. Badrinath Ramamurthy, Senior Architect and Former Faculty of IIT Kanpur as the AICTE-INAE Distinguished Visiting Professor for the term 2013 -15

### Faculty

**Professor & Research Head** Dr. Raghu Krishna Puran - Ph.D (USA)

**Professor (Emeritus)** Dr. R. Srinivasan - D.Sc Dr. S. Ramani - Ph.D Prof. Nagabhushan A.M - M.Tech

**Professor & HOD** Dr. K.G. Srinivasa - M.E, Ph.D

### Professors

Dr. Anita Kanavalli - M.E, Ph.D Dr. Annapurna P. Patil - M.Tech, Ph.D Dr. S. Seema - M.S, Ph.D

### **Associate Professors**

Dr. Jagadish S. Kallimani - M.Tech, Ph.D Mrs. Jayalakshmi. D.S - M.Sc (Engg.) Dr. Monica Ravikishor Mundada -Ph.D

### **Assistant Professors**

Dr. T. N. R. Kumar - M.Tech, Ph.D Mr. Divakar Harekal - M.E, (Ph.D) Mrs. S. Rajarajeswari - M.E, (Ph.D) Mrs. A. Parkavi - M.E, (Ph.D) Mrs. Veena. G.S - M.Tech, (Ph.D) Mrs. Sanjeetha. R - M.Tech, (Ph.D) Mrs. J Geetha - M.Tech, (Ph.D) Mrs. Mamatha Jadav. V - M.Tech Mr. Chethan. C.T - B.E Mrs. Sini Anna Alex - M.E, (Ph.D) Miss. Sardar Vandana Sudhakar - M.E Mrs. Meeradevi - M.Tech, (Ph.D) Mr. M. Mallegowda - M.Tech, (Ph.D) Mrs. Chandrika Prasad - M.Tech Dr. Sowmyarani C.N - M.Tech - Ph.D Mr. Pramod Sunagar - M.Tech Ms. Sowmya B.J. - M.Tech, (Ph.D) Mr. Chetan - M.Tech, (Ph.D) Mr. Pradeep Kumar D - M.Tech, (Ph.D) Mr. Ganashyya Shidaganti - M.Tech, (Ph.D) Ms. Darshana A Naik - M.Tech, (Ph.D) Mr. Srinidhi Hiriyannaiah - M.Tech, (Ph.D) Mr. Hanumantha Raju - M.Tech Mrs. Aparna R - M.Tech

### **Chemical Engineering**



Started in 1978, the Department was the first to offer a course in Chemical Engineering by a self-financing engineering institution in Bangalore and the fifth to be started in MSRIT. The Department is certified thrice in succession by the National Board for Accreditation, by NAAC with A Grade and has ISO 9001:2000 certified for imparting quality education. Over 1900 students have graduated in 33 batches and a majority of them have secured university ranks. The expertise of the faculty covers a wide range of disciplines and they are engaged in cutting edge technological research. A testimony to this is the fact that the Bangalore Regional Centre of the Indian Institute of Chemical Engineers is functioning from this department for almost a decade. The country's most prestigious event in Chemical Engineering CHEMCON-2011 was organised at MSRIT. The department is an approved Research Center for acquiring higher qualification leading to M.Sc and Ph.D degrees. The department offers excellent infrastructure and students have won various prestigious awards, international internships and high accolades for innovative projects.





**Dr. Archna** Professor & Head

### **Papers presented**

(National/International journals and conferences – 2008-2014:-70

### **Recent projects** (UGC/AICTE/DST/VTU)

### **Completed:**

- 1. Degradation of Azo dyes and Cyanides by Hydrodynamic and Acoustic Cavitation – Funded by VTU (Rs. 8.93 lakhs)-Completed year March 2014.
- 2. Development of Nano Metal oxide Complexes for High Temperature Sorption of Carbon Dioxide –Funded by DRDO (Rs. 14.70 Lakhs)- Completed year October 2012.
- 3. Utilization of Vermiculite and Anatase for Treating Effluents containing Complex Pollutants Funded by AICTE Completed year 2006.

### **On Going Projects**:

- 1. Enzymatic Valorization of Bio-Diesel Derived Glycerol to Acetins, funded by MSRIT AA (Rs. 60,000/-)
- 2. Development of Polymer Nano-composite with Nano Metal Oxide Fillers to Enhance their Properties Funded by MSRITAA. (Rs.70000/).
- 3. Design of submerged ceramic membrane biorector for treatment of industrial/domestic/municipal wastewater Institution of Engineers. (25000/-)

### **Certificate Course**

Department is running a certificate course in "Chemical Plant Design and Simulation", Covering Process Instrumentation and Control, Process Integration, Process Engineering in Plant Design, Process Engineering and Process Simulation laboratory. The course is an interface between industry and academia.

### Faculty

**Professor & HOD** Dr. Archna, M.E, Ph.D.

### **Associate Professors**

Dr. V. Venkatesham, M. E., Ph.D. Mr. K.A. Badarinarayana, M.Tech. Dr. G M Madhu, M.E., Ph.D. Dr. Brijesh, M.Tech., Ph.D.

### **Assistant Professors**

Dr. Rajeswari M Kulkarni, M.Tech., Ph.D. Mr. Ramasivakiran Reddy, M.Tech., (Ph.D.) Mrs. V. Sravanthi, M.Tech., (Ph.D.) Mr. Koteswara Rao Jammula, M.Tech., (Ph.D.) Ms. Anapurna S.M M.Tech Mr. Sagar J.S - M.Tech Dr. Mahendra Chinthala - Ph.D

### **Research and Consultancy projects**

- Studies on production of Hydrogen through biological route
- Synthesis of nanomaterials for water treatment applications
- Cavitation technologies for water treatment applications. NoveEcofiendlyHeterogeneousCatalysts for Acid Catalyzed Organic Transformation Reactions.
- Structure property relationship of nanometal oxide filler incorporated polymer nano composites
- · Bioremediation using different biosorbents.

### **Collaborations:**

- MOU with Chemtex Pvt. Ltd. in connection with knowledge sharing and Consultancy.
- MOU with MSR Drug Testing House in connection with water analysis.
- Working on collaborative projects with Poornaprajna Institute of Scientific Research.
- MOU with Kongovi Electronics Pvt Ltd,. in connection with Equipment and human resource sharing.

\_\_\_\_\_ 29 \_\_\_\_

### **Industrial Engineering & Management**



The department of Industrial Engineering & Management, earlier known as Industrial & Production Engineering was established in the year 1979 as a part of Mechanical Engineering. The Department was structured as an independent entity in the year 1984 and was renamed Industrial Engineering and Management in the year 1992. The department of Industrial Engineering and Management obtained the academic autonomous status in the year 2007 affiliated to VTU along with other departments of the institute.

The Department is backed by highly motivated and result oriented staff members. Presently, the department is headed by Dr. G. S. Prakash. All the faculty members possess Master's degree, with 7 of them having doctorate degree from prestigious universities and the rest of the faculties are pursuing their PhD. Faculty members of the department have won prestigious awards and recognitions.

The department started its Post Graduate Program in Industrial Engineering from the academic year 2012-13. The first batch has completed the PG program in the year 2013 -14.

The department is mainly focusing on the thrust areas like Optimization, Productivity enhancement, Quality Control, Work System Design, Supply Chain Management, Computer Integrated Manufacturing, Operations Planning and Control, Principles of Management, and many more including basic Mechanical Engineering subjects. Our graduates are placed in a spectrum of manufacturing and service industries.





