

The Arrow

Department of Aeronautical Engineering Newsletter

2018-19 even semester

Volume 2 issue 11



KUMARAGURU
college of technology
character is life

Character is Life

- Arutselvar N.Mahalingam



HoD's Message:

I warmly welcome you to the eleventh issue of the Aeronautical department's newsletter. Here you will find the latest news about the College, its exceptional programs, students, faculty, and alumni. We have also been adding new, cutting-edge lab equipment for our labs which includes Shock tube for Supersonic research. Our strategy for ensuring that our college remains well-positioned to maintain its phenomenal growth includes industry oriented curriculum and continuing to renew our teaching and research laboratories, with an eye toward elevating one or more of these research labs.

In this issue



Editorial Committee

Editor

Mr.Muthkumar S,
Assistant Professor

Student Associate editors

- 1. Mr.K.Gowtham
- 2. Ms.Akshaya C

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Mr.G.Rajkumar attendd a two days workshop on advance composite materials design and testing at Selvam college of technology, Namakkal.



Sulur Airbase visit

The students of Third and final year along with faculty members Mr.G.Rajkumar , Mr. Naveen kumar K and Mr. Muthukumar S visited the open aircraft exhibition conducted b the Airbase Sulur , Coimbatore. Advanced light helicopter, AN 32 and Commandos drills are the highlights of the occasion.



Glider competition

During the Yugam a Techno Cultural event of KCT, the Aeronautical department conducted a glider designing competition. The event got participation from various colleges and the design and technical aspects are taken in to account in deciding the winners. The juries were from the Aeronautica department itself. Mr.R.Vijayanandh and Mr.G.Rajkumar headed the competition.



Faculty members presented their research works in the ISTEM technical conference conducted by KCT. Aeronautical department was clustered with Mechanical and Automobile departments.



Parent Teachers Meeting

Parent teachers meet for the year held at the department. HOD DR.K.Sundararaj addressing the parents with a welcome PPT and introducing the departments facilities to the parents and answering their questions on the department. Then the parents met the individual mentors to know the status of their wards education



Republic day celebration

KCT alumnus Mr.Prithvi working in Indian Army honored the occasion of Republic day celebrations at KCT. Air wing and Army wing cadets performed a drill in front of our Joint Correspondent. It is a proud moment for the Aeronautical department to see our Alumnus getting honored at the Republic day

