



ACS COLLEGE OF ENGINEERING
BENGALURU-560074
(A Unit of RajaRajeswari Group of Institutions)

DEPARTMENT OF MECHANICAL ENGINEERING

NEWS LETTER

Chairman's Message

Presently, a knowledge explosion is being used ushered in our midst especially in Engineering and technology. We are working with a vision of **India 2020**, to bring progressive changes in Science, Engineering and Technology which will bring progress in mechanical engineering and prosperity to our country. It is a pleasure to note the glorious stride of our budding institution. The joy and experience shared on our campus ensure the growth and development of the overall personality of all the students alike. It is great to notice interesting events taking shape frequently at our campus. All of us are equally delighted to witness the happenings of significant events and tremendous achievements. I wish to record my hearty congratulations to those who have brought laurels to the institution and I appreciate all of you for working together as a team. I am sure, it is just a beginning and there is lot more to be happening. Go ahead and continue the good work. I wish you all the best for achieving greater success and scaling newer heights in your education and career ahead.

Sri. A. C. Shanmugam, B.A., LLB., Former MLA & MP.
Chairman, RR Group of Institutions

Principal's Message

It is pleasure to present the news letter of Mechanical Engineering Department for year 2014-15. The ways we teach and the ways our students learn are unique and creative. Consistently, we took into our deficiencies and transform us to an efficient builder of social change. Many critics would confirm that the College has substantially contributed to the process of National Development by providing quality education and thereby enabling the students to become globally competent engineers. Education is not an act of process of growth. We have excelled in every initiative that we undertook and we have stood together in facing the challenges in realizing quality education.

Dr. (Prof.) H.B. Phani Raju, M.E., Ph.D,
Principal, ACS College of Engineering.

Vision

To create a center of global standard for imparting education in Mechanical Engineering field and conducting research at the cutting edge of technology to meet the current and future challenges of technological development.

Mission

To build enabling environment for excellent teaching, learning and research in order to produce leading entrepreneurs and innovators in the field of Mechanical Engineering for sustainable improvement.

About the Department

Welcome to the Department of Mechanical Engineering at ACS College of Engineering Bengaluru, where experienced faculty and highly motivated students - supported by a dedicated staff - experience a unique engineering education. The Department offers academic programmes at three levels leading to Bachelor of Engineering (B.E.), Master of Technology (M.Tech.) in Product Design & Manufacturing (2013-2014), and Doctor of Philosophy (Ph.D.) degrees.




An extremely dynamic and large faculty (current strength of about 15), and a well experienced support staff, give the Department a breadth of research focus and wide range of technical expertise. Our 15 odd full time experienced faculty members have a passion for teaching and an avowed commitment to research and development. We are continually striving to improve the quality of our programs by finding new ways of structuring our curriculum and exploring new delivery methods.

We provide our students opportunities to engage in experiments, design work, project work, industrial training, seminars, and team work to enhance the learning process that is so vital for a holistic engineering education. They develop skills of inquiring and exploring new ideas on their own. In essence, they are well prepared for the life-long learning that is vital for an enriching career in engineering. Our students develop an ability to think, are able to innovate, and acquire a strong foundation in technical knowledge. This new letter highlights the students and faculty achievements in the academic year 2014-2015.

