

Ref No BPP/Notice/Prc/1816/2024

## Date: 06.12.2024

## **Notice**

The following member will be delivering a lecture as detailed below:

Presenter's Name: Ms. Anushree Ray

Title: Optimal switching scheme of thyristor-controlled LC compensator to enhance the power quality in unbalance distribution system

## Abstract:

This study presents a low-cost thyristor-controlled LC compensator scheme for the improvement of overall power quality in the distribution system. The parameters of the compensator have been designed and optimal triggering angles for thyristor switching have been obtained for reducing the unbalanced condition and harmonic injection at a high power factor. Compared to the traditional static VAr compensator schemes, the proposed technique can significantly reduce the harmonic injection into the system. The particle swarm optimization technique has been applied to compute the optimal triggering angles, and different aspects of the power quality factor have been assessed through rigorous simulations. Power quality assessment has been further validated through an experimental setup in the laboratory. Finally, a comparison of the proposed scheme with other similar schemes has been carried out to highlight its efficacy

Date: 17.12, 2024

Venue: B Block Seminar Hall

Time: 4 pm onwards

This seminar is a part of Faculty Seminar Program of the Institute *Prosaran*. The faculty, technical and staff members of the Institute are hereby requested to attend the session.

Sd/Principal
B P Poddar Institute of Management & Technology

CC All HODs, BPPIMT

CC: Dean-Academics, BPPIMT CC: Dean R&D, BPPIMT

CC: The Faculty Concerned

CC: Prof. Nabanita Das CC: Registrar, BPPIMT