Dr. G S Prakash Professor & Head

### No. of Papers presented

National International journals and conferences from 2008-15: 200

### No. of Staff Development Programmes Organized

Staff development programmes conduced from 2008-15: 25

### **Research and Consultancy**

The department has well equipped R & D labs. There are 12 research scholars working for the pursuit of the doctoral degree.

### **Recent projects**

- Mathematical Models in the design and optimization of perishable goods supply chain with emphasis on food and vegetables. Funding agency: DST.
- Development and Characterization of glass reinforced magnesium alloy metal matrix composites. Funding agency : VTU., Belgaum
- Enhancing fuel economy of automobiles through design of experiments. Funding agency: UGC, New Delhi.

### Associations

• The department has set up a Behavioural Science Research lab at the MSRIT premises in collaboration with Stanford - Columbia University, USA, later in 2011 with the National University of Singapore, Singapore.

### Faculty

**Principal & Professor** Dr. N V R Naidu, M.Tech, Ph.D

**Professor & Head** Dr. G.S. Prakash - M.Tech, Ph.D

### **Associate Professors**

Mr. A. Balakrishna - M.Tech, (Ph.D) Mr. S. Appaiah - M.Tech, (Ph.D) Dr. C.S. Chethan Kumar - M.E, MBA, Ph.D Dr. Bharath.S - M.S, Ph.D

### **Assistant Professors**

Dr. Shilpa .M - M.E, (Ph.D) Mr. M.R. Shivakumar - M.E, (Ph.D) Dr. Shobha. R - M.Tech, Ph.D Dr. M. Rajesh - M.Sc (Engg.), Ph.D Mr. Vivekanand . V - M.S Mr. Sudheer .D. Kulkarni - M.Tech, (Ph.D) Mr. Deepak Kumar, M.Tech (Ph.D) Mr. P.R. Dheeraj - M.TEch

### **INDEMAN** Society

The society of Industrial Engineering andManagement,"INDEMAN SOCIETY", was established in the year 1996. It was formed with the intention of bringing out the hidden talents of the students and to expose them to latest technological developments. The society is engaged in organizing invited lectures, industrial visits and others co-curricular activities.

### **Electronics & Instrumentation Engineering**



Department of Electronics and Instrumentation Engineering was established in the year 1992 as Department of Instrumentation Technology and it is renamed recently by VTU. The department has been accredited by NBA three times and also has ISO 9001:2008 Quality management System in place. The synergy of the progressive management, committed faculty, staff, and students are ensuring in excellent academic results year after year.

The goal and objective of the department have been to prepare the students Industry-ready by aligning Electronics and Instrumentation Engineering education program to the current technology and the best practices in the area of Embedded system, Sensor technology and Industrial Automation technologies in general and specially for deployment of these technologies in building Industrial Automation Systems with latest advances in Information, Communication and Networking.





**Dr. Premila Manohar** Professor and Head

#### **Research and Development:**

- 1. Industry Collaboration: The department has signed MoU with Mitsubishi Electric to set up a centre of excellence in factory automation on 24th Feb 2016.
- 2. Number of papers published in journals and conferences by faculty: 5
- 3. Students' funded project: Four projects were selected and funded by KSCST and Rs 20, 000 was sanctioned.
- 4. Rajesh Arasu, Head, Architecture, Philips India, Bangalore, delivered a talk about "Product Design and Development" on 7thOct 2015.

### Faculty Development Programme / Workshops:

 The Department organized A 3-day FDP on "Current Trends in Digital Image Processing & its Applications" from 19 to 21 January, 2016, Under TEQIP. The FDP was inaugurated by Dr. A.G.Ramakrishnan, Professor & Chairman Dept.of Electrical Engg IISc, Bangalore along with Principal, MSRIT.

### Inter Departmental Activities:

- The department Electronics and Instrumentation Engineering in association with Telecommunication Engineering and Electrical and Electronics engineering has organised 1st IEEE Sensor Council International Conference on Smart Sensors and Systems (IC-SSS – 2015) from December 21-23, 2015.
- 2. The Department of Electrical & Electronics Engineering & Department of Electronics and Instrumentation Engineering MSRIT organized one week Faculty Development Programme on 'Trends in Industrial Measurements & Automation' from 27th June to 1st July 2016".

### Industrial Visits:

• VI semester students visited L&T Kanchipuram and VEL Steel tubes Pvt Ltd, Chennai and IV semester students visited Martin chocolates company, Bangalore.

### **Student Achievement:**

- Mumtaz Ahmed, Gondi Prashitha, Hithiksha, and Reshma had participated and won appreciation award for the project named "Intelligent car wash system" at Mitsubishi electric cup – A national level automation competition held at VIT, Pune.
- Tanush Chowdhury and Vasant Menon of Seventh semester has won I place in INFINIUM held at BMIST in the month of October 2015.
- Srujan and Harish of Fifth semester has participated in the ARM design context at IIT Madras in the month of September 2015

### Faculty

**Professor & HOD** Dr. Premila Manohar

Professors

Dr. J Ravi - Ph.D

### Associate Professors

Mr. G. Shivaprakash - M.Tech. (Ph.D) Mrs. M.Jyothirmayi - M.E. (Ph.D) Dr. M.K. Pushpa - M.Tech. Ph.D

### Assistant Professors

Mr. H.S. Niranjana Murthy - M.Tech. (Ph.D) Mr. M.D. Nandeesh - M.Tech. (Ph.D) Mrs. Elavaar Kuzhali.S - M.S. (Ph.D) Mrs. J.V. Alamelu - M.S (By Research) Dr. A. Saravanan - M.E., Ph.D Mrs. K.M Vanitha - M.Tech. (Ph.D) Mrs. Vibha.B.Raj - M.Tech. Mr. Ajay Ashok ovhal - M.Sc (Engg)

### **Information Science and Engineering**



Department of Information Science and Engineering (ISE) was established in the year 1992 with an objective of producing high-quality professionals to meet the demands of the emerging field of Information Science and Engineering. The department started with UG programme with an annual sanctioned intake of 30 students and the intake was enhanced to 60 seats in the year 1991, to 90 seats in the year 2001 and then to 120 seats in the year 2008. The department started M.Tech in Software Engineering in the year 2004. The department has been recognized as R&D center by VTU. The department has well equipped laboratories. Some of the laboratories have also been set up in collaboration with industries such as Intel, Apple, Honeywell, EMC2, Nokia Siemens and IBM. The department has highly qualified and motivated faculty members. All faculty are involved in research and technical paper publications in reputed technical journals, conferences across the world. The department has successfully conducted seminars & workshops for students and academicians in the emerging technology.





Dr. Vijaya Kumar B. P Professor & Head

### **Research Publications**

National / International Journal and conferences (2008-15): 340

#### **Research and Consultancy**

Department is into Research and Consulting activities in the areas of Image Processing, Bio Informatics, Middleware Technologies, Data Mining, Service Oriented Architecture, Software Testing, Free and Open Source Software Engineering, Mobile ad hoc and Sensor networks.

### Research Projects (UGC/AICTE/DST/VTU/VGST)

- Design and Development of Assistive Internet of Things (IOT) , sponsored VGST - 4 Lakhs
- Design and Development of a low-cost, Portable Gait Motion Analysis System, sponsored by DST - 55 Lakhs
- Brain computer Interface, Pattern Recognition, Robotics in Health Care, ArtifiCial Intelligent system, sponsored research & development project by AICTE, New Delhi - 7.5 Lakhs
- Smarter Farm1ng Joint research project with IBM.
- ARM Lab, ARM Kits funded by ARM company WIth development kits
- Mobile computing Innovation Lab, sponsored by Microsoft (Nokia) University Program, Application development for smart phones, student interns and training activities.
- Research project on digital image registration sponsored by AICTE, New Delhi
- CUDA teaching center with grant for equipment consisting of 8 Tesla multi-core processor cards and a teaching assistant grant by NVIDIA
- Embedded system Lab with equipment grant of Intel Galileo Arduino- certified development boards, sensor Grove kits
- Honeywell Research Lab: conveyer Belt Test Rig sponsored by Honeywell Pvt. Ltd, Bangalore
- Information Storage Management and Data Science Lab with EMC2

### Associations

The department has forged robust alliances with Intel India, Microsoft, Mindtree, Philips, IBM, Siemens, Apple, Tationem, SECO, EMC2, Apple, Honeywell and Nvidia with several companies establishing Centers of Excellence in the campus.