Dr. M.Eswaramoorthy
HEAD OF DEPARTMENT

STUDENT'S UNIVERSITY EXAMINATION PERFORMANCE

DEPARTMENT TOPPERS : 2014-15 PASSED OUT STUDENTS

	VINAY C 1AH11ME016	FIRST
	SIDDESH.S 1AH11ME013	SECOND
	VIJAY.M 1AH11ME015	THIRD

FINAL YEAR 2014-2015 B.E. PROJECT LIST

S.No	Title of the project report	Sponsored
1	Bio-Composites Bumper for automobile	KSCST under SPP
2	Biogas production from paper waste with blend with cow Dung	KSCST under SPP
3	Experimental and computational simulation of producing ultrafine grain Size in aluminum sheet by severe plastic deformation	KSCST under SPP
4	Investigations on the influence of micro fillers on three-body abrasive wear behavior of glass fibre reinforced epoxy composites.	KSCST under SPP
5	Design,Development And Experimental Evaluation Of V-Trough Solar Air Heater With Thermal Energy Storage For Drying Applications	VGST under TRIP
6	Analysis of inconsistency in bead width during electron beam welding	HAL, Bengaluru
7	Emergency Seat Ejection Systems in Fighter Aircraft	HAL, Bengaluru
8	Crack Analysis Of NDT Through Ultrasonic Testing And Compare With Thermal Analysis	HAL, Bengaluru
9	Design and analysis of mechanical housing for PCB's in applications	ISRO, Bengaluru
10	Performance Enhancement of Photovoltaic Cell using Phase Change Material	Self
11	Preparation and characterization of mixed Nano-ferrites	Self
12	Characterization Of Natural Fiber Reinforced Bio-Composites for Automobile Applications	Self
13	Design and Fabrication of Three Axis Multipurpose Machine using Differential Gear Mechanism Methods	Self

KSCST sponsored	VGST sponsored	Industry Sponsored	Self Sponsored
04	01	04	04

PLACEMENTS:

Seven students of the Final year Mechanical Engineering have been selected for **MERCHANT NAVY**.

STUDENTS ACTIVITIES & ACHIEVEMENTS

The Project entitled **“MECHANICAL AND THERMAL PROPERTIES OF NANOCALY DISPERSED BIODEGRADABLE POLYMER NANOCOMPOSITES FOR THE PACKAGING APPLICATIONS”** won the **First place** in the Mechanical Engineering Stream at a State level

Project Exhibition/Competition TECHNODEA -2014 held at **SSIT, Tumkur**. 8th Sem Mechanical Eng. Students Rakshith, Srinivas, Naveen Kumar, Mahantesh. Guided by Prof. Girisha C and Dr. Vishnu Mahesh .K.R



Shamanth Kumar of VI Sem, Mechanical Engineering Secured First Place in CADD MODELLING at a National Level Technical Symposia, held at NIE, Mysore, on 10th and 11th April 2015.



Shamanth Kumar of VI Sem, Mechanical Engineering Secured First Place in CADD MODELLING at a State level Fest, held at Cambridge University, Bangalore.

Shamanth Kumar of VI Sem, Mechanical Engineering Secured First Place in SKETCHING at a State level Fest, held at New Horizon College of Engineering, Bangalore.

Sujay of VI semester Mechanical Engineering Secured Second place at "UTSAV-2015" a state level Inter college Fest held at BMSCE, Bangalore

Suhas.V of IV semester Mechanical Engineering participated in the State level Project Exhibition conducted at Dr. AIT, Bangalore.

Suhas.V and Tejesh Kumar of IV semester Mechanical Engineering secured Second place in Paper Presentation competition at a National Conference held at Jyothi Institute of Technology, Bangalore.



PROGRAMME ORGANIZED IN THE DEPARTMENT

VTU-VGST sponsored Faculty Development Programme on “Sustainable Product Design and Manufacturing” during 22nd -25th June 2015. Technical Partner: M/s Skanda Machine Tools Pvt Ltd. Inaugurated by Dr.S.N.Sridhara, Executive Council Member, VTU Belagavi. 12 Guest Speaker and 40 participants were attended. The Valedictory address given by Dr S.B.Mallur, Special Officer, VTU Bengaluru Region.



One Day Technical seminar on “Innovation and Ignition of Young Minds” delivered by Dr.Vijaya Vittala, Dean (R&D), HMS Institute of Technology, Tumkur on 08th March 2015.



One Day Technical seminar on “Applied Finite Element Analysis” delivered by Professor Gunti Ranga Srinivas. Centre for Product Design and Manufacturing, IISc, Bengaluru on 12th September 2014.

