

DST-SERB School at IIT Kanpur during 10-14 Dec., 2013
on
Smart Transmission Grid using Synchrophasor Technology

Technical Programme

DAY -1

09:00-10:00	Registration and Inaugural function	
10:00-11:30	Introduction to Synchrophasor Technology	SCS
11:30-11:45	Tea Break	
11:45-13:15	Performance Evaluation of Synchrophasor Equipment & IEEE standards	SC
13:15-14:30	Lunch Break	
14:30-16:00	Introduction to and Demo of Hypersim from OPAL-RT (Lab Session-I)	OPAL-RT
16:00-16:15	Tea Break	
16:15-17:30	Introduction to and Demo of RTDS	PhD

DAY -2

09:00-10:15	Optimal PMU Placement	RS/SCS
10:15-11:30	State Estimation using PMU Measurements	SC/PhD
11:30-11:45	Tea Break	
11:45-13:00	Renewable Integration	SNS/PhD
13:00-14:30	Lunch Break	
14:30-16:00	Case Studies on Synchrophasor Lab Setup and RTDS (Lab Session-II)	PhD
16:00-16:15	Tea Break	
16:15-17:30	Case Studies on Synchrophasor Lab Setup and RTDS (Lab Session-II)	PhD

DAY -3

09:00-10:15	Dynamic Phasor Estimation	SCS/PhD
10:15-11:30	Oscillation Monitoring using PMU Data	PT
11:30-11:45	Tea Break	
11:45-13:00	Synchrophasor Assisted Voltage Stability	SC/PhD
13:00-14:00	Lunch Break	
14:00-18:30	Visit to 400kV switchyard and Static Var Compensator and PMU installation at Power grid s/s Chakarapur, Kanpur (Field Visit)	

DAY -4

09:00-10:15	Wide Area Controller using PMU Data	SCS/PhD
10:15-11:30	Smart Grid Initiative in India	SS
11:30-11:45	Tea Break	
11:45-13:00	Load and Line Modeling using PMU Measurements	SC/PhD
13:00-14:30	Lunch Break	
14:30-16:00	Hardware-in-loop Testing using RTDS (Lab Session-III)	PhD
16:00-16:15	Tea Break	
16:15-17:30	Hardware-in-loop Testing using RTDS (Lab Session-III)	PhD

DAY -5

09:00-10:00	Fault Location using PMU Data	SC
10:00-11:30	Synchrophasor Technology Assisted Optimal Load Shedding	SCS/SK
11:30-11:45	Tea Break	
11:45-13:00	Adaptive Protection using Synchrophasor Technology	SK/SCS
13:00-13:30	Closing Ceremony	
13:30-14:30	Lunch Break	

Faculty Instructors

Ph.D Students (PhD)

SCS	Dr. S.C. Srivastava, IIT Kanpur	AS	Ankush Sharma, PhD. Scholar, IIT Kanpur
SC	Dr. Saikat Chakrabarti, IIT Kanpur	PB	P. Banerjee, PhD. Scholar, IIT Kanpur
SS	Dr. Subir Sen, PGCIL & Adjunct Faculty, IIT Kanpur	BR	Ch.VVSB Reddy, PhD.Scholar,IIT Kanpur
PT	Dr. Praveen Tripathy, IIT Guwahati	VV	Vignesh V, PhD. Scholar, IIT Kanpur
SNS	Dr. S. N. Singh, IIT Kanpur	BP	Bibhu Prasad Padhy, PhD.Scholar,IITKanpur
RS	Dr. R. Sodhi	MK	Mahesh Kumar, PhD.Scholar,IITKanpur
SK	Dr. Seetalekshmi K.		

