

RajaRajeswari College of Engineering

#14, Ramohalli Cross, Kumbalagodu, Mysuru Road,Bengaluru - 560 074 (Approved by AICTE, New Delhi. Affiliated to the Visvesvaraya Technological University, Belgaum)

Department of Mechanical Engineering

MECH NEWSLETTER

Volume :7 Issue: 1

Chief Patron



Dr.A.C.Shanmugam, B.A.LLB, FIMSA, FRCPS (Glasgow, UK) Former MLA., MP., Chairman, Rajarajeswari Group of Institutions.



Mr.A.C.S.Arunkumar B.Tech (Hons), LMISTE,MIET., (UK).,LMCSI., Vice-Chairman RajaRajeswari Group of Institutions.

Patrons

Dr.Vijayanand.S Executive Director RajaRajeswari Group of Institutions.

Mr. Jeyabalan.S Special Officer RajaRajeswari Group of Institutions.

Dr T R Gopalakrishnan Nair Rector RajaRajeswari Group of Institutions.

Principal

Dr.R.Balakrishna,Ph.D., RajaRajeswari College of Engineering

<u>Head of the Department</u> Dr. Yeshovanth H R, Ph.D., HOD-Mech

Gear 2019

We are very much grateful to the Management, Rector and Principal for their continuous encouragement, inspiration and support extended for the release of this "NEWS LETTER"- GEAR 2019.



Dr.H R Yeshovanth, Head of the Department

Department at a Glance

The Department of Mechanical Engineering was started in the year 2006 has highly qualified faculty with good blend of experience from both Academics and Industry. The department has well equipped laboratories with advanced software's. Within a span of 14 years the department has reached 'Center of Excellence' by attaining good academic results, conducting many seminars, conferences, workshops, FDPs, Industry - Institute Interactions at State and National levels.

Courses Offered:

UG Programme :

• Bachelor of Engineering in Mechanical Engineering-4 Years.

Research Programme:

• Doctor of Philosophy

Centre of Excellence:



		NT OF MECH					
	STUDENT TOPI	PERS FOR THE	ACADEMIC Y				
	8th Semester		7th Semester				
	EPPL				5		
1RR15ME020	1RR15ME052	1RR15ME066	1RR15ME033	1RR15ME101	1RR15ME101		
AJ MALLAPPA MELE	M CHANDU	NITISH DUNDAPPA	H NARAYAN KARIK	SUMMUKHA J	HARSHITH S		
SGPA:9.05	PA:9.05 SGPA:8.90 SGPA:8.85 SGPA:8.67				SGPA:8.13		
	5th Semester		6th Semester				
				8			
1RR16ME107	1RR16ME104	1RR16ME080	1RR16ME104	1RR16ME107	1RR16ME080		
SANTHOSH O	SAMMEDH JAIN T A	PUNITH Y	SAMMEDH JAIN T A	SANTHOSH O	PUNITH Y		
SGPA:8.81	SGPA:8.58	SGPA:8.31	SGPA:8.04	SGPA:7.96	SGPA:7.69		
	3rd Semester		4th Semester				
8			-	R	R		
1RR17ME128	1RR17ME059	1RR17ME134	1RR18ME410	1RR17ME058	1RR17ME128		
VINEETH V	MIR MOHAMMED SAIFUDDIN	YATHISH KUMAR B L	VIKAS H	MARVEL M VAZ	VINEETH V		
SGPA:8.64	SGPA:8.36	SGPA:8.07	SGPA:8.71	SGPA:8.68	SGPA:8.64		
	1st Semester		2nd Semester				
R	9	9.	R	9.			
1RR18ME019	1RR18ME002	1RR18ME054	1RR18ME019	1RR18ME054	1RR18ME006		
KIRAN H Y	AKASH GURUSIDDAPPA HITNALLI	VIKAS GURUSIDDAPPA HINTNALLI	KIRAN H Y	VIKAS GURUSIDDAPPA HINTNALLI	AMOGH M K		
SGPA:9.05	SGPA:8.1	SGPA:7.95	SGPA:9.05	SGPA:8.1	SGPA:7.95		