FACULTY ACHIVEMENTS

Ph.D Accomplishments

Name of the Faculty	University	Status
Prof. Siddesha H.S	Bangalore	Synopsis Submitted
Prof. R Sivasubramaniyam	VTU, Belagavi	Thesis Submitted
Prof. C.Ramesh	Satyabama University	Course work Completed
Prof. Bapugowda.C.M	VTU, Belagavi	Comprehensive Completed
Prof. Kumar B.M	VTU, Belagavi	Registration on
Prof. Sunilraj.B.A	VTU, Belagavi	Registration on
Prof. Srinidhi Acharya S R	VTU, Belagavi	Registration on

Research Activities

S.No	Title of the project report	Sponsored
1	Bio-Composites Bumper for automobile	KSCST under SPP
2	Biogas production from paper waste with blend with cow Dung	KSCST under SPP
3	Experimental and computational simulation of producing ultrafine grain Size in aluminum sheet by severe plastic deformation	KSCST under SPP
4	Investigations on the influence of micro fillers on three-body abrasive wear behavior of glass fabire reinforced epoxy composites.	KSCST under SPP
5	Design,Development And Experimental Evaluation Of V-Trough Solar Air Heater With Thermal Energy Storage For Drying Applications	VGST under TRIP



Conference/Workshop Attended

Name of the Faculty	Conference/Workshop Attended	Place	Year
Dr. M.Eswaramoorthy	International Conference On Renewable Energy (ICORE) 2014 organized by Solar Energy Society of India.	Delhi	December 2014
	QIP Short Term Course on Advances in Solar Energy Conversion Technologies.	IIT Delhi	December 2014
	Two day FDP on Leadership, Interpersonal skills, Align to win, High-Impact Presentation skills.	ACSCE, Bangalore.	January 2015
Prof. Siddesha.H.S	Two day FDP on Leadership, Interpersonal skills, Align to win, High-Impact Presentation skills.	ACSCE, Bangalore.	January 2015
	VTU-VGST FDP on Sustainable Product Design and Manufacturing.	ACSCE, Bangalore.	June 2015
	AICTE sponsored FDP on Computational Mechanics & Industrial Applications.	Government Engineering College, Ramanagara	January 2015
Prof. Ramesh C	Two day FDP on Leadership, Interpersonal skills, Align to win, High-Impact Presentation skills.	ACSCE, Bangalore.	January 2015
	VTU-VGST FDP on Sustainable Product Design and Manufacturing.	ACSCE, Bangalore.	June 2015
Prof.R Sivasubramaniyam	Two day FDP on Leadership, Interpersonal skills, Align to win, High-Impact Presentation skills.	ACSCE, Bangalore.	January 2015
	VTU-VGST FDP on Sustainable Product Design and Manufacturing.	ACSCE, Bangalore.	June 2015

Prof. Bapu Gowda C M	Two day FDP on Leadership, Interpersonal skills, Align to win, High-Impact Presentation skills.	ACSCE, Bangalore.	January 2015
	VTU-VGST FDP on Sustainable Product Design and Manufacturing.	ACSCE, Bangalore.	June 2015
Prof. Kumar B M	Two day FDP on Leadership, Interpersonal skills, Align to win, High-Impact Presentation skills.	ACSCE, Bangalore..	January 2015
	VTU-VGST FDP on Sustainable Product Design and Manufacturing.	ACSCE, Bangalore.	June 2015
Prof. Sandeep.G.R.	Two day FDP on Leadership, Interpersonal skills, Align to win, High-Impact Presentation skills.	ACSCE, Bangalore.	January 2015
	VTU-VGST FDP on Sustainable Product Design and Manufacturing.	ACSCE, Bangalore.	June 2015
Prof. Sunilraj.B.A	Two day FDP on Leadership, Interpersonal skills, Align to win, High-Impact Presentation skills.	ACSCE, Bangalore.	January 2015
	VTU-VGST FDP on Sustainable Product Design and Manufacturing.	ACSCE, Bangalore.	June 2015
Prof. Srinidhi Acharya S R	Two day FDP on Leadership, Interpersonal skills, Align to win, High-Impact Presentation skills.	ACSCE, Bangalore.	January 2015
	VTU-VGST FDP on Sustainable Product Design and Manufacturing.	ACSCE, Bangalore.	June 2015
Prof. Chandrashekhar B	Two day FDP on Leadership, Interpersonal skills, Align to win, High-Impact Presentation skills.	ACSCE, Bangalore.	January 2015
	VTU-VGST FDP on Sustainable Product Design and Manufacturing.	ACSCE, Bangalore.	June 2015
	Machine Learning and its Applications.	MSRIT, Bangalore	July 2015
Prof. Veeresh Bhusnur	Two day FDP on Leadership, Interpersonal skills, Align to win, High-Impact Presentation skills.	ACSCE, Bangalore.	January 2015
	VTU-VGST FDP on Sustainable Product Design and Manufacturing.	ACSCE, Bangalore.	June 2015
	QIP Short term course on Principles of Iron Making.	IIT, Bombay	December 2014

