



Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya University
Department of Electronics and Communication Engineering

SCSVMV/ECE/IRD/IR/086

Date: 25.01.2018

Sub: Minutes of 32st Research Colloquium meeting organized in ECE department on 19/01/18
– Regarding

1. The Department of ECE organized the “32st Research Colloquium” on 19/01/18, in CASD Lab at 03.00 pm.

2. Resource person :

R.Krishnamoorthy
Assistant professor /ECE,
SVCT , Sriperambudur-602105,
External Research Scholar (ECE),
SCSVMV,Kanchipuram.

Research Topic

**RF ENERGY HARVESTING SYSTEM FROM MOBILE CELL
TOWERS FOR LOW POWER DEVICE**

Synopsis :

Topic of Research Colloquium is RF energy harvesting system from mobile cell towers for low power device. In this presentation, about an experimental RF energy harvesting system to harvest energy from mobile cell towers. A system will be presented using existing antenna and charge pump technology to charge a cellular phone battery without wires. In this first step, we will use a standard phone, and incorporate the charging technology into a commercially available base station. The base station will contain an antenna tuned to 915MHz and a charge pump. The system design consists of three modules: a single wideband 377Ω E-shaped patch antenna, a pi matching network and a 9-stage voltage doublers circuit. These three modules were fabricated on a single printed circuit board. A Schottky diode-based single stage voltage doublers and nine-stage voltage doublers has also been designed and fabricated for DC voltage generation. Excepting results show that a voltage of 3.2V is obtained at a distance of 10m from the cell tower and a voltage of 0.92V is obtained at a distance of 50m. It seems these days that everyone has a cellular phone.

3. File Photo of the Colloquium



File Photo: Resource Person Delivering Speech to Audience

6. Research Colloquium was organized by A.Rajasekaran, Assistant Professor, ECE department.

A.Rajasekaran
(Research Colloquium coordinator)

Prof.V.Swaminathan
(HOD/ECE)

Encl:

1. Attendance Sheet.

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