Congratulations to all the class toppers

Vision Group on Science and Technology (VGST) 2018-19 Approved Details

GRD No.	738		
VGST Programme	Research Grants for Scientists Faculty (RGS/F)		
Duration of VGST programme	1 Year		
Project Title / Theme / Topic	Performance Improvement and Characterization		
	of Thin Film Solar Cells		
Principal Co-Ordinator	B.D.Wadekar, Assistant Professor		
Total VGST Grant Sanctioned (in Lakhs):	5.0		

Faculty publications in academic year 2018-19

- 1. Kavya S, Ranjitha M, N Sreenivasalu Reddy and Vaibhavi D, "Experimental study of heat transfer on receiver tube of Parabolic collector with continuous helical fins", International Research Journal of Engineering and Technology (IRJET), volume 06, number 5, May 2019, pp. 28-31, e-ISSN : 2395-0056, p-ISSN : 2395-0072, Impact factor: 7.211.
- 2. N Sreenivasalu Reddy, "Numerical study of heat transfer characteristics on double pipe heat exchanger equipped with discontinuous helical fins", International Conference on Mechanical and Building sciences (ICMBS 2019), 27th and 28th March 2019, SNS college of Technology, Coimbatore- 35.
- 3. N Sreenivasalu Reddy, "Experimental study of heat transfer on receiver tube of parabolic trough collector with continuous helical fins", International Conference on Mechanical and Building sciences (ICMBS 2019), 27th and 28th March 2019, SNS college of Technology, Coimbatore- 35.
- 4. B.D Wadekar, "Parametric Optimization of Heat sink Using Multi Objective Optimization Method" in International Journal of Emerging Technologies and Innovative Research, Volume 6 Issue 6, June 2019.
- 5. B.D Wadekar, Presented a paper in national conference held in Cambridge Institute of Technology, Bangalore on May 3rd & 4th 2019.
- 6. K S Madhu, "Experimental Investigation of Heat Transfer In Helical Coil Heat Exchanger By Varying Angles With CFD Analysis" International Conference ICRAME2K19 organized by the T John Institute of Technology from March 2019.
- 7. Madhu K S, "Experimental Investigation of Heat Transfer In Helical Coil Heat Exchanger By Varying Angles With CFD Analysis" International Journal Of Research And Analytical Reviews E-ISSN 2348-1269,P-ISSN 2349-5138 UGC approved, paper ID IJRAR1AM913, held during June 2019.
- 8. Anand A published a journal in Journal of Emerging Technologies and Innovative Research titled "Conversion of Biodegradable Waste into Compost" ISSN UGC approved (Journal No:63975) & 5.87 Impact Factor published in Volume 6 Issue 5, May -2019.
- 9. M. Karthikeyan, K. Arul Raj, M.P. Arunkumar, P.K.C. Kanigalpula "Tribological and vibrational characteristics of AISI 316L tested at elevated temperature and 600 Torr vacuum". Defence Technology , ELSEVIER, Volume, February 2019, Pages 58-64.
- 10. Karthikeyan Muthu, Chockalingam Palanisamy, Natarajan Chinnasamy, "Influence of Process Parameters on Rapid Prototype Part Using Response Surface Methodology ", An International Journal of Journal of Engineering Technology and Applied Physics, Vol 1 No 1, 2019, PP 4-7.