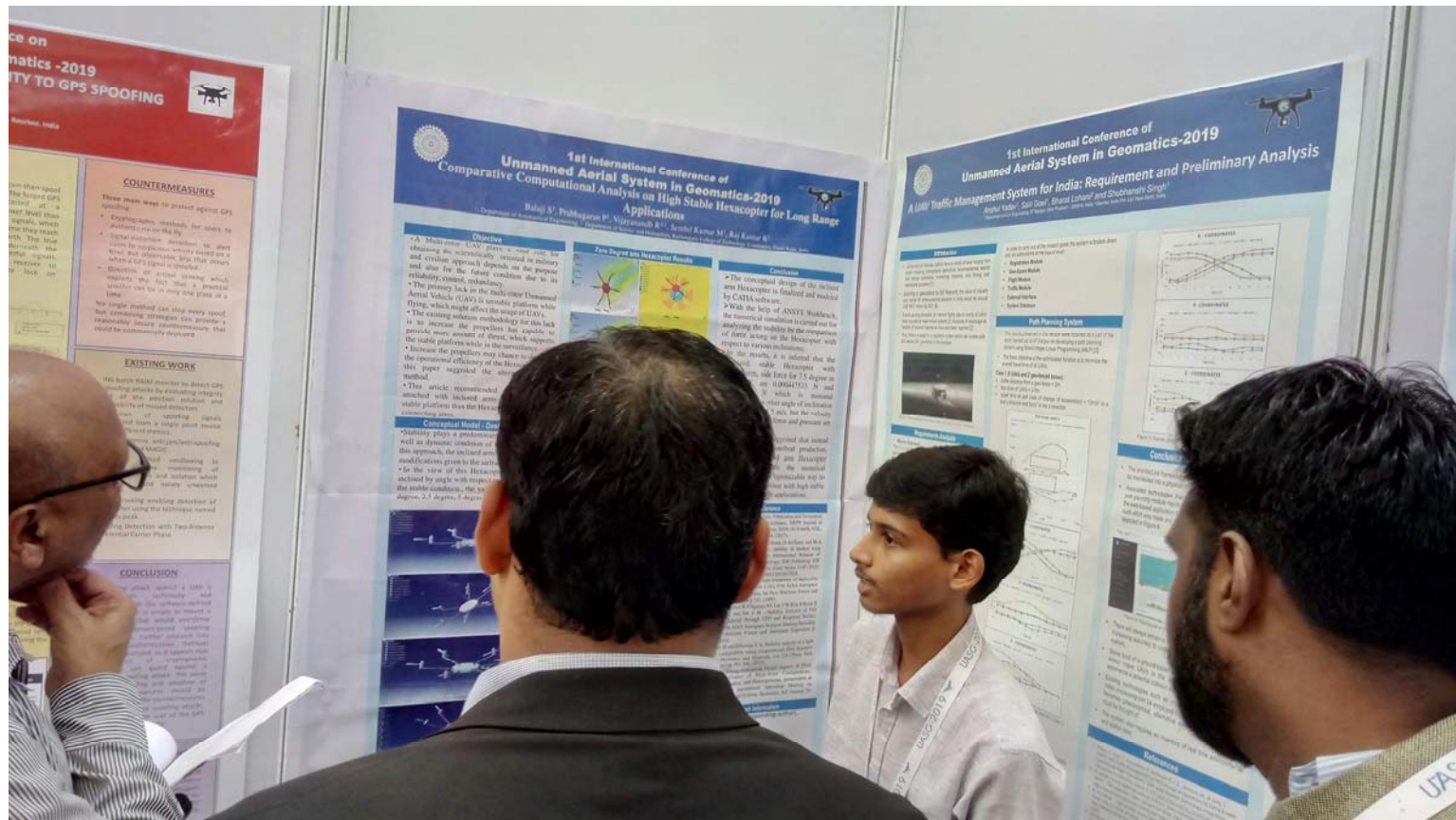


Mr.Dharmaraj from Trichy who has experience over 25 years in Aeromodelling been called for a 3 day aeromodelling workshop at the department and attended by faculty members from KCT and other colleges.



IIT ROORKEE PROFESOR VISIT

Dr. Krishnan Murugesan from Department of Mechanical and Industrial Engineering IIT ROORKEE visited the campus and interacted with the Aeronautical and Mechanical faculty. He shared his ideas on receiving funded projects from various industries and government funding agencies.

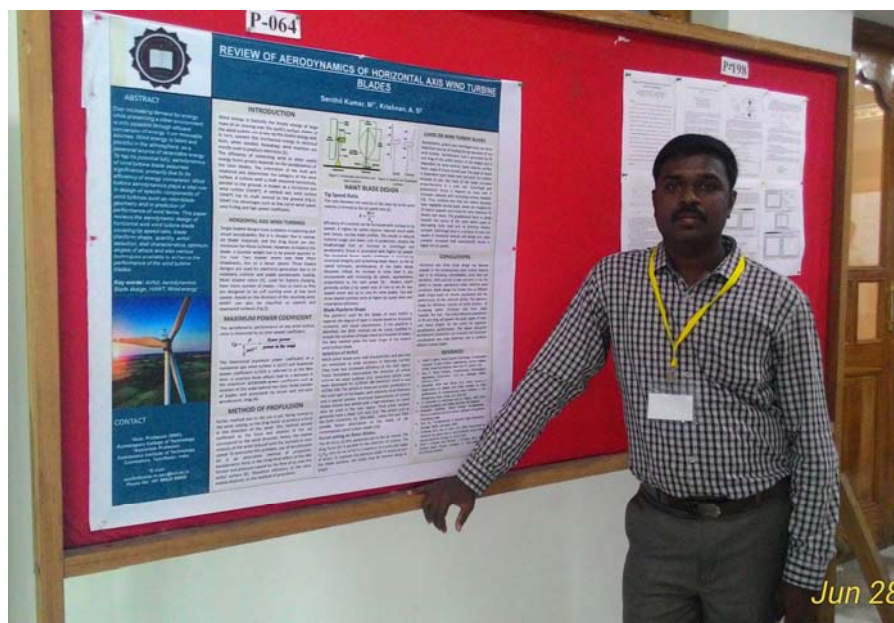


Balaji S, Prabhakaran P second year student did a poster presentation 1st International Conference On Unmanned Aerial System In Geomatics - 2019 In Cooperation With ISPRS 6th And 7th Of April 2019, IIT Roorkee Noida Campus.



