



About Department | Page 02
Student Article | Page 03
R&D Proposals| Page 04
Festival Celebrations | Page 06
Faculty Article | Page 07



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KITS

KKR & KSR Institute of Technology & Sciences

(Approved by AICTE New Delhi, Affiliated to JNTU Kakinada, Accredited by NAAC with "A" Grade)



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VISION, MISSION & PEO'S

Vision

Developing highly Qualitative, Technically Competent and Socially Responsible Engineers.

Mission

To provide quality education in the domain of Electronics and Communication Engineering through

- Enriched curriculum for addressing the needs of Industry.
- Effective teaching learning processes through congenial environment.
- Gaining contemporary knowledge through research, development, curricular, co and extra-curricular.

ECE Program Educational Objectives

Graduates of Electronics & Communication Engineering Shall

PEO1: Develop a strong background in basic science and mathematics and ability to use these tools in their chosen fields of specialization.

PEO2: Have the ability to demonstrate technical competence in the fields of electronics and communication engineering and develop solutions to the problems.

PEO3: Attain professional competence through life-long learning such as advanced degrees, professional registration, and other professional activities.

PEO4: Function effectively in a multi-disciplinary environment and individually, within a global, societal, and environmental context.

PEO5: Take individual responsibility and to work as a part of a team towards the fulfillment of both individual and organizational goals.

The institute is a symbol of egalitarian outlook without discretions. KITS student activity council is organized exclusively by students with representatives from various disciplines stands for the advocacy of democracy and leadership opportunities provided by the institute. KITS student clubs enable all the students and staff mingle freely to express their views and share their talents and expertise. **KITS imparts Outcome Based Education (OBE)** which gives equal opportunities to teaching and learning curricular, co-curricular and extra-curricular activities.

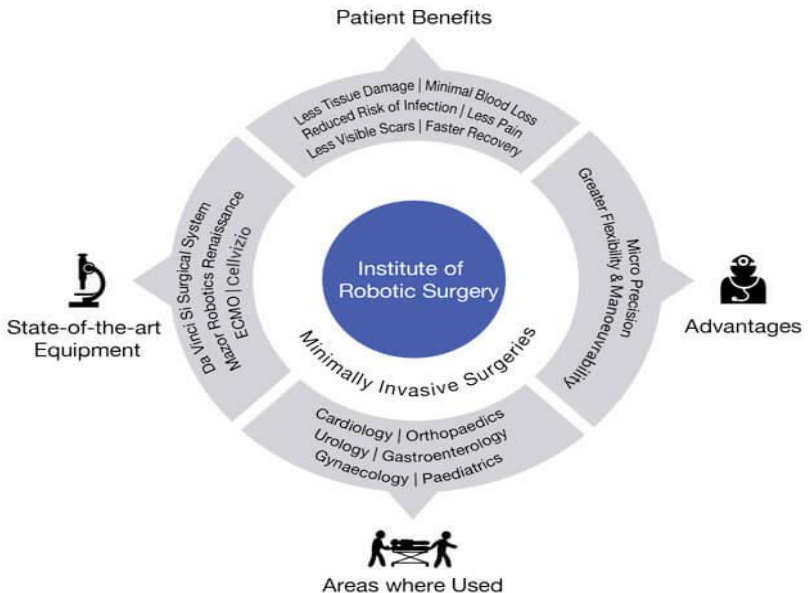
Student Article:

WHAT IS ROBOTIC SURGERY



Robotic or robot-assisted surgery integrates advanced computer technology with the experience of the skilled surgeons. This technology provides the surgeon with a 10x magnified, high-definition, 3d-image of the body's intricate anatomy.

The surgeon uses controls in the console to manipulate special surgical instruments that are smaller, as well as more flexible and manoeuvrable than the human hand. The robot replicates the surgeon's hand movements, while minimizing hand tremors. The surgeon thus can operate with enhanced precision, dexterity and control even during the most complex procedures.



Proposals

Proposal 01:

“Council of scientific and industrial research, Human Resource Develop Department Group, New Delhi sectioned a grant of Rs.40, 000/- for the National Conference on Knowledge Based Innovative electronic and Telecommunication Systems (NCKIETS-2019). Application Reference no.SYM/9794/18-HRD”



CSIR's renewed mission is inspired by the remarks made by President of CSIR Society to CSIR to build".."the new CSIR that will fulfill the aspirations of modern India..."