### Faculty

### Professor & HOD

Dr. Vijaya Kumar B.P M.Tech (IITR), Ph.D (IISc), SMIEE

### Professors

Dr. Lingaraju G <mark>M M.Tech, PhD</mark> Dr. Mydhili K Nair - Ph.D

#### **Associate Professors**

Mr. Rajaram M Gowda - M.Tech (Ph.D) Mr.Shashidhara H S - M.Tech, (Ph.D) Mr.George Philip C - M.Tech, (IITB) Dr. Megha.P.Arakeri - M.Tech, Ph.D (NITK) Dr. Siddesh G M - M.Tech , Ph.D Dr. Raghavendra G.S - Ph.D

#### **Assistant Professors**

Dr. P M Krishna Raj - M.Sc (Engg), Ph.D Mrs. T Tamilarasi M.E ,(Ph.D) Mrs. Savita K Shetty - M.Tech Mrs. Myna A N - M.Sc (Engg) (Ph.D) Mrs. Deepthi K - M.Tech Mrs. Lincy Meera Mathews - M.Tech, (Ph.D) Ms. Rajeshwari S B - B.E, M.Tech Mrs. Prathima M N - M.E Mrs. Pushpalatha M N - M.Tech (Ph.D) Mr. Mohan Kumar S - M.Tech (Ph.D) Mrs. Sumana M - M.Tech (Ph.D) Mr. Prashanth Kambli - M.Sc, (M.Sc Engg) Mr. Naresh E - M.Tech (Ph.D) Mr. Jagadeesh Sai D - M.Tech Mr. S R Mani Sekhar - M.Tech, (Ph.D) Mr. Suresh Kumar K R - M.Tech, (Ph.D) Mrs. Sunitha R S - M.Tech Mr. Sandeep B L - M.Tech, (Ph.D) Dr. Dayananda P - M.Tech, Ph.D Mr. Koushik S - M.Tech, (Ph.D)

### **Telecommunication Engineering**





Dr. K. Natarajan Professor & Head

The Department of Telecommunication Engineering was established in 1996 to address the increasing demand for professionals with expertise in communication and networking Technologies in India. The graduate Engineering programme is governed by a robust quality management system which covers all academic and co curricular activities including course revision delivery evaluation laboratories assignment, mini projects and seminars. The department has state of the art laboratories equipment resources and committed faculty with the best of academic and industry recognition. Robust alliances with some of the leading industries like CDAC, CDOT, DRDO, ISRO, ERNET, STANFORD and many more along with other universities enable the department conduct R & D and execute innovative project that potentially help PG and UG students for placements and higher studies. The Department strives to address the above challenges and gather insights towards making the course congruous ubiquitous under the leadership of Dr.K Natarajan along with his team members of the department.

### Activities

### **Papers presented**

National/International Journals and Conferences 2008-2016: 116

### Associations

Department of Telecommunication working closely with leading Academic institutions like IIT's, IISc and other universities, in addition the department and staff are working closely with leading industries like BEL, BOSCH, ARM, L&T, HONEYWELL, TI, CISCO, ABB, IUTEL etc.

Our students are doing internship and projects in the areas of Micro and Nano sensors, Wireless Sensor Networking, Digital Image Processing, Advanced Microcontrollers and Embedded System Design and FPGA based design. The Department faculty work very closely on the research area with professors fromIISc, NIIT, IIT and other foreign universities.

### **Funded Projects**

The department has obtained Research Projects of Rs.165 lakhs for the last two years.

### Faculty

**Professor & HOD** Dr K Natarajan, MTech, Ph.D

**Professor** Dr.B K Sujatha M.E, Ph.D

### **Associate Professors**

Dr.K R Shobha M.E, Ph.D Dr.Vishwanath Talasila Ph.D Mr. Satish Tunga M.E, (Ph.D) Mr.S J Krishnaprasad M.Tech (Ph.D)

### **Assistant Professors**

Mr.Venu K N -M.E, (Ph.D) Mrs.Parimala P- M.E, (Ph.D) Mrs.H R Ramya- M.E, (Ph.D) Mr.Umesharaddy- M.E, (Ph.D) Mr.S G Shivaprasad Yadav- M.E, (Ph.D) Mrs. Nisha S L- M.E, Mrs. Kusuma S M- M.E, Mrs.Swetha Amit- M.E, (Ph.D) Mr. Arvind Kumar G M.Tech

### **Medical Electronics**



Department of Medical Electronics was established in 1996 with an objective of equipping the students the skills to explore opportunities in emerging healthcare technologies and concepts. The department closely works with medical professionals to understand the challenges faced by them and interface with industries provide innovative solutions through realtime projects. the faculty is compraised of highly motivated, dedicated and well knit team with industrial and research background.

### Activities

Various Faculty Development and Student Training Programs have been conducted in association with IEEE EMBS Bangalore chapter and IEEE EMBS MSRIT Student Chapter. These programs are in the areas of Biosignal Processing, Smart PhD Planning & How to do research effectively, PSOC processor applications, Hands on Training using LAB VIEW, Medical Imaging Technology: Fundamentals to Advanced, Signal and Image processing using SCILAB, ITK and VTK tools for image processing and Stanford Biodesign Process

#### **Research & Publications**

Faculty and students of the department have produced 30 international publications in peer-reviewed international journals and conferences. Main focus areas are in Neural network based sensor, Brian Signal Processing, Neurofeedback, Auditory Signal Processingand pychophysiology, Medical Image Fusion, Simulation, modeling and control of physiological system, Fetal monitoring systems and wound healing. Focus is also on development of Wireless physiological monitoring systems and rural health model in collaboration with other institutes and international partners

### Faculty

**Professor & HOD** Dr. N. Sriraam - M.Tech., Ph.D

**Professor** Prof. Kumar Velu P. G - M.Tech.

#### **Associate Professors**

Dr. C.K. Narayanappa - Ph.D Mrs. Prabhu Ravikala Vittal - M.Tech., (Ph.D)

#### **Assistant Professors**

Mrs. Uma Arun - M. S., (Ph.D) Mrs. Prabha Ravi- M. S., (Ph.D) Mr. S.J. Mahendra - M. Tech. (Ph.D) Mrs. B. R. Purnima - B.E., MSc. (Engg) Mr. Sanjay H S - M. Tech., (Ph.D) Mr .Basavaraj Hiremath- M.Tech., (Ph.D) Mrs. Chandana S - M.E., (Ph.D) Mrs. S. Tejaswini - M.Tech

#### **Visiting Faculty**

Dr. Vasanthi - MBBS, MS Dr. Veena - MBBS

# **Biotechnology Engineering**





Dr. Bindu S Professor & Head

Established in 2002 the department offers a four year B.E. Biotechnology Program with an intake of 60 students and a two years PG Program, M.Tech in Biotechnology with an intake of 18 students. The department is also a recognized Research Centre by VTU, Belgaum, offering M.Sc (Engg.) by research and PhD programs. The Department has 15 faculty members, 10 of them are PhD holders and the rest are M.Tech/M.Pharma. Many of the faculty members have post-doctoral experience in premier institutions in India and Abroad. The faculty members have competence in Core areas of Biotechnology viz. Food and Agricultural Biotechnology, Health and Medical Biotechnology & Environmental Biotechnology and Bioprocess Engineering. The department research is focused towards these core areas and funded by national and state funding agencies like DST, AICTE, VGST, VTU and RGUHS.

