PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

Within a few years of graduation, the candidate is expected to

PEO 1. Demonstrate the ability to analyse, formulate and solve/design engineering/real life problems based on his/her solid foundation in mathematics, science and engineering.

PEO 2. Showcase the ability to apply their knowledge and skills for a successful career in diverse domains viz., industry/technical, research and higher education/academia with creativity, commitment and social consciousness.

PEO 3. Exhibit professionalism, ethical attitude, communication skill, team work, multidisciplinary approach, professional development through continued education and an ability to relate engineering issues to broader social context

PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

PO 1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and mechanical engineering to the solution of complex engineering problems.

PO 2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO 3. Design / development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO 4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO 5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO 6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO 7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO 9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO 10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO 11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO 12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

PROGRAM SPECIFIC OUTCOMES (PSOs)

Engineering Graduates will be able to:

PSO 1. Apply their Knowledge in the Domain of Engineering Mechanics, Thermal and Fluid Sciences to Solve Engineering Problems utilizing Advanced Technology.

PSO 2. Successfully Apply the Principles of Design, Analysis and Implementation of Mechanical Systems/Processes which have been learned as a part of the Curriculum.

PSO 3. Develop and Implement New Ideas on Product Design and Development with the help of Modern CAD/CAM Tools, while Ensuring Best Manufacturing Practices.

NEWSMECHERS Team:

Mr. John Paul C D Assistant Professor (Faculty in charge)	Gokuldas V R S3ME A (Editorial)	Aswin S Nair S3ME A (Editorial)	Jerin P Raju S3ME A (Design)	Rahul Francis S3ME B (Editorial)	Jude Joseph George S3ME B (Editorial)

NEWSMECHERS

DEPARTMENT OF MECHANICAL ENGINEERING
RAJAGIRI SCHOOL OF ENGINEERING AND TECHNOLOGY

ISSUE 6|July 2017 –June 2018

ABOUT THE DEPARTMENT

Established in the year 2012 with an initial intake of 60 students in 2011, the Department of Mechanical Engineering has progressed by leaps and bounds in all respects in a short span of time. Presently the department admits 120 students per year to its undergraduate study programme. The department has attracted highly qualified and experienced personnel from various streams of Mechanical Engineering as its faculty.

VISION

To evolve into a centre of excellence by imparting professional education in mechanical engineering with a unique academic and research ambience that fosters innovation, creativity and excellence.

MISSION

- To have state-of-the-art infrastructure facilities.
- To have highly qualified and experienced faculty from academics, research organizations and industry.
- To develop students as socially committed professionals with sound engineering knowledge, creative minds, leadership qualities and practical skills.

MESSAGE FROM HOD

On behalf of the staff and students of the Mechanical Engineering Department, a very warm welcome to the sixth edition of NEWSMECHERS. We are very much grateful to the Management and Principal for their continuous encouragement, inspiration, and support extended for the release of this newsletter. This year we proudly present our flagship international conference on Green Building and Sustainable Engineering. I congratulate all members of the editorial board for their sincere effort to release this newsletter.

Dr. Thankachan T. Pullan
Associate Professor
Department of
Mechanical Engineering

SCAN QR CODE TO
DOWNLOAD MECHAZINE 2018

EDITORIAL BOARD

We are extremely happy to release the sixth edition of the Mechanical Engineering Department Newsletter NEWSMECHERS. This will acts as a communication channel among the faculty, students and parents in Mechanical Engineering Department. In addition to the regular features, this year we present glimpses of GBSE 2018.

2014-18 Batch Graduation Day

STUDENT ACHIEVEMENTS

Mr. Paul George of S7 ME manufactured a 500MM X500MM X 500MM 3D printer and installed successfully and gave training at J.R.U CONTROL PVT LTD on 7th July 2017.

AshwathNambiar, Athul Krishna, Bijil John, Nirmal M. K. of S7 ME got top 5 among 17 projects at an event held at Avishkar 2.0 Project Expo, Mar Athanasius College of Engineering, Kothamangalam as part of Takshak '17 on 22nd September 2017.

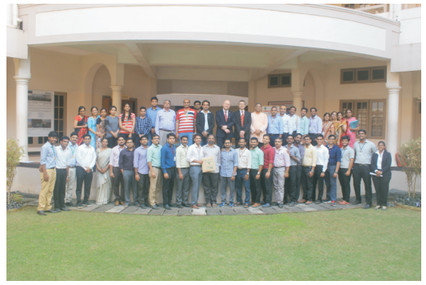
Jais George of S3 ME Alpha won First Position in MASTERPIECE and Second Position in Eclectic held as part of Adizya, Tathva '17 conducted by National Institute of Technology, Calicut from October 13th to 15th 2017.

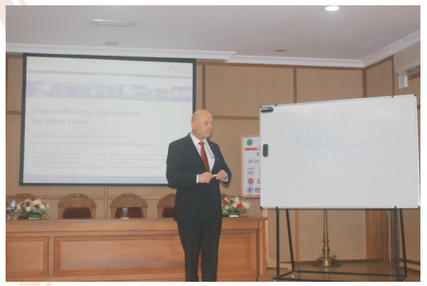
Muhammad Fahad N Ayoob, Mohammed Asif and Anashwara of S5 ME won First Prize in Startup i3,organised by KSUM at Eranad Knowledge City, Manjeri from 27thOctober to28th October 2017.