So CSIR's mission is simply - to build a new CSIR for a new India."Pursue science which strives for global impact, technology that enables innovation - driven industry and nurture trans-disciplinary leadership thereby catalysing inclusive economic development for the people of India"

The people and nation-centre thrust to science, technology and societal pursuits remains the cornerstone of CSIR's mission. In view of rising dreams and aspirations of the nation, its expectation from CSIR and the other public funded institutions is ever increasing. Not only are the pace of scientific and technological growth and the aspirations of higher living standards evident today but also many age old myths of economy and growth have been broken; e.g., the shift from manufacturing to services; capital resources; population as a burden to human resource as an asset; national needs to international opportunities and so on. The changed scenario has inspired CSIR towards:

1. Science and Engineering leadership;
2. Innovative technology solutions;
3. Open innovation and crown sourcing;
4. Nurturing talent in transdisciplinary areas;
5. Science based entrepreneurship; and
6. Socio-economic transformation through S&T intervention.

Proposal 02:

Mrs. P.SARALA put a proposal on “ Analysis and Estimation of Spectrum Efficiency with Non Orthogonal Multiple Access for 5G technology” under “Empowerment and Equity Opportunities for Excellence in Science” scheme

Eligibility:

1. The applicant should be an Indian National.
2. Should be an active researcher belonging to the Scheduled Caste or Scheduled Tribe category working on regular basis in an academic institutions/national labs or any other recognized R&D institutions in the field of Science and Engineering. No co-investigators are allowed in the project.
3. The applicant should have at least four years of service remaining before superannuation as on the date of submission of the proposal.
4. Researchers/Scientists who are running an ongoing project under this program as on the date of submission of the proposal are not eligible to apply.



Nature Of Support:

1. Funding is provided up to a maximum of Rs. 50.0 lakh (excluding overhead charges).
2. Duration of the project shall be for a maximum of three years.

DUSSEHRA CELEBRATIONS

Dussehra (Vijaya Dashami, Dasara, or Dashain) is a Hindu festival that celebrates the victory of good over evil. It is a gazetted holiday in India, which is marked on the 10th day of the bright half (Shukla Paksha) of the month of Ashvin (Ashwayuja), according to the Hindu calendar.

Dussehra celebrates the Hindu god Rama's victory over the demon king Ravana and the triumph of good over evil. The epic Ramayana tells the story of the Lord Rama who wins the lovely Sita for his wife, only to have her carried off by Ravana, the demon king of Lanka. Ravana plays an important role in the Ramayana. Ravana had a sister known as Shoorpanakha. She fell in love with the brothers Rama and Lakshmana and wanted to marry one of them. Lakshmana refused to marry her and Rama could not as he was already married to Sita.

Shoorpanakha threatened to kill Sita, so that she could marry Rama. This angered Lakshmana who cut off Shoorpanakha's nose and ears. Ravana then kidnapped Sita to avenge his sister's injuries. Rama and Lakshmana later fought a battle to rescue Sita. The monkey god Hanuman and a huge army of monkeys helped them.

The Mahabharata is another series of Hindu stories that play a role in the Dussehra festival. The Pandavas were five brothers who fought evil forces with a set of distinctive weapons. They abandoned their weapons and went into exile for one year. They hid their weapons in a Shami tree and found them at the same place when they returned from exile. They then worshipped the tree before going to a battle, which they won. This epic is also commemorated during Dussehra.

With huge enthusiasm this Dussehra festival was celebrated by KITS College. **Dr.Ch. Aruna Bala** and her team organized the celebrations in a healthy manner. The celebrations, started with dancing to the tunes of Bathukamma Songs, by decorating it with flowers and the colleges have turned into flower gardens, as it was the last working day before the holidays have begun. The girl students have actively celebrated the occasion in their campus is filled with the joy .



Faculty Article :

ANSYS HFSS FOR ANTENNA DESIGN

This application brief describes antenna design using ANSYS HFSS, the industry leading 3D electromagnetic (EM) simulation tool for high frequency and high speed electronic components. It highlights several antenna-related applications with emphasis on antennas on or around other structures.

With multiple simulation technologies and powerful automated adaptive mesh refinement providing gold standard accuracy, HFSS can help antenna designers who are constantly challenged with implementing designs across more and more frequency bands inside a smaller and smaller footprint.

With these additional technical challenges along with the ever shrinking time to market, simulation with HFSS is a must-have in the antenna design and integration process.

Prerequisites

- HFSS Getting Started or equivalent familiarity with HFSS 3D modeler, workflow, solver setup, and post-processing (plotting results graphs).
- Knowledge of microwave electronic principles including S-parameters, transmission lines and antenna far-field radiation patterns.
- Knowledge of antenna impedance matching, infinite array and finite array principles are also important as workshop exercises utilize these engineering principles.

How to start HFSS?

- **HFSS** should be installed on the computer or station you are working on. There should be
- an **HFSS** icon on the desktop you can double click on it to launch HFSS, or you can go to
- **“Start”** button on the lower left corner of your screen, click on it, then go to **“Programs”**