Journal Publications

Vikas Kumar Methre and **M. Eswaramoorthy** (2015) 'Exergy Analysis of Solar Still Integrated Nano-Composite Phase Change Materials, Applied Solar Energy Vol.51 (2) pp: 99-106. (springer publications).

G. Rajasekhar and **M. Eswaramoorthy** (2015) 'Performance Evaluation On Solar Still Integrated With Nano-Composite Phase Change Materials' Applied Solar Energy, Vol.51 (1) pp: 15-21.(springer publications)

Prof. H.S. Siddesha (2015) "Experimental and computational simulation of producing ultra-fine Grain structure processed by CGP", in International Journal of Advance Research in Science and Engineering (ISSN 2319-8354), Volume 04, Issue, SI (02) February 2015.

Prof. H.S. Siddesha (2015) "Experimental and computational simulation of producing ultra-fine Grain structure processed by CGP", in International Conference on Science Technology and Management (ICSTM-2015)".

Prof. R.Siva Subramaniyam (2015) "Performance analysis and heat transfer studies on protruding surfaces of electronic components" in proceedings of Mechanical Engineering series 01 lead generation by DJ publications".

Prof. R.Siva Subramaniyam (2015) "Performance Analysis on Diesel engine using Pongamia oil with and without EGIR (Exhaust Gas Recirculation) in International Journal of Recent Advances in Science and Engineering explore Digital Library."

Prof. Ramesh C, K.Maniysundar, Selvanandan, and P.M.Anbarasan (2015) "Structural and Magnetic Study on Nickel Substituted MnZn Mixed Ferrite" in *Elixir Materials Science* 79 (2015) 30353-30356".

Prof. Ramesh C, K.Maniysundar, Selvanandan.S and P.M.Anbarasan (2015) "Structural and Magnetic study on Aluminum substituted MgZn mixed ferrite powders prepared by solid gel method" in Der Pharma Chemica Vol 7, Issue 4 (April 2015).

Prof. Ramesh, C, Maniysundar, *Selvanandan* (2015) "An overview of magnetism of spinel nanoferrite particles and A study of chromium substituted Zn-Mn ferrites nanostructures via sol-gel method" in IEEE Xplore.

Membership in Professional Bodies

Name of Faculty	Nature of Membership	Membership Number	Professional Bodies
M. Eswaramoorthy	Fellow	F-119732-7	IE(I)
	Life	LM-22660	MISTE
	Life	1241/01	SESI
Siddesha.H	Life	LM-37905	ISTE
	Member	M-140163-1	IE(I)
Bapugowda M	Life		ISTE
R.Siva subramaniyam	Life	LM48785	ISTE

Guest Lecture Delivered

Dr.M.Eswaramoorthy has delivered the guest lecture on 'Thermodynamic analysis of solar parabolic dish thermoelectric generator in QIP short term course on Advanced Solar Energy technologies held at IIT Delhi during 11th December 2014.



Patrons

Shri. AC Shanmugam, Chairman, RRG
Shri. ACS Arunkumar, Vice Chairman, RRG
Shri. S Vijayanand, Executive Director, RRG
Shri. S Jeyabalan, Special Officer, RRG

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