- Vishwanath K.C "Investigation of Effect of Mechanical Properties of Different Shaped Notched Around The Specimen under Friction Stir Hole Expansion" to International Journal Of Engineering Sciences & Research Technology (IJESRT), ISSN: 2277-9655, Impact Factor: 5.164, CODEN: IJESS7, Vol. 7 Iss. 8, August-2018, DOI: 10.5281/zenodo.1345627.
- 12. Shivalingaiah. K published research article "Yoga, A way of Life and a Boon to the Mankind-Interactive insights" in college Magazine, Anahata-2018.
- 13. Radhakrishna R.K, Experimental Study On Mechanical Properties Of Woven Hybrid Bamboo And Jute Fibers Reinforced Epoxy Composites International Journal Of Scientific Research In Engineering And Management (Ijsrem) Volume: 03 Issue: 07 | July -2019, Issn: 2590-1892.
- 14. Radhakrishna R.K "Impact Toughness of Woven Bamboo & Jute Fiber Reinforced Epoxy Hybrid Composites" at Cambridge university, on 3rd and 4th April 2019.
- 15. Praveen Kumar S.P "Characteristic study of Aluminum based Metal Matrix Composite with hybrid mixture of Alumina and Zinc Oxide" in National Conference on Emerging Trends in Mechanical Engineering Trends 2019. at JSS Academy of Technical Education, Bangalore.

Faculty participation in FDP. Workshop in Academic year 2018-19

- Anand A National Level Seminar on "Additive & Advanced Manufacturing" conducted from 29th -30th July 2019, by Department of Mechanical Engineering, held at Bangalore Institute of Technology.
- 2. Dr.satheesha V participated in workshop on "Product Design and Innovation Workshop 2019" on 21st -25th January 2019 organized by Department of Mechanical engineering, UVCE Bengaluru.
- 3. Dr. N Sreenivasalu Reddy, participated in Two day state level exhibition / seminar project entitled "Experimental study of heat transfer on receiver tube of parabolic collector with continuous helical fins", held at Bapuji Institute of Engineering and Technology, Davanagere, 10th & 11th August 2018, supported by Department of science and Technology, Government of Karnataka and Department of Science and Technology, Government of India
- 4. Dr. N Sreenivasalu Reddy, participated in Two day state level exhibition / seminar project entitled "Design and fabrication of dual purpose refrigerator for agriculture", held at Bapuji Institute of Engineering and Technology, Davanagere, 10th & 11th August 2018, supported by Department of Science and Technology, Government of Karnataka and Department of Science and Technology, Government of India.
- 5. Dr. N Sreenivasalu Reddy, Dr.Vishwanath K.C participated in Two day state level exhibition / seminar project entitled Experimental study of heat transfer on a rotating receiver tube of parabolic trough collector, Funded by KSCST, IISc, Bengaluru, 2019, held at KLECE, Belgaum.
- 6. Dr. N Sreenivasalu Reddy, participated in Two day state level exhibition / seminar project entitled Conversion of biodegradable waste into composite, Funded by KSCST, IIsc, Bengaluru, 2019, held at KLECE, Belgaum.

- 7. Shivalingaiah.K attended Two day National conference on Modern Trends in Mechanical Engineering[MTME-2017] 19th and 20th May 2017 Organized by Department of Mech Engg, RajaRajeswari College of Engineering, Bengaluru-74.
- 8. Shivalingaiah.K attended 'workshop on vocational courses' conducted by AICTE, on 19th March 2018 at Atria Institute of Technology, Bangalore.
- 9. Shivalingaiah.K attended One day Technical Seminar on Future of product development in Real world Engineering-2018 14th July2018 Organized by Dheya Engineering technologies Pvt.Ltd, Bangalore.
- 10. Shivalingaiah.K attended Two day National conference on "High Temperature Tribology Conference (HTTC-2018)" on 3rd & 4th Sept.2018 organized by 'DUCOM INSTRUMENTS', Bangalore.



One week FDP on Thermal Power Engineering



Faculty Development Program on "Thermal Power Engineering" conducted from 22nd to 27th July 2019. Faculties from various engineering college attended the programme.