### Activities

- Five Days Faculty Development Programme on "Computational Tools for OMICS Data Analysis" Under Technical Education Quality Improvement Programme (TEQIP II), Jointly organized by Department of Biotechnology & Department of Computer Applications, M.S.Ramaiah Institute of Technology, Bengaluru. Held between 11th-15th July, 2016.
- Five Days Faculty Development Programme Technical workshop on "Applications of Biotechnology in Natural Products Development" Under Technical Education Quality Improvement Programme (TEQIP II), Jointly organized by Department of Biotechnology, M.S. Ramaiah Institute of Technology & The Himalaya Drug Company, Bengaluru. Held on 28th June -2nd July 2016.
- One day Seminar on "The Craft of Writing Research Grant Proposal" under TEQIP (Phase-II), organized by Department of Biotechnology, M.S.Ramaiah Institute of Technology, and Bengaluru. Held on May 20th 2016.
- The Department of Biotechnology and Department of Computer Applications, M S Ramaiah Institute of Technology (MSRIT) conducted a one day National Symposium on "Next Generation Sequencing and Microarray data analysis" on 19th January 2016. This event was organized under TEQIP- Phase II and was supported by Indian Institute of Chemical Engineers (IIChE) Society.
- One week Faculty Development Programme on "Downstream Processing of Biologics and Nutraceuticals" during 4-8 January 2016.

### Faculty

#### **Professor & HOD**

Dr. (Mrs.) Bindu. S - MSc, Ph.D., PDF (USA)

#### **Associate Professors**

Dr. M.N. Chandraprabha - MSc (Engg.), Ph.D. (Engg.) Dr. Dhamodhar P - M.Sc, M.Phil., Ph.D. Dr. Ahalya N-MSc, M.Phil, Ph.D., PDF

#### **Assistant Professors**

Mr. Lokesh KN - M. Pharm (Ph.D.) Dr. Sharath R - MSc, Ph.D., Dr. Ravi Kumar YS - MSc, Ph.D., PDF Dr. Prabha M - MSc, Ph.D., PDF Dr. Sravanti V - M.Sc., Ph.D. Mr. Samrat K -M. Tech Mr. Gokulakrishna M-M. Tech Ms. Bhavya SG -M. Tech Mr. Krishna Murthy T.P - M.Tech Dr. Pradeepa k - Msc., Ph.d

#### **Publications:**

- ✓ National:20
- ✓ International:128
- ✓ Awards: 05

### Architecture



The Department of Architecture was started in 1992 to address the growing demand for professionals in housing, commercial projects and urban planning and offers a 5 year COA and AICTE recognized B.Arch & M.Arch Degree Programme. The Department executes various research and consultancy projects and the faculty consists of very senior professionals with rich experience in industry and academics. Students from across India and abroad enroll for the course and many have been recognized for their academic excellence, having won several ranks and gold medals. The Department has experts specializing in the following areas.

# Areas of expertise

- · Architecture
- Construction Project
  Management
- Building Engineering & Management
- · Interior Design
- · Urban & Regional Planning
- · City Planning
- · Urban Planning
- Product Design
- · Landscape Architecture
- · Conservation
- · Sustainable Architecture
- · Environmental Planning
- · Housing
- · Fine Arts
- · Habitat Design

### Faculty

**Professor. Head** Dr. Sridhar Rajan - M.Arch, Ph.D

#### Professors

Prof. Viswas Hittalmani - M. Des

#### **Associate Professors**

Ar.Rajshekar Rao - M.L.Arch (Ph.D) Mrs Rashmi Niranjan - M.F.A. (Ph.D) Ar. S. Jotirmay Chari - M.Plan Dr. Mona Lisa - Ph.D

#### **Assistant Professors**

Mr. Vijayanand M - M.Tech (Ph.D) Mr. Aruna S - BE (System Analyst) Ar. Arpita Singh - M.Arch, (Ph.D) Ar. Sudha Kumari - M.Arch Ar. Vishwa S - M.Plan Ar. Lavanya Vikran - M.Arch Ar.L Shiv Deepti Reddy - M.Arch Ar. Waqar Abid A.Z - B.Arch Ar. Kriti Bhalla - B.Arch Ar. Kusum Singh - M.Arch Ar. Kanika Bansal - M.Plan Ar. Apoorva Lakshmi R - B.Arch Ar. Preeti Ann Cherian - M.Arch Ar. Surbahon Rajkumar - M.Arch Ar. Karishma Susan Kurian - B.Arch Ar. Jeena Soa George - MCP Ar. Nagajyotsna - B.Arch

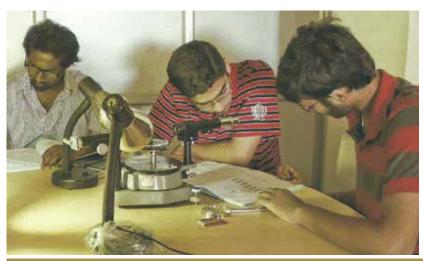
#### **Visiting Faculty**

Ar. K Jayram Ar. Shiva Kumar Swamy Ar. Shalini Srikanth Ar. Pallavi Ar. Rounak Sudhakar Ar. .Sudesh Menon Ar. Rajkumar, Ar. Ulhas Rane Ar. Arundathi Ar. Shafia Ar. Sredevi Changali Ar. Chandrashekhar S Rajoor Ar. Sunil Shastry Ar. H S Anatram Ar. Swati Diwakar Ar. Durga Prasad Ar. Alia Ar. Jitender Kadur Ar. Savita N Ar. Tarun Ar. N S Nalini

### **Basic Sciences**

**Physics**, **Chemistry** and **Mathematics** are the constituent subjects of basic sciences, common to all branches in the initial semesters. Each of the departments imparts effective subject knowledge supported by qualified and experienced staff. The departments are recognized as research centres by VTU and offer a Ph.D degree in the respective subjects.

# Physics





**Dr.V. Ramachandramurthy** Professor & Head I/c

The Department of Physics at MSRIT has well qualified and experienced faculty who are actively engaged in teaching and research work. The focus areas of research work are liquid crystals, luminescence, X-ray crystallography and Nanomaterials. The Department is recognized as a research center by V.T.U.

### Activities

#### Papers presented

Research Publications in National/International Journals from 2008 to till date: 75

There are 13 Research Scholars registered for PhD through the Department. Currently one full time J.R.F. is working under a BRNS Project.

#### **Events conducted**

Two day workshop on "Non-Linear Optics" was organized during 2nd and 3rd August 2013.

Two day workshop on "X-ray Crystallography" was organized during 1st and 2nd July 2014 to commemorate International year of Crystallography IYCr2014.

5 day Work Shop On Principles of Photonics and Applilations was Organited between 20-24th July 2015.

Guest lectures are organized periodically.

