DEPARTMENT OF
ELECTRONICS
AND
COMMUNICATIONS
ENGINEERING

TECHNICAL MAGAZINE

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THIS ISSUE

Brings you Awareness about Department activities Done by staff and students

ABOUT THE INSTITUTE:

Sagi Rama Krishnam Raju Engineering College (S.R.K.R Engineering College) is a coeducational, independent and a self -financed Engineering College. It is one of the oldest seminaries formed in 1980's by S.R.K.R. Engineering college Association provide to a better quality technical education to students. President Sri. S. Prasada Raju is carrying forward the vision of his father Late Sri Sagi Rama Krishnam Raju guiding the society on its path of excellence. The college is located with a science beauty in a 30 acres plot in Chinna -Amiram Bhimavaram-Vijayawada state highway; just 2 miles from Bhimavaram town, that is well known A Second Bardoli and is famous for **Pancaharamas** (Somaramam). This college is affiliated to JNT University. Kakinada, recognized AICTE, New Delhi. And Offers 6 UG Courses, 7 PG Courses and 5 Ph.D. Programs. Was accredited thrice by National Board of Accreditation (NBA). And accredited by the National Assessment and Accreditation Council (NAAC). Centre of Excellence namely Water and Environment Technology (WET) research centers and Geospatial Information Centre (GIC) are established.

FDP ON SIGNAL AND IMAGE PROCESSING WITH MATLAB

A one week national level Faculty Development Program is conducted on Signal and Image processing with MATLAB from 3rd to 8th July 2017 in ECE department. This program is Jointly Organised by Electronics & ICT Academy, NIT Warangal and Department Of ECE, S.R.K.R. Engineering College, Bhimavaram.

The inaugural function was conducted on 3rd July 2017 at 9.30 AM in ECE department seminar hall. Chief Guest for this function is Sri. B. Sambi Reddy, Chief Engineer, Efftronics, Vijayawada. For this function the management members Sri G. Murali Ranga Raju, Chairman, SRKRECA, Sri S.V.Ranga Raju, Honorary Director, SRKRECA, Dr. G. P. Saradhi Varma, Principal, SRKREC, Dr. K.V.S.N.Raju, Vice Principal, SRKR Engineering college and FDP coordinators Dr. T. Kishore Kumar, Head of ECE department, NIT, Warangal and Dr.P.V.Rama Raju, Head of ECE department, SRKR Engineering college, faculty members from ECE department and faculty from various institutions attended. Total 55 faculty members participated from various engineering colleges in AP and other parts of India. The Chief Guest of inaugural function Sri. B. Sambi Reddy, Chief Engineer, Efftronics has given Key note address on Signal and Image processing and signal processing applications in Indian railways. On 3rd July 2017 Dr. T. Kishore Kumar, NITW has given lecture on signal processing and its applications and also on speech processing.



- On 4th July 2017 Sri. MV Raghunath, NITW gave lecture on Signal processing and advanced signal processing.
- On 5th July 2017 Sri. MV Raghunath, NITW gave lecture on Advanced signal processing. Another resource person, Sri. P. Bhanu Prasad gave lecture on Advanced speech processing.
- On 6th July 2017 Sri KV Sridhar, NITW gave lecture on Multirate signal processing and Speech coding.
- On 7th July 2017 Dr. V. Anil Kumar, IIIT, Hyderabad demonstrated Speech recognition and Speaker recognition.
- On 8th July 2017 Dr. T. Kishore Kumar, NITW gave his lecture on speech enhancement.
- On 8th July 2017 in the valedictory function the chief guest Dr.S. Varada Rajan, Secretary, AP State Council of Higher Education has addressed the gathering. Certificates were distributed to the Participation in the valedictory function.

DEPARTMENT VISION

Envision of diverse, stimulating and consistent academic research ambience for student community and shaping them into competent professionals in the field of Electronics and Communication Engineering and cater to the needs of society with a keen sense of environmental consciousness.

