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| Resourc | e Sharing – | Research | & Develo | pment Lab |
|---------|-------------|----------|----------|-----------|
| | | | | |

| S. No | Beneficiaries | Batch Size | Title | Guide |
|-------|---|---------------|---|--------------------------------|
| 1 | P.Karthick, P.G-VLSI, KCE | 01 | Experimental demonstration and extensive comparison of various modulation techniques for underwater optical communication | Dr. J. Arputha Vijaya Selvi |
| 2 | Aravind. N, Aravind Armstrong. A, ECE, KCE | 03 | LiFi Data transmission through Underwater. | Dr. J. Arputha Vijaya Selvi |
| 3 | Aravinth. M, Jefri Robinson. M, Manikandan. S and Ravichandran. A, ECE, KCE | 04 | Automatic Health drink maker for old age people, physically challenged and blind | Dr. J. Arputha Vijaya Selvi |

Publications through Resource Sharing

- T.Pasupathi, et.al. SBA: Swachh Bharat Abhiyan: Dustbin Management System, Second International Conference on Innovations in Engineering, K.Ramkrishna College of Engineering, 13 & 14th March, 2018
- 2. T.Pasupathi, Mugilarasi FPGA implementation of SPGA based beam control algorithm for Free Space Optical Communication, National Conference on Innovations in Embedded systems and Networking (NCIEN-18), Kings College of Engineering, 21st March 2018.
- 3. T.pasupathi, Comparisons of various modulation techniques suitable for Underwater Wireless Optical Communication, International Journal for Scientific Research & Development, Vol.6, Iss.1,ISSN(online):2321 0613, Mar2018

Grants sanctioned

• A Grant of Rs. 7,500/- was sanctioned from IEEE, MAS, under student project scheme for the project titled "SBA: Smart Dustbin Management System.

Proposals submitted

- Department of Mechanical Engineering submitted a proposal to AICTE under AQIS for Modernization of IC Engine Lab, Rs.1,058,823.53
- Department of ECE submitted a research proposal to DRDO, New Delhi, titled "Mitigation of low-order tip-tilt atmospheric turbulent effects using Wavefront Sensorless Adaptive Optics in Terrestrial FSO Communication", Rs.58Lakhs. Investigators: Dr. J. Arputha Vijaya Selvi, Principal & Mr. T. Pasupathi, AP/ECE.
- Department of ECE submitted a proposal to AICTE under RPS of AICTE, titled 'Design and Implementation of Soil Dynamics Prediction and Control System (SDPCS)', Investigator: Dr. J. Arputha Vijaya Selvi, Principal, Rs. 9,32,941.18
- Department of Civil Engineering, submitted a proposal for organizing STTP on Alternate and Low Cost Construction Materials and Techniques, Rs. 2,00,000, Coordinators: Dr. R. Saravanan, HOD/Civil & Mrs. T. Bhuvaneswari, AP/Civil
- Department of CSE, submitted two proposals for organizing STTPs on Cloud based Computational Intelligence approaches to Big Data Analysis, Rs.1,92,000. Coordinators: Dr. S.M. Uma, HOD/CSE and Mrs. S. Puvaneswari, AP/CSE and STTP on Web Application Development through Open Source Software's, Coordinators: Mrs. K. Abhirami, ASP/CSE & Mrs. R. Suganthalakshmi,AP/CSE, 1,97,500,

- Department of CSE, submitted a proposal to AICTE under AQIS for Modernization of IoT Enabled Cloud Laboratory, Rs. 13,70,294.12
 Investigators: Dr. S.M. Uma, HOD/CSE & Ms. S. Jasmine Smilee, System Administrator
- Department of EEE, submitted a proposal for organizing STTPs on Software Simulation Tools for Power Engineering and Renewable Energy Sources using Intelligent Controllers, Rs. 2,20,000, Coordinators: Mr. A. Albert Martin Ruban, HOD/EEE & Mr.R.Sundaramoorthi, AP/EEE,
- Department of T&P, submitted a proposal for establishing Skill and Personality Development Programme (SPDP) Centre for SC/ST Students, Kings Skill Development Centre. Rs. 24,96,513.15. Coordinators: Dr. S. Sivakumar, Vice Principal & Mr. B. Suresh Babu, AP/T&P.

Publications

| Department | Journals | Conferences |
|---|----------|-------------|
| Civil Engineering | 02 | 20 |
| Computer Science and Engineering | 13 | 80 |
| Electronics & Communication Engineering | 80 | 14 |
| Electrical & Electronics Engineering | 0 | 15 |
| Mechanical Engineering | 02 | 02 |
| Science & Humanities | 20 | 13 |

Faculty completed Ph.D.

| Name / Dept | | |
|---|--|--|
| Dr.N.Hemavathi, Electrical & Electronics Engg., | | |
| Dr.G.Ramya Arokiamary, Mathematics | | |
| Dr.R.Suresh, Mathematics | | |

Faculty doing Ph.D.