#### **Recent projects**

- 1. "Experimental Investigations on liquid crystal nanocomposites" from BRNS for 27.5 Lakhs with Dr. K. L. Sandhya as Principal Investigator.
- 2. L.C. Nano Composites as a optical Senor from VGST for 4 lakh with Dr. K.L. Sandhya as Principal Investigator

### Faculty

**Professor & HOD I/C** Dr.V. Ramachandramurthy - M.Sc., Ph.D

**Professor** Prof. Dr. Seshadri - Ph.D

#### **Associate Professors**

Dr. A. Jagannatha Reddy - M.Sc., M.Phil Dr. Seema Agarwal

#### **Assistant Professors**

Dr. Ravindra M Melavanki - Ph.D Dr. K.L. Sandhya - Ph.D Dr. B. V. Nagesh - M.Sc., Ph.D Dr. G. N. Anil Kumar - Ph.D Dr. B. Siddlingeshwar - Ph.D Dr. S. Vaijayanthimala -Ph.D.

Dr. Kalpana Sharma, Ph.D

# Chemistry





**Dr. B.M Nagabhushana** Professor & Head

The Department of Chemistry is one of the earliest established departments (established in 1962) at MSRIT. The department has qualified & experienced faculty, state-of-the-art infrastructure, and is actively involved in basic and applied research work besides pursuing its objective of preparing students for challenging careers.

The department has expertise in the preparation of light emitting materials, nano-catalysts, nano-sensors, nano-pigments, solid oxide fuel cell electrodes, nano-ceramics, bio-ceramics, anticancer drugs, biologically active metal complexes, magnetic resonance imaging materials, photo-switchable molecular device materials, transition metal coordination polymers, MRI Shielding polymer composites etc.

### Activities

#### **Papers presented**

(National/ International journals and conferences - 2008 to till date)-300

The Department of Chemistry has forged alliances with the following educational institutions and Research organisations

- Indian Institute of Science, Bangalore.
- Department of Physics, Bangalore University.
- Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam.
- Department of Physics, Mysore University, Mysore.
- RTM Nagpur University, Nagpur.
- National Aerospace Laboratories, Bangalore
- Jawaharlal Nehru Tech. University, Ananthapur.
- S. V. University, Tirupathi
- Sri Siddartha University, Tumkur.
- Kuvempu University, Shimoga
- Gulbarga University, Gulbarga

### Faculty

Professor & HOD Dr. B. M. Nagabhushana, M. Sc., Ph.D

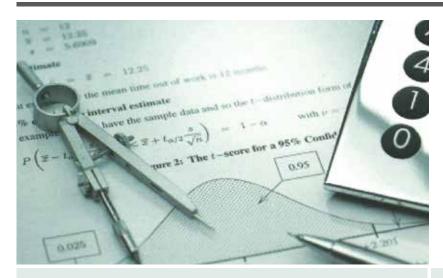
Visiting Faculty Prof. B. S. Durgakeri- M. Sc, M. Phil

Associate Professor Dr. Nagaraju Kottam- M. Sc., Ph.D

#### **Assistant Professors**

Dr. M. N. Manjunatha- M. Sc., Ph.D Dr. P. Murali Krishna- M. Sc., Ph.D Mr. BasappaYallur- M. Sc., (Ph.D) Dr. Malathi C- M. Sc., Ph.D Dr. Sharanabasappa Patil- M. Sc., Ph.D Dr. R. Hari Krishna- M. Sc., Ph.D Dr. Manjunath D.H., Ph.D

## **Mathematics**



# Activities

#### **Funded Projects**

- Two phase Model of blood flow by inserting a catheter under the influence of external forces - VTU, Belgaum.
   Grant: Rs. 1,00,000.00 Duration: 3 Years Status: Ongoing
- A generalized Mathematical Modeling of separation Process by Membrane Filtration with effects of Membrane Fouling -VTU, Belgaum.
   Grant: Rs. 3,25,000.00 Duration: 3 Years Status: Ongoing
- Faculty have published over 50 research papers in reputed journals and Conferences in the last 5 years.

#### Patent

- Generation of Electrical Energy using Hydraulics in Railway System – 2011
- Ecological Power Generation from an Elevator 2011





Dr.V. Ramachandramurthy Professor & Head

### Faculty

### Professor & HOD

Dr. V. Ramachandramurthy - M.Sc., Ph.D.

#### Professors

Dr. N. L. Ramesh – M.Sc., Ph.D. Dr. S. H. C. V. Subba Bhatta – M.Sc., M.Phil., Ph.D. Dr. G. Neeraja – M.Sc., Ph.D.

#### **Associate Professors**

Dr. Monica Anand – M.Sc., M.Phil., Ph.D. Dr. Dinesh P. A. – M.Sc., M.Sc.(IT), M.Phil., Ph.D

#### **Assistant Professors**

Dr. M. V. Govindaraju – M.Sc., M.phil., Ph.D. Mr. Vijaya Kumar – M.Sc.,(Ph.D.) Dr. A. Sreevallabha Reddy – M.Sc., Ph.D. Mr. Suresh Babu R – M.Sc., M.Phil. (Ph.D.) Dr. Basavaraj M. S – M.Sc., M.Phil. (Ph.D.) Mr. B. Azghar Pasha – M.Sc., (Ph.D.) Mr. Aruna A. S. – M.Sc., M.Phil. (Ph.D.) Mr. M. Girinath Reddy – M.Sc., M.Phil., (Ph.D.) Mrs. Uma M – M.Sc., (Ph.D.) Mrs. S. Ramprasad – M.Sc., M.Phil. (Ph.D.) Mrs. Kavitha. N – M.Sc., (Ph.D.) Mrs. Sushma. S – M.Sc., (Ph.D.) Dr. Nancy Samuel- M.Sc., M.Phil., Ph.D. Dr. Y.S. Kalyan Chakravarthy - M.Sc., Ph.D.

### **Computer Applications**





Dr. T V Suresh Kumar Professor & Head

The Department of Computer Applications was established in 1997 with the objective of meeting the ever growing demand for quality professionals in Information Technology. The department is excelling in R&D in the area of Software Engineering, Pradictive Analytics and cyber Forensic.

### **Activities**

The Department of Computer Applications was established in 1997 with the objective of producing high quality professionals to meet the demands of the emerging field of Computer Applications. The department got academic autonomy in the year 2007 and accredited by NBA. The department is recognized as a Research Center under Visvesvaraya Technological University, Belgaum.

The department is actively involved in Industrial Consultancy and Research work. The faculty have published more than 150 research papers in conferences and journals. The department is also actively associated with industry partnership. Department continuously conduct Faculty Development Programmes, workshops, seminars, conferences on latest topics in the area of Computer Applications.

### Faculty

#### Professor & HOD

Dr. T V Suresh Kumar – M.Sc, M.Phil, M.S, Ph.D

#### **Associate Professors**

Dr S. Ajitha – MCA, M.phil, Ph.D Dr. S Jagannatha - MCA, M.Phil, Ph.D Dr. D Evangelin Geetha - MCA, M.Phil, Ph.D

#### **Assistant Professors**

Dr. Madhu Bhan- MCA, M.Phil, Ph.D Dr. M Mrunalini- MCA, M.Phil, Ph.D Mrs. K Sailaja Kumar - MCA, M.Phil, (Ph.D) Mr. Chethan Venkatesh- MCA, M.Phil, (Ph.D) Dr. Manish Kumar - MCA, M.Phil, Ph.D Dr. Niranjana Murthy M - MCA, M.Phil, Ph.D Mrs. B N Nithya – MCA Mr. Ananda N - MCA

## Management Studies (MBA)

The Department of Management Studies (MBA Programme) was established in 1998 with an objective of creating high quality professional managers to meet the emerging and ever growing demands and challenges of the industry in an ethical and responsible manner. The department has 4 doctorates and 10 faculty members pursuing their Ph.D. Over the years, the Department has built a strong reputation for its program and graduating students are placed in reputed institutions and leading corporations.

### Activities

Papers presented

(National/International Journals and Conferences - 250

#### Consultancy work undertaken

Strategic support in Recruitment and Selection to 'SEARCH' – A Bangalore based recruitment organization.