Karnataka State Council for Science and Technology

KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Indian Institute of Science Campus, Bengaluru – 560 012 Website: http://www.kscst.iisc.ernet.in/spp.html || Email: spp@kscst.iisc.ernet.in || Phone: 080-23600978

STUDENT PROJECTS PROGRAMME: 42nd SERIES - STATE LEVEL SEMINAR AND EXHIBITION

List of Projects Selected for State Level Seminar and Exhibition (S&E) to be held at

K.L.E. Dr. M.S. Sheshgiri College of Engineering and Technology, Udyambag, Belagavi on 26th and 27th July 2019

SI. No.	PROJECT REFERENCE NO.	PROJECT TITLE	BRANCH	NAME OF THE GUIDE	NAME OF THE CO-GUIDE	NAME OF THE TEAM LEADER	NAME OF THE STUDENT 2	NAME OF THE STUDENT 3	NAME OF THE STUDENT 4	SEMINAR OR EXHIBITION
229.	425_8E_0994	SMART HELMET FOR ACCIDENT PREVENTION AND COAL MINES SAFETY MONITORING AND ALERTING SYSTEM	INFORMATION SCIENCE AND ENGINEERING	Mrs. NEHA SINGHAL	8	Mc. SWETHA B	Mo. BHAVYA SHREE R	Mc. DISHA K V	8	EXHIBITION
230.	425_BE_2490	CONVERSION OF BIODEGRADABLE WASTE INTO COMPOSTE	MECHANICAL ENGINEERING	Prof. N SREENIVASALU REDDY	Prof. ANAND	MF. AKSHAY L	Mr. AJITH M	MF. K MADHUSUDHA N	Mr. PRASHANTH REDDY	EXHIBITION
231.	425_8E_2491	EXPERIMENTAL STUDY OF HEAT TRANSFER ON A ROTATING RECEIVER TUBE OF PARABOLIC TROUGH COLLECTOR	MECHANICAL ENGINEERING	Prof. N SREENIVASALU REDDY	Dr. VISWANATH K C	MP. YASHAWANTH S M	Mr. NITISH.D. MUTTUR	Mr. PRAMOD MOHAN HEGDE	Mr. RAHUL PRAKASH, S	EXHIBITION
232.	425_BE_3032	DESIGN AND FABRICATION OF GOBAR GAS BASED REFRIGERATOR SYSTEM	MECHANICAL ENGINEERING	Prof. N SREENIVASULU REDDY	Dr. VISHWANATH K.C	Mr. SANDESH M.K	Mr. SHASHANK.G	Mr. RENUKA RAJ	Mr. SACHIN MALABADI	EXHIBITION

Note:

You are requested to send the hard bound copy of the project report along with softcopy of the full report in a CD in PDF format.

Any corrections with respect to Guide and Students name, kindly send an email regarding the same to spp@kscst.iisc.emet.in.



Dr.SreenivasaluReddy N, Assoc. Prof, Dr. Vishwanath K C, Assoc. Prof, Bengaluru participated in the State level seminar and Exhibition organised and conducted by Karnataka State Council for Science and Technology during 26nd & 27th July 2019.

Staff Training Program on Computer Integrated Manufacturing Tools and Training



Conducted Staff Training Program in "Computer Integrated Manufacturing Tools and Training " and given the demonstration of various CNC machining program for Mechanical Engineering Staff from24th to 28th June 2019.

Students Project Exhibition





Conducted Students Project Exhibition on 20th May 2019 for Mechanical engineering students. 95 Students participated in exhibition and exhibit their projects. Dr.Siddesha H.S, Dr.SivaSubramaniyam R, Professor's from ACS College of Engineering Bengaluru evaluate the project.

Computer Integrated Manufacturing

Conducted a technical talk on "Computer Integrated Manufacturing" for the Mechanical engineering students on 25th April 2019. Mr.Ravindra Padasalagi, Ex. HAL DGM delivered the concepts of CIM and its processes, applications to the students.

Mexelerate 2K19

Conducted National Level Student Symposium on 23rd to 24th April. Dr. Girish, Professor & Head Department of Mechanical Engineering, AMC College of Engineering delivered the address and distribute the prizes to the students participated in different events.