AshwathNambiar, Athul Krishna K. R., Bijil John, Nirmal M. K. of S7 ME, won First Prize in the STUDENT'S PROJECT competition on 13th, 14th & 15th December 2017 in connection with ELEX 2017 INDUSTRIAL EXHIBITION Organised by Kerala Electrical & Allied Engg. Co. Ltd. (A Govt of Kerala Undertaking) at CIAL Exhibition Centre.

Jeffin Francis, AbyBijuNarayamparambil, Anupama Johnson, Jeswant Mathew of S5 ME AlphaWon second prize in campus edition of Hult Prize2018:"Harnessing the power of energy to transform the lives of 10 million people" at College of Engineering Trivandrum on 21st December 2017.

Jeffin Francis , AbyBiju N., Anupama Johnson, Jeswant Mathew of S6 ME won Best Popular Project Award (Rs. 10000/-) and Best Mechanical Engineering Project Award (Rs. 12000/-) for the Project "Semi-Autonomous Electric Car "In SRISHTI 2018 (4th National Level Technical Project Exhibition & Competition) held at Saintgits College of Engineering,





Jeffin Francis, AbyBiju N, Anupama Johnson, Jeswant Mathew of S6 MEA Grade, 1st Prize in the college level Model Exhibit Competition (Rs. 10000/-) in Albertian International Educational Expo-2018 on 4th to 6th January 2018.

ASHWATH NAMBIAR, ATHUL KRISHNA, NIRMAL M K, BIJIL JOHN of S8 ME won A Grade, 2nd Prize in the college level Model Exhibit Competition (Rs 5000/-) in Albertian International Educational Expo-2018 on 4th to 6th January 2018.

ASHWATH NAMBIAR, NIRMAL M K, BIJIL JOHN, ARJUN T. M, and ATHUL KRISHNA won 2nd prize for their project "Inverted Pendulum Wheel Chair Module" (Rs 50,000/-)In the "Dr. Pradeep P. Thevannoor Innovation Awards 2017" Global Contest and Exhibitionorganized by SCMS School of Engineering & Technology, Cochin and supported by APJ Abdul Kalam Technological University, during 2-3 February 2018

Jeffin Francis, AbyBijuNarayamparambil, Anupama Johnson, Jeswant Mathew of S6 ME Alpha got Rs.2 lakhs funding from Kerala Start up mission for their project proposal titled " Semi- Autonomous Electric Car "in the 9th Idea Day conducted by KSUM on 5th February 2018 at IIM Kozhikode.

JeevanJoji, Joe Ebby, Akhil S Peter, Christo Joseph of S8 ME got Rs.1 lakhs funding from Kerala Start up mission for their project proposal titled " Automated Portable Rubber Smoke House" in the 9th Idea Day conducted by KSUM on 5th February 2018 at IIM Kozhikode.

Mr. Arunkumar G Bhat of S6 ME Alpha has visited Sojo University and industries in Japan e from 5th March to 14th March 2018. This was under Japan-Asia Youth Exchange program in science (SAKURA Exchange Program in Science) administered by Japan Science and Technology Agency.

Verdatumservices a start by Mr. Athul Ram of S8 ME Alpha received a grant of 2 lakhs from Kerala Start Up Mission.

EVENTS ORGANISED

Introduction Section to AUTODESKFUSION 360 SOFTWARE seminar was coordinated by Mr. JithinP.N for S7 ME students on 27th and 28th July 2017.

A seminar was held on "ANSYS on HPC" by MR. Vaibhav, HPC Expert from ANSYS Team as part of International Faculty Development Program on High Performance Computing & Data Science on 18th August 2017.

An awareness lecture on Anti Ragging (menace of ragging and Anti Ragging rules) was delivered by Mr. Mohitkumar, District Judge,DLSA, Kochi on 29th August 2017.

RSET IEDC in association with Mechanical Engineering Department organized a Two day"LPSC-ISRO Exhibition" on 9th and 10th August 2017.

Training in modelling software Autodesk fusion 360 by Mr. Viju Antony, Trainer from BIM IT was organized by Mr. Jithin P for the ME students on 26th and 27th September 2017.

Training by RSET and HMT on CNC programming for S7 students of Mechanical department. The 3 days training includes one day at RSET and 2 days at HMT for different batches of students.

Mr. PAUL GEORGE of S7 ME Beta and team conducted a hands on workshop on Robotics and 3D Printing as part of the CSE department IEDC activity on 15th October 2017.

Mr. PAUL GEORGE of S7 ME Beta and team conducted a Two day hands on workshop on Robotics and 3D Printing as part of the ECE department IEDC activity on 7th October 2017.

"Real Mechanica" - Mechanical Students Association of RSET organized preliminary round of ENGINEERIA- GLOBAL ENGINEERING QUIZ in association with CADD Centre, Aluva on 4th and 5th October 2017.

RSET IEDC in association with 'Real Mechanica' - Mechanical Students Association of RSET organized a Python boot camp for first year mechanical engineering students of RSET on on 7th October 2017.

Department of Mechanical Engineering and Civil Engineering in association with SunyaLabs organized an invited session on "The World of Engineering Simulation- Trends in CAE/CFD for product Design" for B.Tech Civil and Mechanical students by Mr. KuruvillaLukose, Altair Engineering India Pvt. Ltd on 9th November 2017.

RSET IEDC in association with 'RealMechanica' organized a BAL-BOT competition and exhibition on 16th November 2017.

International Conference on Green Buildings and Sustainable Engineering (GBSE 2018)",Jointly Organized by RSET and Research and Testing centre for Thermal Solar Systems (TZS), Institute for Thermodynamics and thermal Engineering (ITW), University of Stuttgart, Germany was held RSET on 24th and 25th January 2018.