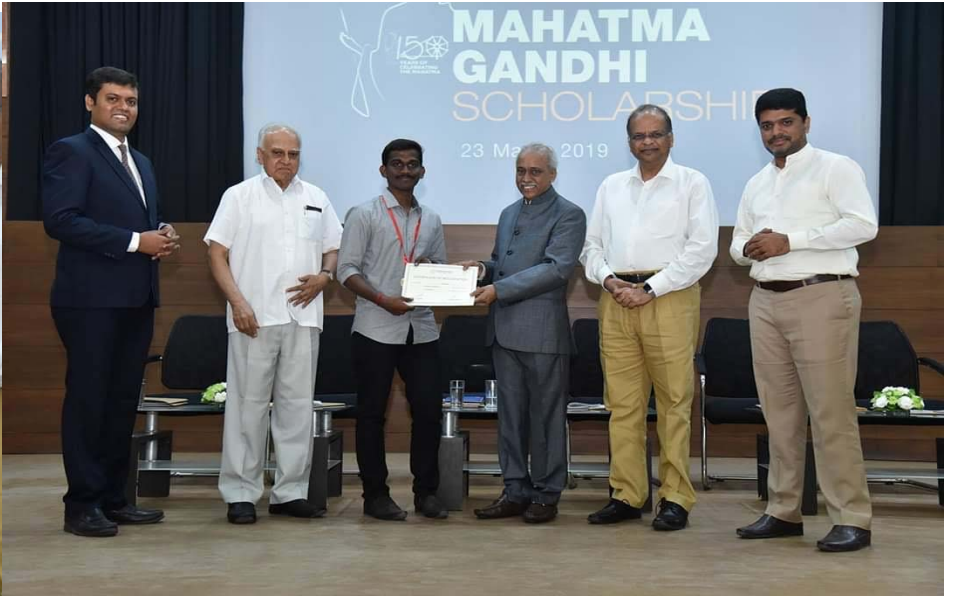
Paper presentation

Mr. Vijayanandh R presented his research work on "Advanced positioning system of an airborne vehicle" at International Conference on Energy, Environment and Engineering 2016 in Coimbatore Institute of Technology, Coimbatore.



Poster presentation

Mr. M. Senthil Kumar faculty of Aeronautical department presented his work in International Conference on Nanoscience and Nanotechnology for Energy Applications held at Sathyabama university, Chennai. He presented the work on horizontal axis wind turbine and the methods to improve its performance characteristics.



The best outgoing student award and Best academic performance award are received by Ms.Dharani priya nd Mr.Sathish kumar of 2018 passed out students. The department congratulating the awardees.



Composite consultancy project

Mr.Rajukumar G faculty of Aeronautical department undertaking a composite consultancy project for the Mahindra college of Engineering Namakkal. The Composite fabrication facility at the department have the Vacuum bagging as the primary fabrication process



GATE EXAM AWARENESS

Mr.KArthik from GATE forum Coimbatore addressed the third year students on the importance GATE exam and the opportunities available after clearing it.The studnets were also introduced with the scholarship that is available with the institute.



NBA AWARENESS

Mr. Senthilkumar S faculty of aeronautical department explained the students on the advantages of NBA accreditation for the students. He talked about the outcome based education, course outcomes and Program objectives. The third year students are the audiences.

List of Faculty activities during the 2018-19 even semester

1. our department HoD Dr.K. Sundararaj had attended a 12 days GIAN course in “shock wave reflection phenomena” at IIT Madras ,Chennai
2. Mr.M.Senthilkumar attended a 12 days GIAN course in “shock wave reflection phenomena” at IIT Madras ,Chennai
3. Dr.Prem kumar P S presented his research paper in the area Propeller Aerodynamics at SVS College of Engineering in the International conference on civil Mechanical Chemical engineering & technologies (ICCMCT)
4. Mr. R. Vijayanandh presented his work Design Optimization of Advanced Multi-rotor Unmanned Aircraft System Using FSI at the 3rd International Conference on Innovative Design, Analysis & Development Practices in Aerospace and Automotive Engineering held at Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, Avadi, Chennai, India
5. Mr. R. Vijayanandh presented his work at National Technical Seminar on Future Technologies for Combat Vehicle Electronics at CVDRE , Chennai.
6. Mr. M. Senthil Kumar presented his paper on Performance Improvement of Small Horizontal Axis Wind at Energy System International Conference cum Exhibition on THERMAL ANALYSIS AND ENERGY SYSTEMS held in Hindusthan College of Engineering and Technology, Coimbatore.



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COIMBATORE – 641 049

Department of Aeronautical Engineering

INSTITUTE VISION

The vision of the college is to become a technical university of International Standards through continuous improvement.

INSTITUTE MISSION

Kumaraguru College of Technology (KCT) is committed to providing quality Education and Training in Engineering and Technology to prepare students for life and work equipping them to contribute to the technological, economic and social development of India. The College pursues excellence in providing training to develop a sense of professional responsibility, social and cultural awareness and set students on the path to leadership.

DEPARTMENT VISION

To attain excellence and global reputation in Aeronautical Engineering Education and Research.

DEPARTMENT MISSION

M1: The department is committed to provide quality education in Aeronautical Engineering to students to build their career and do quality research and thus contribute to the field of Aviation and Aerospace.

M2: The department aims to prepare students for their higher studies and research to contribute to the advanced technological needs of Aeronautical engineering.

M3: To encourage faculty to update their knowledge and teaching-learning process through continuous learning.

M4: To undertake inter-disciplinary research to contribute and support the industry.

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

The Program Educational Objectives (PEOs) of Aeronautical Engineering Undergraduate Program are to prepare the students:

I. To pursue a successful profession in leading organizations.

II. To pursue postgraduate degrees and conduct research at leading technological universities to contribute to the advancement in the field of Aviation and Aerospace industries.

III. Continue their professional development by utilizing educational and career building opportunities through their employer, educational institutions, or professional bodies.

PROGRAM OUTCOMES (POS)

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: 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.

PO3: 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.

PO4: 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.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: 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 and systems.

PO7: 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.

PO8: Ethics: Apply ethical principles and commitment to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.

PO10: 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.

PO11: 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.

PO12: 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):

PSO1: Apply fundamental principles of Aerodynamics, Structures, Propulsion, Materials, and Avionics to provide solutions to aerospace and non-aerospace industrial problems.

PSO2: Use the software packages in the design, manufacturing, testing and maintenance of aeronautical and aerospace based components