Faculty Development programme





Faculty Development Program on Industry 4.0 for Manufacturing Industry was organised and conducted on 10th April 2019. Mr. Ramaprakash Holla, DPS,(MD), Bengaluru delivered the lecture to the faculties and the students of all years.



Industrial Visit



4th Semester, Mechanical Engineering students visited the M/s Distinct Productivity Solutions Bengaluru on 9th April 2019 and 23rd October 2019. Mr.Akshay, OE Engineer and Mr.RamaPrakash Holla Managing Director of Distinct Productivity Solutions explained the various process of their industry.

Industrial Visit



4th Semester, Mechanical Engineering students visited the M/s Bharat Fritz Werner Ltd Bengaluru on 9th April 2019. Mr.Jagath.P, Assistant Manager of Bharat Fritz Werner Ltd explained the various process of their industry.

"Industrial Visit"

Students of 5th semester Mechanical Engineering visited to TD Power Systems Private Limited, Dabaspet, Nelamangala Taluk, Bengaluru – 562 111 on 05th April 2019.

"ORIENTATION COURSE"





"Orientation course on computer software" was organised and conducted by VTU regional centre , Bengaluru from 18/03/2019 – 20/03/2019 & 25/03/2019 – 27/03/2019. Dr. Badari Naryan, Mr.P.Ramesh Kumar, Mr. H R Sudarshan Prasad from Centre of Excellence Aerospace and Defense delivered the computer software such as 3D EXPERIENCE R2017X and ABAQUS CAE , Design of aircraft, product design process, product design management, 3D experience software advantages and foundation course for developing skill in aircraft, Controlling system of aircraft, Introduction about the avionics system, software used in the air craft design and the classification, functions, controlling system used in the aircrafts .

"INDUSTRIAL VISIT"



6th Semester, Mechanical Engineering students visited the "Karnataka Milk Federation (KMF)-Mother Dairy" 1ST Main Road, Maruthi Nagar, Yelahanka Bangalore, Karnataka 560064 on 21st March 2019.

***** IOT Hardware

Organized IOT Hardware on 19th March 2019 to the students of Mechanical Engineering students. Mr.Akshay Honnappa and Team explained the various IoT principles and the hardware used to develop the automation system for mechanical engineering machines.

Industrial Visit



6th Semester, Mechanical Engineering students visited the "M/s Parsons nutritionals pvt ltd" Plot No-319C, 320A & B, 321, Second Phase, Harohalli Industrial Area, Kanakapura-Taluk, Ramnagar-Dist, Bengaluru - 562112, Karnataka on 7th March 2019.

TECHNICAL TALK



Conducted "TECHNICAL TALK" on "Orientation Program on Manufacturing Process, Personality Development and Entrepreneurship for Mechanical Engineers" on 6th March 2019. Dr Mr. Thungaraju G D, Founder of PEOPLE MECHANICS COMPANY delivered the lecture.

Startups and Entrepreneurship

Mechanical Engineering organizing Startups and Entrepreneurship on 28th February 2019. Resource Person : Mr.Rahul,RRCE Alumnus

Industrial Visit





6th Semester, Mechanical Engineering students visited the "Government Tool Room and Training centre", Rajajinagar Industrial Estate Bangalore – 10 on 27th February 2019.

TECHNICAL TALK



Conducted "TECHNICAL TALK" on "AUTOMATION TECHNOLOGY" to the students of Mechanical Engineering students on 23rd Feb 2019. Mr. Santhosh M S, DCIN/SSD (Drive and Control Academy), Senior Manager, Rexroth Bosch Group to give the lecture on AUTOMATION TECHNOLOGY.

TECHNICAL TALK



Conducted "TECHNICAL TALK" on "PRIVY TO THE ART OF AUTOMATION"" to Students of Mechanical engineering department on 20th February 2019. Mr.Suhas B Srihari, Assistant Professor, Embedded Developer of GTTC Group to give the information about automations.

"Industrial Visit"





4th Mechanical Engineering Students visited the "Government Tool Room&TrainingCentre",Bangalore-560010 on 19th February 2019Resource Person: Mr Mr.Suhas B Srihari, Assistant Professor . Embedded Developer. GTTC Group to give the information to Students in Mechanical department.