QUEST 2K17 CONDUCTED BY IETE STUDENT BODY

Quest 2K17 conducted by IETE student body organised by Professor DVR Mohan, Department of ECE, SRKR engineering college, Bhimavaram. For internal participants i.e. participants from SRKR Engineering College and Participants from Colleges around the Bhimavaram, paper presentation contest is held and selected presentations procure prizes. Some of the best papers with titles are CARBON NANOTUBES, LIFI TECHNOLOGY, WEAPON TECHNOLOGY, WIRELESS COMMUNICATION, ATLAS, AUTOMATIC RAILWAY GATES, WIRELESS COMMUNICATION, ARTIFICIAL RETINA, NUCLEAR MICRO BATTERY, TOUCH SCREEN TECHNOLOGY, IOT, BLUETOOTH TECHNOLOGY, E-WASTE, WITRICITY, BLUE EYE TECHNOLOGY, BIONIC EYE TOUCH, SCREEN TECHNOLOGY, IRRIGATION MONITORING AUGMENTED, REALITY FPGA.

FDP ON RECENT TRENDS IN VLSI DESIGN AND ITS APPLICATIONS



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One week national level faculty development program is conducted on Recent Trends in VLSI Design and its Applications from 20th to 25th November 2017 in ECE department. This program is jointly organized by Electronics & ICT Academy, NIT Warangal and department of ECE, S.R.K.R. Engineering College, Bhimavaram.The inaugural function was conducted on 20th November 2017 at 9.30 AM in ECE department seminar hall. Chief Guest of this function is Dr. Krishna Prasad K S R, Professor, NIT Warangal. For this function the management members Sri S.V.Ranga Raju, Honorary Director, SRKREC, Dr. G. P. Saradhi Varma, Principal, SRKREC, Dr K.V.S.N.Raju, Vice Principal, SRKR Engineering college and FDP coordinators Dr. Srihari Rao P, Associate Professor, NIT Warangal and Dr.P.V.Rama Raju, Head of ECE department, SRKR Engineering College, faculty members from ECE department and faculty from various institutions attended. The chief Guest of inaugural function Dr. Krishna Prasad K S R, Professor, NIT Warangal, has given the key note address on Recent Trends in VLSI Design and its Applications.

- On 20th November 2017 Dr. T.P. Srihari Rao, NITW has given lecture on MOSFET Characterization small signal model. Also Dr. Krishna Prasad K S R, Professor, NIT Warangal, has given lecture on SSA and CMOS inverter and Efficient CMOS techniques.
- On 21st November 2017 Dr. Ch Gajendranath, Assistant Professor, IITH
 gave lecture on circuit design at Sub-nA current levels. Also Also Dr.
 Krishna Prasad K S R, Professor, NIT Warangal, has given lecture on
 Basic building blocks, sources sinks references and Single transistor
 amplifier.
- On 22nd November 2017 Dr. Krishna Prasad K S R, Professor, NIT Warangal, has given lecture on Gain boosting techniques and Differential amplifier. Daily in the afternoon sessions Coreel Technologies people supported for hands on sessions.
- On 23rd November 2017 Sri P Muralidhar gave lecture on VHDL Programming and VLSI architectures.
- On 24th November 2017 Sri M V Krishna Reddy, ON Semiconductors, Bangalore demonstrated PLL case study.
- On 25th November 2017 Professor Das Gupta, IIT Roorkee gave his lecture on FINFET fundamentals.
- On 25th November 2017 in the valedictory function the chief guest Professor Das Gupta, IIT Roorkee and Dr. Srihari Rao, NIT Warangal has addressed the gathering. Participation certificates distributed in the valedictory function.

DEPARTMENT MISSION

- 1.Educating the students with the state of the art technologies in ECE to meet the ever growing challenges of the industry.
- 2. Nurturing the spirit of innovation and creativity in the faculty and students in order for them to carry out research in collaboration with research organizations and industry.
- 3. Providing ethical and value based education that promotes activities pertaining to societal needs.

