



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Academic Year 2021-22(ODD SEM)

IEEE STUDENTS BRANCH STB 16621- September, 2021 INTERNAL STAFF TECHNICAL SEMINAR

04.10.2021

Summary of the seminar:

Department of Electronics and Communication Engineering in association with IEEE student branch (16621) organized an Internal Seminar on 15th Sep, 2021 at 01:00PM for the teaching staffs of Department of ECE to provide a platform to get exposure in the field of recent trends in Electronics and Communication Engineering by accessing online journals facility available at our campus. Mrs.N.Mangaiyarkarasi, HOD/ECE welcomed the faculties. Mr.S.Ramarajan, Assistant Professor/ECE delivered a talk on "Efficient Power Saving Algorithm for WSN". All the faculties were attended the seminar.

Online Journal Paper Referred: Kanoun O, Bradai S, Khriji S, Bouattour G, El Houssaini D, Ben Ammar M, Naifar S, Bouhamed A, Derbel F, Viehweger C, Energy aware system design for autonomous Wireless Sensor Nodes: A comprehensive review. Sensors 2021, 21, 548.

Aim and the themes discussed:

Nowadays, wireless sensor networks are becoming increasingly important in several sectors including industry, transportation, environment and medicine. Autonomous energy supply is thereby an essential aspect as it decides the flexible positioning and easy maintenance, which are decisive for the acceptance of this technology, its wide use and sustainability.

Significant improvements made in the last years have shown interesting possibilities for realizing energy-aware wireless sensor nodes (WSNs) by designing manifold and highly efficient energy converters and reducing energy consumption of hardware, software and communication protocols.

Using only a few of these techniques or focusing on only one aspect is not sufficient to realize practicable and market relevant solutions. This seminar therefore provides a comprehensive

review on system design for battery-free and energy-aware WSN, making use of ambient energy or wireless energy transmission. Also addresses energy supply strategies and gives a deep insight in energy management methods as well as possibilities for energy saving on node and network level.

Outcomes

- The seminar provides deep insight into system design and increase awareness of suitable techniques for realizing battery-free and energy-aware wireless sensor nodes and to introduce the basics of Wireless Sensor Networks (WSN), Classification, Topologies and Applications.
- The seminar briefed the different strategies to reduce the power consumption in WSN based on Clustering Routing Protocol. Finally Mr.S.Ramarajan clarified the questions raised by the faculty members. Mr.T.Pasupathi, AP/ECE, event coordinator delivered vote of thanks.



Staff In charge HOD