#### **ICSSR Sponsored National Seminars**

- 1. Sustainable Development in Power Sector 25th & 26th February 2016 Through Renewable Energy Resources
- 2. Rural Women Entrepreneurship in India: Way 27th & 28th May 2016 for Social and Economic Empowerment

#### **Conferences conducted**

National Conference:

- · Challenges and opportunities in Services Sector- 20th & 21st April 2011
- Business Perspectives in Rural Management- 24th & 25th Nov 2011
- New Perspectives in Indian Management 23rd & 24th April 2014
- Business Excellence for Inclusive and Sustainable Growth -- 7th to 9th May 2015

#### International Conference:

 Challenges and Opportunities in Mechanical & Industrial Engineering and Management Studies -11th to 13th July 2012.

#### Faculty Development Programmes Conducted:

- Pedagogical Tools in Management Education- 25th February 2010
- Research Methodology- 6th to 8th March 2013
- Research Methodology- 14th to 16th December 2015

#### Management Development Programmes Conducted:

- · Selling Skills for Publication sector- 19th & 20th May 2011
- Recent Trends in Indian Management Practices- 5th & 6th December 2013

#### **Entrepreneurship Development Programmes Conducted:**

• Empowering Women for Entrepreneurship – 18th to 30th May 2015

### Humanities

The Department of Humanities in MSRIT is involved in teaching languages and social sciences subjects to the students particularly concerned with the first year BE/ B. Arch program. Apart from this core responsibility, it also provides additional support to students to improvise language skills by conducting additional coaching programs. At regular intervals, meetings with foreign and needy students are held to know their performance levels and understand their academic grievances to give suitable solutions. We also give guidance to higher semester students in language proficiency to get through competitive exams. The department involves in teaching subjects like Professional communication, Constitution of India & ethics, Kannada and Communication skills for students of Engineering and Architecture departments. The faculty consists of full time and part time professors who work with students in several areas.



Dr. P.V.Raveendra Professor & Head

### Faculty

**Professor & HOD** Dr. P.V. Raveendra - B.E, MBA, Ph.D

#### **Associate Professor**

Dr. Y.M.Satish, M.B.A, Ph.D. Dr. M. Rizwana, M.B.A, Ph.D. Dr. A.Mahalakshmi, M.B.A, Ph.D.

#### **Assistant Professors**

Mr. N.Srikanth Reddy, M.B.A, (Ph.D) Mr. Santhosh Kumar.S- M.B.A, (Ph.D) Mr. G.Vijaya Kumar- M.B.A, (Ph.D) Mrs. Pallavi.B- M.B.A, (Ph.D) Ms. S.B.Rashmi- M.B.A, (Ph.D) Mr. Arun Kumar.D.C- M.B.A, (Ph.D) Mr. Adarsha.K- M.B.A (Ph.D) Mrs. Padmalini Singh – M.B.A, (Ph.D) Mr. Vaijanath Babshetti – M.B.A, (Ph.D) Mrs. Jyothi.E.Singh- M.B.A, (Ph.D)

### Faculty

Assistant Professor Mrs. Premila Swamy D - M.A, B.Ed UGC NET(PhD)

#### Faculty

Mrs. Kanya Kumari - M.A Mr Uday Kumar H M - M.A (MBA) Mrs. Annapurna - M.A

#### **Part time Lecturers**

Mrs. Kavitha Nagashetty - M.A Mr. Neelappa Talawar - M.A

# **Placement & Training**

### "WE CREAT A RECORD AND BREAK OUR RECORD"

MSRIT is always the preferred academic institutes for a large number of organizations for recruiting our graduates. The biggest names in the corporate world visit the campus on a regular basis, with enviable recruitment offers. Most of the top companies across the nation, visit us for Campus Recruitment. There is tremendous competition amongst companies to visit the Campus to recruit the best talent of the institution. MSRIT has been the traditional recruitment destination for many organizations. The institution stands as the most preferred destination for students who aspire to grow, learn and reach beyond the ordinary, reason why some of the world's finest companies visit us and discover the best minds available.



Dr. Savitha Konna.M Placement & Training Officer

For the batch 2015, nearly 268 companies have visited on campus & 1787 offers are made.

The highest CTC is 24 LPA.

**Recruiters Speak** 

It has always been a refreshing and pleasant experience visiting MSRIT, Bangalore, for campus placements. We are impressed by the enthusiasm and intellect displayed by the students. We are delighted that we have been visiting MSRIT, Bangalore regularly.

- Mr. Satyanarayana, Director, Open Stream



Dr.Savitha Konna.M. was presented "Career Guru" Award in National Employability Conclave.

MSRIT, Bangalore is one of the preferred Engineering Institutes for TDPS, for recruiting campus graduates. Many of the MSRIT graduates are employees of greater TDPS and have contributed significantly for TDPS success.

- Mr. P.G. Manjunath, Head-HR, TDPS

The fact still remains, the name MSRIT stands for Placements!!

### Placement Dept, MSRIT In The News

THE TIMES OF INDIA, MONDAY, DECEMBER 22, 2014 **MS Ramaiah Engg** College Student to 'S RAINI Join Indian Navy

In a bonanza year for Bengaluru's engineering colleges, its two students graduating from Information Science stream hit jackpot, walk home with huge campus placement offers More than 1,500 graduates of MS Ramaiah Institute of Technology bag offers - the highest for a city college A student bags Rs 16-lakh offer in a first for the nearly century-old University Visvesvaraya College of Engineering, the only government-owned engineering college in Bengaluru

Startups, new-age tech players and leading social media companies are scouting Bengaluru for engineering talent

# **Co curricular - Activities**

### Sports

Students of MSRIT participate actively in a variety of sports and a dedicated department led by Mr. H.K. Kiran Kumar, Director of Physical Education, manages this activity. The Department has the best of infrastructure and facilities with quality equipment for sports including cricket, basketball, football, badminton etc. The campus has a dedicated basketball and Tennis court and a gym with high-tech equipment that enables students to keep in shape.

Annually, MSRIT hosts various sports events - M.S. Ramaiah Memorial Cricket Tournament, M.S. Ramaiah Memorial Basket ball (M&W) Tournament, VTU Inter-college Tournaments, Inter-Branch matches and an Annual Athletic Meet for boys and girls. These tournaments attract participation from various other engineering colleges across Karnataka and have a high level of recognition. MSRIT's students have represented the state and India in several sports activities, winning many individual/team events.



Mr. H K Kiran Kumar Director of Physical Education



### **Cultural activities**

At MSRIT we strongly believe in the holistic development of students in such a way they evolve into full-fledged and confident professionals by the time they graduate. This can be made possible by encouraging them to engage in various cultural activities such as music, theatre, literary, visual & fine arts, etc. apart from sports, NSS and other similar pursuits.

Cultural Activities is not just about entertainment; they help molding the personality of the students and help them in the following ways:

- Enhances soft skills such as communication skills, etiquette and confidence levels.
- Helping them in the areas of time management, emotion management, success (& failure) management, crisis management and more importantly people management.
- While good grades equip students to get their first jobs, extra-curricular activities help students to equip for their whole lives.
- They help inculcating in students values such as empathy, broad mindedness, team-spirit, selfcontrol, ethics, acceptance of pluralities in society, corporate social responsibility, and so on.



### National Service Scheme

The National Service Scheme (NSS) is a Government of India initiative launched in 1969 to promote social consciousness, responsibility, discipline and dignity of labour among college students, encouraging them to utilize their leisure time in various social service activities.

