

Sarvajanik Education Society
Sarvajanik College of Engineering & Technology, Surat



A Report of an expert talk
On
“Power Electronics Solutions to Power Quality Problems”

By
Dr. R. Chudamani
SVNIT, Surat

Held on 28-04-2016 at EC AV Room, SCET
10.30 am to 12.30 am

-:Organised by:-
Prof. Nilesh Shah
Electrical Engineering Department, SCET

◊ **Welcome by Prof. Nilesh Shah**

- Guest of the function, students and staff were welcomed orally by Prof. Nilesh Shah.
- Most of the staff and students of ME and some final year as well as Third Year of BE from Electrical were present.
- Prof. Hiren Patel, Faculty of Electrical Engineering Department, formally welcomed Dr. R. Chudamani with a bouquet of flowers.



◊ **Introduction of resource person**

- Dr. R. Chdamani from department of Electrical Engg., SVNIT was elaborately introduced to the gathering by Prof. Nilesh Shah.
- The inspiring achievements and dynamic carrier in research and development over a period of 22 years have inspired and motivated the audience in general and students in particular.

◊ **An expert talk on “Power Electronic Solutions to Power Quality Problems” by Dr. R. Chudamani**

- Dr. R. Chudamani started with introduction and significance of power quality.
- Madam discussed about harmonics, source of harmonics, effects of harmonics in power system as well as resonance and unbalance supply issues.
- Different standards of power quality were presented.
- Various types of Non-linear loads are discussed.
- Elaborated about Harmonic solutions for variable frequency drive like line reactor, isolation transformer, tuned filter, detuning of filters, multipulse converter. Comparative analysis of different solutions is presented.
- Finally Active filters, control scheme of shunt passive and series active filter and related issues are discussed and the corresponding practical results are demonstrated.
- Students and faculty members have very much interacted during discussion of various harmonic solutions as well as active filters.



◊ **Interaction via open defence:**

- Even after discussion during lecture, some of the students and faculties have clarified their doubts about control strategy, practical implementation aspects of active filter. Dr. Chudamani clarified the queries related to work carried out by students at SCET.

◊ **Vote thanks and Memento presentation:**

- Prof. Nilesh Shah thanked the distinguished guest speaker and audience for passionately listening and interactive participation in the brain-storming.
- Prof. P. D. Munshi of Electrical Engineering Department presented a memento to Dr. R. Chudamani.
- Healthy interaction was made during high tea amongst few faculties and guest.

◊ More Glimpses of the Event