TRANCE-2018



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two day event TRANCE -2018 has been conducted by the Dept. of ECE, SRKREC during 4th and 5th Jan.-2018. The inaugural function was conducted on 4th Jan.2018 at 9.30 AM in ECE, Dept. AC Seminar hall .For this function the management members Sri S.V.Ranga Raju, Secretary and Correspondent, SRKR Engineering College Association, Dr. G. Pardha Saradhi Varma, Principal, SRKR Engineering College, Chief Guest Sri Sreenivas Rao Dunna, Chief Manager, RARDC, HAL, Bangalore, Convener Dr.P.V.Rama Raju, Professor and Head Dept of ECE, faculty coordinators Prof. G.V.S.Padma Rao, Sri K.N.V.Satyanarayana Assistant professor & Sri G. Rajesh Kumar, Assistant Professor, Senior faculty members from ECE Dept, HOD's from other Depts., Students from ECE Dept., Students Participants from SRKREC and Students Participants from Various Institutions all over from south India were attended.

In TRANCE -2018 we conducted Six events like Theatre (Movie & making), Revelant (Poster Presentation), Art Gallery, Nexus (Hardware Circuitry), Conception (Technical Quiz) and Exposition (Paper presentation), Spot Events, Sports and Games. A workshop on "Augmented Reality" has also conducted by MSR Tech Labs, and five resource persons have come to train the participants.

On the next day, on 5th Jan.2018 in the valedictory function the chief guest Sri A. Raja Krishna, Staff Engineer, Juniper Networks, Bangalore, has addressed the gathering. For some of the events 1st, 2nd and 3rd prizes are given .And for some of other events 1st& 2nd prizes are given. A total amount Rs. 11,000/- of worth cash prizes was given.

For internal participants i.e. participants from SRKR Engineering College and Participants from Colleges around the Bhimavaram, paper presentation contest is held and completed on 3rd Jan.2018.

IETE'S CRUX-18



CRUX 2K17 conducted by IETE student body organised by Professor DVR Mohan, Department of ECE, SRKR engineering college, Bhimavaram. For internal participants i.e. participants from SRKR Engineering College and Participants from Colleges around the Bhimavaram, Hardware contest is held and selected presentations procure prizes. Some of the best Circuits with titles are BALANCING ROBOT, Automatic Railway Gates, ROBOTIC ARM, Eye Blink Detector to Prevent Accidents, Universal Power Supply, Line Follower Robot Without Arduino, SOLAR TRACKING, REVERSE CAR PARKING CIRCUIT, AIR FLOW DETECTOR, EMERGENCY POWER BANK CIRCUIT.

This year Smt. Oruganti Sundari Annual Scholarship is given to Miss Ragireddy Devi Priya who got 9.14 CGPA in third year.

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ABOUT OUR DEPARTMENT

The department of ECE came in to existence in 1980 when the institute was established with an intake of 35 which was subsequently raised to 240 over a period of time. M.Tech course in Communication Systems was started in 2006. The department is presently offering 4 year B.Tech program in ECE, 2 year M.Tech in Communication Systems and Ph.D. program. The department has highly qualified, experienced and dedicated staff members. The department has dedicated technical and non teaching staff members. The department has good infrastructure facilities. The department was accredited thrice by National Board of Accreditation (NBA). The department has student chapters of professional bodies like IEEE. IETE and college level ISTE, which conduct various student technical activities. Students of ECE participate in National level technical paper hardware competitions and being organized at various other colleges and some of them are awarded with prizes. They have been obtaining good scores in GRE, TOEFL and CAT. Students are placed in companies like TCS, Polaris, CTS, IBM, Infosys, Texas Instruments, BSNL, BEL, ISRO and DRDO.

department has been identified as research center by JNT University. The research provides center required facilities for carrying out research work for scholars. The department is associated with organizations like DRDO, NSTL, BEL, ISRO, BSNL, NRSA and RTTC. The department has MOUs with Vector India Pvt. Ltd., AMSYS Technologies, Communication Innovation Systems Ltd. and TCS for collaborative work and faculty improvement programs. Faculty published and presented about 175 research papers in technical journals and conferences.