The NSS unit was started at MSRIT in 1999 and since then, several programs have been initiated with about 100 students as volunteers. Students participate in a variety of activities including conservation of the environment, water, sanitation, health issues, family welfare and nutrition, AIDS awareness, anti-drugs drive and so on. Government Primary/ High schools and a few slums were selected for community service and educational programmes. Students attending the camp are issued a certificate and also eligible for grace marks in seekingadmissionto higher classes.

### **Performance recognition**

The management has always identified and rewarded individual excellence be it in studies, sports or cultural activities. MSRIT's students have displayed all round excellence and the performance of the students in the examinations has been way above average. Students are awarded the 'Founder-Chairman's Award' for Excellence in Academics. The 'Outstanding Graduation Student of MSRIT Award' is presented to best student taking into consideration the all round performance - academics, sports, cultural and other extra-curricular activities. There is also a department level 'Best Achiever Award' presented annually to deserving students.



### **Alumni Association**

MSRIT's students have always been sought after by the best names in the industry and occupy responsible positions in various organizations across the globe. These students continue to have a strong affinity for the institution long after they graduate and move on, a bond that has resulted in the creation of a vibrant and growing alumni association. This group participates actively interacting with present students, offering scholarships to deserving students and helping in entrepreneurial efforts, campus placements and guest lectures.

Shri. Tallam Venkatesh, renowned industrialist, and Treasurer, Karnataka State Cricket Association; "is the current President of MSRIT Alumni Association whose activities include but are not confined to:

- Merit and Means Scholarship Program (MMS)
- Shri Krishna P. Godasi Scholarship by Maganti Foundation
- GMW Aspire Foundation Scholarship
- Annvag Agarwal Scholorship

- MSRIT Alumni Association Book Bank
- Project Funding and Best Project Awards
- Alumni Mentoring Scheme
- Awarding Top Rankers
- Bus Pass Scheme

### **Proctoral System**

The Proctorial System is introduced with an objective of providing supportive care and offering advice to students to help them with their academic/ personal issues if any from time to time and counsel them appropriately. This is done to ensure the students complete their course comfortably and successfully. Every teaching department implements this process through its faculty and the faculty members are called proctors.

The proctors closely monitor the students' performance and interact with their parents/ guardians & also with wards providing progress reports including details of attendance, class marks and examination results.



Dr. G S Prakash Chief Proctor

# **Student Information System**

MSRIT has in place a Student Information System (SIS), an online application that offers students and their parents/guardians up-to-date information about attendance status, marks scored, timetable, lesson plans and more ... A login ID and password is provided to help them access this information.



# Alliances - Bridging the gap between industry and academics

Professional education today is all about working in synergy with the industry to ensure a maximum fit with their requirements and expectations and MSRIT has been working towards achieving that objective. The college has established close working relationships with some of the world's leading names in technology.

The Intel Centre of Excellence has been established at MSRIT with the purpose of training in multi-core architectures and parallel programming. The objective of this centre is to provide training to faculty members from various colleges in South India. Experts from Intel and leading professors from IISc are involved in the training activity. The centre is equipped with the best of infrastructure and several students carrying out projects in high performance computing and allied areas use the centre.

Adobe Systems has set up the MSRIT Abode RIA Lab to cater to the needs of academicians and industry professionals in web-related applications. The lab imparts knowledge to faculty from various engineering colleges in the streams of CS, IS, and IT on Web 2.0 and Rich Internet Applications (RIA), and enable faculty to guide students on RIA.

EMC2 and MSRIT have entered into a relationship to create the EMC2 Knowledge Center. EMC2 provides MSRIT's ISE Department, access to relevant materials, demos, white papers, videos and books on Information Storage Management and 'Storage Area Networks'. The Department offers Information Storage and Management as one of the electives for the 6th Semester autonomous B.E. degree program.  $\operatorname{IBM}$  has established a Centre of Excellence at the

MSRIT campus to provide training to faculty/ students and placement opportunities to students.

Schneider Electric and MSRIT have set up a Centre of Excellence in the areas of Industrial Process Automation and Controls. Industry oriented courses are offered in consultation with Schneider Electric.

The Department of Telecommunication, MSRIT has entered into an MOU with Honeywell Technologies Solutions Lab. Private Ltd, Bangalore to set up a stateof-the-art laboratory for Condition Monitoring and Testi ng the Conveyor Belt & Idler system (Test-rig) using embedded computing and wireless sensor networks for remote monitoring - an effective test-platform for students in academic projects, interns, placements and also Faculty Research, Publications, and developments in the areas of communication, computer, electrical, civil and mechanical engineering.



### Centre for Advanced Training and Continuing Education (CATCE)

The biggest challenge to students and faculty alike is to keep abreast with the latest developments in technology, practices and processes. Centre for Advanced Training and Continuing Education (CATCE) is an initiative that enables MSRIT's students and faculty benefit from advanced technical! other skills training, bridging the gap between industry and academics. Reputed training institutes visit the campus to offer training programs on a variety of subjects and CATCE even entertains requests from faculty/ students on specific topics. Some of the programs conducted were on .NET Technologies, Circuit Simulation and MATLAB, Soft Skills and Placement Related Programs, Digital Control System (DCS), Foreign Languages, GRE/GMAT/CAT/GATE/TOEFL and Cisco Certified Courses.

## **MSRIT IEEE Student Branch**

A student branch of the international body, Institute of Electrical & Electronic Engineers, USA, has been established at MSRIT. The initiative works towards enriching students with the latesttechnical developments in the domains. The body also encourages students to participate in various technical events through the year and two major events are conducted annually - Avishkar, a Tech Fest and Colloquium, a lecture series.

# Society for Mechanical Engineering

The Society for Mechanical Engineering (SME) was formed in 1994 to enable students gain more knowledge through talks, lectures, industrial visits, career guidance programs, students' talent search programs, quizzes, project exhibitions etc. One of the important and popular exhibitions is the final year project exhibition, held at the end of the academic year. A panel of judges comprising of academicians, engineers, and scientists evaluate the projects.

# **Entrepreneurship Development Cell**

The Entrepreneurship Development Cell (EDC) at MSRIT is headed Ms. S.K. Rekha and was established in 2003, initially funded by the Department of Science and Technology, Government of India for a five year period. The objective of EDC is to foster the spirit of entrepreneurship encouraging students to unbind their minds from the unconventional and the status quo, helping them realize their dreams. EDC is open to all the students of MSRIT and organizes the following programs - (a) Business Skill Development Programme (sponsored by MSME), (b) Entrepreneurship awareness camps/ Entrepreneurship Week and (c) Mentoring of student start-ups.

EDC has an association with the National Entrepreneurship Network (NEN) and participates in E-Week, a national level competition conducted in February of every year. About 600 institutions from across India participate in this event in which MSRIT was the Runner Up Champion in 2011 and 2012. EDC has also forged an alliance with MSME (Micro, Small and Medium Enterprises) and conducts a Business Skill Development Programme every year. Participants are issued a certificate which is the minimum criteria to receive Government assistance/grant; subsidies.

# **Technology Incubation Centre (TIC)**

Technology Incubation Centre was established in June 2005 and those interested to incubate an ideal proposition are offered access to computers systems, Internet connectivity and associated communication infrastructure along with an address for correspondence. They also receive mentoring Iconsulting when required. Once their ideas take off, students are advised to move out ofthe incubator. About 40 students of MSRIT have started their companies under this program since 2006 and the incubation facility is extended to MSRIT's alumni.