Industrial Visit



4th Mechanical Engineering Students visited the "Government Tool Room&TrainingCentre",Bangalore-560010 on 12th February 2019. Mr.Suhas B Srihari, Assistant Professor, Embedded Developer, GTTC Group to give the information to Students in Mechanical department.

Carrier guidance





Conducted "Carrier guidance " on Study Metro on 02nd February 2019. Mr.Abhinav, Bajaj Group give the information about higher studies to Students of Mechanical department.

Industrial Visit



5th Mechanical Engineering Students visited the "TD Power Systems Private Limited on 23rd October 2018. Mr. Sathish Shetty, Engineer and Mr. Vidyadhar, Engineer KIADB Industrial Area, Dabaspet, Nelamangala Taluk, Bengaluru – 562 111 to give the information about the power systems manufactured to the students.

Industrial Visit



3rd Mechanical Engineering Students visited the M/s Bharat Fritz Werner Ltd. On 23rd October 2019. Mr. Chandrashekar.N.Sajjan, Dy. General Manager of Bharat Fritz Werner Ltd, Off Tumkur Road, Bangalore – 560022 to give the information to students about their industry.

Technical Seminar



Conducted "Technical talk for Mechanical and Electrical Engineering Students on HVAC (Heating Ventilation Air-Condition) & MEP Industry, Job Profile, Scope of Work, Industry Demand on 22nd October 2019 by PRINSTON SMART ENGINEERS.

Industrial Visit





7th semester Mechanical Engineering Students visited the Indian Machine Tool Manufactures Association, BIEC, 10th Mile, Tumkur Road, Madavara Post, Bangalore -562123 on 5th October 2018 and gain the knowledge about the practices of manufacturing industry.

Technical Talk



Conducted "Technical talk for 7th sem Mechanical Engineering Students on "AUTOMATED SYSTEMS" by FANUC India Pvt, Ltd, Bengaluru on 7th September 2019. Mr.Pradeep Kumar, Manager, FANUC India Pvt, Ltd, Bengaluru participated and delivered the lecture.

Newsletter Co-ordinators

Dr.H.R.Yeshovanth, Prof and HoD Dr. R. Shankara Reddy, Prof Dr. M N Shankar , Prof Dr. Mohan Raj R, Prof Dr.M.Karthikeyan, Prof Prof. C. Ramesh, Asst. Prof Prof.SreenivasaluReddy N, Asst. Prof Prof.Pramod V Koujalagi, Asst. Prof Prof.Thanuj Kumar M,Asst. Prof Prof. Vishwanath K C, Asst. Prof Prof.Satheesha V, Asst. Prof Prof Dhanajay B S,Asst. Prof Prof.Anand A, Asst. Prof Prof.Praveen Kumar S P,Asst. Prof Prof. Wadekar B R , Asst. Prof Prof. Madhu K S, Asst. Prof Prof.Radhakrishna R K,Asst. Prof Prof.Ravi Kumar T, Asst. Prof Prof.MadhusudhanM,Asst. Prof Prof.Shivalingaiah K, Asst. Prof Prof. Mahendra H M Asst. Prof Prof. Ravikiran ,Asst. Prof Prof. Yellapa M, Asst.Prof Prof. Deepthi H M ,Asst. Prof Prof. Ningappa D Kunabeva, Asst. Prof Prof. Druvakumar Mallappa, Asst Prof

Center of Excellence



R & D and Innovation Centre





Dheivegam_co









When learning is purposeful, creativity blossoms. When creativity blossoms, thinking emanates. When thinking emanates, knowledge is fully lit. When knowledge is lit, economy flourishes.

-A.R.J. Abdul Kalam

Department of Mechanical Engineering

RajaRajeswari College of Engineering #14, Ramohalli Cross, Kumbalagodu, Bangaluru-560074, Karnataka, India.