| Name / Dept | Area of Research | |
|---|---------------------------------|--|
| Mr.D.Sivakumar, Computer Science & Engg., | Data Mining | |
| Mr.J.Jegan, Computer Science and Engg., | Wireless Networks | |
| Mrs. K.Abhirami, Computer Science & Engg., | Data Mining | |
| Mrs.P.Nalayini, Computer Science & Engg., | Wireless Networks | |
| Mr. A. Herald, Electronics & Communication Engg., | Optical Communications | |
| Mr. T. Pasupathi, Electronics & Communication Engg., | Free Space Optics | |
| Mr. P. Raja Pirian, Electronics & Communication Engg., | IoT | |
| Mr.A.Albert Martin Ruban, Electrical & Electronics Engg., | Wireless Sensor Networks | |
| Mr. R. Sundaramoorthy, Electrical & Electronics Engg., | Power Converters | |
| Mr.P.P.Shantharaman, Mechanical Engg., | Composite Material | |
| Mr. R.Sankar, Mechanical Engineering | Surface Coating | |
| Mr.G. Shankara Kalidoss, Mathematics | Simultaneous Pells Equation | |
| Mr. G. Jeyakrishnan, Mathematics | Number Theory | |
| Mrs. S. Geetha, Mathematics | Fuzzy Graphs | |
| Mrs. S. Revathy, Mathematics | Fuzzy Graphs | |
| Mrs. N. Latha, Mathematics | Mathematical Models in Genetics | |
| Mr. K. Sudhakar, Training & Placement | Finance | |
| Mr. B. Barankumar, Training & Placement | Marketing | |
| Mr. B. Suresh Babu, Training & Placement | Marketing | |

Programmes Organized

IEEE student branch organized a Guest Lecture on "Satellite Communications" on 31st July 2017. Dr. J. Arputha Vijaya Selvi, IEEE Branch Counselor & Principal presided over the function. Ms. M. Jehosheba Margaret, Assistant Professor/ECE, Sethu Institute of Technology, Virudhunagar delivered lecture. In her lecture, she gave an overview of satellites, types of orbit, satellite segments, link power budget and applications. The session was more interactive and students got benefitted.



A view of the participants along with dignitaries on the dias



Dr. K. Prabhu during the technical session

IEEE Student Branch organized a one day workshop on "Wireless Optical Communication" on 29th August 2017 (Tuesday). Dr. K. Prabhu, Associate Professor, VIT University, Vellore delivered inaugural address. In his address, he briefed about the significance of Wireless Optical Communication, its advantages and applications. Also he briefed on the Challenges in establishing WOC and mitigation techniques used in WOC. In addition, he asked, the students to get associated with the faculty and carryout projects in this domain.

A Seminar on "Art of Writing a Paper" was organized on 29th January, 2018. Dr. S. Bharathi Raja, Principal, Indra Ganesan College of Engineering, Tiruchirappalli, delivered inaugural address During the session I, he delivered talk on "Research to Reward". In his lecture, he briefed on the methods of research: Scientific method, Engineering method, Empirical method and Analytical method. Also he explained the steps involved in research: Literature survey, open problem, need for present research, experimentation, analysis, validation and results & discussion.



Dr. S. Bharathi Raja delivering inaugural address



Dr. R. Amirtharajan delivering lecture

IEEE SB organized an awareness talk on "Career Guidance" on 26th February, 2018. Mr. P. Raja Pirian, alumni coordinator and AP/ECE, welcomed and introduced the resource person. Mr. S. V. Vijaya Karthik. SAP Consultant, Tata Consultancy Services, Bangalore delivered awareness talk. In his lecture, he gave overview of current scenario in multinational companies and gave tips to the students for preparing themselves to get placed.



Kings College of Engineering, Thanjavur organized Space Expo in association with ISRO –Propulsion Complex (IPRC), Mahendragiri on $23^{\rm rd}$ March, 2018. This event has been organized to cherish the achievements of ISRO in space science and to make awareness among the school and college students regarding the achievements of India in space technologies. Dr. J. Arputha Vijaya Selvi, Principal, welcomed the gathering. Dr.R.Rajendran, Secretary, presided over the function and delivered presidential address.



Shri. S. Pandian inaugurates the expo. Secretary, CEO, Principal and Vice Principal are seen in picture



School students viewing the expo

Shri. S.Pandian, Director, IPRC, Mahendragiri inaugurated the exhibition and delivered the keynote address. In his keynote address, he briefed on the future plans of ISRO in space technology. ISRO is in the process of developing satellites that helps the fishermen to navigate and detect cyclones locations. Finally, while concluding he stated ISRO has started working on sending human to space. More than 4,000 Students from various schools and colleges in and around Thanjavur and Pudukkottai districts visited the exhibition and got benefitted.

PROJECT EXPO 2K'18 was organized in association with ISRO – Propulsion Complex (IPRC), Mahendragiri & IEEE – RAS, Chennai on 29th March, 2018. This project Expo aims to encourage the students' creativity and innovations on Engineering & Technology. Dr.P.A.Manoharan, Chairman, IEEE Madras Section, inaugurated the expo and delivered the inaugural address. In his inaugural address he stressed the importance of innovations in project.



Currently industries are coming forward to sponsor and establish a brand new machineries like robots in the colleges to show case their product and technology for the development purpose. Dr. P. Ganesh, Senior Scientist, IPRC, Mahendragiri, offered felicitation and delivered keynote address on Career Guidance. Dr. P. Ganesh appreciated the efforts of the participants and distributed the prizes and certificates. Dr.S.Sivakumar, Vice Principal and heads of various departments were present. Dr.T.Shanthi, Project Officer, delivered Expo summary. Dr.S.Sivakumar delivered vote of thanks. More than 700 Students from various Engineering colleges of Tamil Nadu, Andhra Pradesh and Karnataka have participated in the Project expo.