# Highlights



M. S. Ramaiah Institute of Technology, Department of Electronics and Communication, VI semester students Anoop Kulkarni, Karthikeshwar Varma and Rakshit Ramesh have won the Texas Instruments Innovation Challenge Chairman's Award for their innovative idea to reduce fatalities due to car accidents. The device uses a radar technology to detect and assess distances so as to avoid accidents due to vehicle collision. The project was mentored by Prof. M. S. Srinivas. The award is worth \$10,000 and this year about 11,000 engineering students from across India participated in this contest with the aim to solve real world problems and create lasting social impact. Our former President and an inspiring scientist Dr. A. P. J. Abdul Kalam presented the awards and speaking on the occasion, he highlighted his vision of innovation such as the one demonstrated by our students as a key to national development.

#### 1) UAV Competition at Maryland, USA

Team Edhitha, A group of multidisciplinary undergraduate students of M.S. Ramaiah Institute of Technology become the first Indian team to win the prestigious Student Unmanned Aerial System(SUAS) competition, 2015, in Maryland , USA . SUAS, organized by the Seafarer Chapter of the Association for Unmanned Vehicle Systems International (AUVSI), is the premier tactical UAV development competition in the world held in order to stimulate and foster interest in unmanned systems and technology careers. The team developed its own tactical UAV over the span of a year, which had real time search and rescue operational capabilities.

Team Edhitha placed 1st in Flight Mission Demonstration, 5th in the Technical Journal Paper and 4th place in the Flight Readiness Review presentation, thus clinching the winning title of the competition. The team went home with a cash prize of \$6900 and winner's Trophy.

The team comprised of Pawan S Rao of Mechanical department, as a team leader, Sharath Nairy , Akash Muralidhar , Adarsh Joseph , Kamesh Krishnan, Deborshi Goswami, of Mechanical Department , Saurabh Hindlekar, Indhu K, Sankha Karfa from Computer Science department and, Praneetha Mallela from Telecommunication department. The team was mentored by department of Mechanical Engineering alumni Vishwanathan Ramanathan, Sriraghav Sridharan and Vishnu B.N.(former captain and founder of Edhitha) while Dr. D. Ramesh Rao, Professor and Head, Department of Mechanical Engineering, served as the faculty adviser of the team.

The competition focuses on engaging undergraduate students in a challenging mission requiring the design, fabrication and demonstration of a system capable of completing specific aerial operations, and performing several additional tasks involving systems integration, target acquisition and identification, airborne delivery, etc. The 2015 SUAS Competition was held 17 to 20 June 2015. Of the 55 teams who registered, only 39 teams competed with 20-page technical Journal papers, while only 34 teams (18 US colleges, 12 international colleges, and 4 high schools) showed up at Webster Field in Maryland to present their Flight Readiness Reviews (FRR). Of these, 32 teams competed in the flight-mission demonstration phase.



Prize award ceremony - MSRIT Team

#### 2) SAE Aero Design West, 2015

Team Quatlas, M. S. Ramaiah Institute of Technology is proud to assert the following results

- 1. Broke the national record by carrying a maximum payload of 13.6 lbs.
- 2. 15th position out of the 41 international teams that participated in the competition.
- 3. 2nd position among the Indian teams at the event.
- 4. 3rd position among the Asian teams at the event.

The team successfully competed with international teams such as University of

# Highlights

Akron, Ohio, University of Poznan, Poland, Ryerson University, Canda, Calstate University, Fullerton, and various national teams such as P.E.S Institute of Technology, Dayanand Sagar College of Engineering, Manipal Institute of Technology, Rahat Barah Institute etc. MSRIT's team Quatlas carried the highest payload ever carried by an Indian team in the history of SAE Aero Design. Team received appreciation from the SAE Technical Inspectors of having designed the most stable aircraft and a marketable plan for use as UAVs.



#### Hybrid Go-Kart Challenge - 2014-15

Held at Coimbatore – Prize Money Awarded – 50000 INR



Dr Raji George and Team

### SAE- BAJA, EFFICYCLE and Formula Car racing competition

- All India CAD Design Contest, 2011, Three third prizes won by Department's students, Cash prize of 50,000 INR awarded
- All India CAD Design Contest, 2012, Autodesk National Level Student CAD Design Contest (South Zone) Hosted at the department, 1st prize
- All India 3D CAD design contest, 2013, IIT-Madras, won the First Prize (Rs.1,20,000) for Pedal operated floor mopping machine, Also won an all expenses paid trip to Las Vegas





The pride of the department is the project works of the final year students.



SEMINARS, CONFERENCES, WORKSHOPS CONDUCTED

# Highlights

#### 1. International conference ICCOMIM-2012



As part of golden jubilee celebrations of M S Ramaiah Institute of Technology, Department of Mechanical Engineering, Industrial Engineering & Management and Master Business Administration jointly organized an International conference on "Challenges and Opportunities in Mechanical Engineering Industrial Engineering and Management Studies from 11th to 13th July 2012. The conference was held at MSRIT campus and attracted more than 250 research papers from various disciplines.



#### 2. International conference ICRAES - 2014,

Department of Mechanical Engineering in association with Civil, Industrial Engineering &Management, Chemical Engineering and Bio-Technology jointly organized an International conference on "Recent Advances in Engineering Sciences' from 4th to 5th September 2014 under TEQIP-II. More than 500 participants consisting of academicians, practicing engineers, Research Scholars and Students attended the conference. The conference was held at MSRIT campus and attracted more than 360 research papers from various disciplines.

# Working on the cutting edge - Inspired initiatives in nanotechnology

Nanotechnology, the science of manipulating matter at an atomic and molecular level is widely considered to the future with leading research labs and Governments across the globe makingsignificant investments.

The Nanotechnology laboratory was instituted in the Department of Mechanical Engineering, MSRIT in 2003 with an initial grant from the management. The objective was to develop a facility synthesize Carbon-Nanotubes both single walled and multi-walled and to involve in research in this futuristic domain. Further a grant of Rs.1B.B2Iakh was allotted from DRDO, New Delhi. Under

the extra moral research scheme further facilities were setup to fabricate Metal Matrix Nano Composites by Powder Metallurgy technique. DRDO sponsored research project titled 'Strengthening Mechanisms in Carbon Nanotube Reinforced Aluminium Composite' was successfully completed in the year 200B. The recent research project under investigation is funded by VTU for an amount of Rs. 7.5 lakhs titled 'Synthesis and Characterisation of Carbon-Nanotube Reinforced Copper Composites".

The laboratory has to date published 10 international papers in journals and conferences and a national patent has been obtained in the area of 'brake liners' using nano-materials. 5 research scholars are currently pursuing their doctoral degree in the area of Nano-materials and Nano-composites.

It is proposed to set up a 'Center of Excellence in Nanotechnology' in the immediate future with the vision of a collaborative research involving Universities/ Research Organisations/ Industries nationally and internationally.

### Udbhav

Students' performance during UDBHAV - the Cul-Fest of MSRIT. Udbhav is the top three cultural fests of Bangalore as per a survey. MSRIT leads Karnataka State in students performances in all spheres of cultural activities - Debating, Quizzing, Theatre, Dance, Arts, Music, etc., and have won many laurels within and outside the country.















### VARIOUS EDUCATION INSTITUTION UNDER GOKULA EDUCATION FOUNDATION (GEF)

| M S Ramaiah Institute of Technology                         | M S Ramaiah College of Advance 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 Centre            |
| M S Ramaiah Dental College                                  | Gokula Ayush Arogyadhama                                 |
| M S Ramaiah College of Pharmacy                             | Kutpm-Gef International Medical School                   |
| 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 Vidyanikethan                                   | M S Ramaiah Drugs & 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 Advance 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                    |

M S Ramaiah Nagar MSRIT Post Bangalore 560 054 www.ramaiah-india.org T 080 2360 3122/0822
 F 080 2360 3124
 E principal@msrit.edu
 W www.msrit.edu