

Name: Dr. Chaity Sarkar

Department: Electrical Engineering

Contact Nos.: 7278524633

Qualifications: PhD

Designation: Assistant Professor

VIDWAN ID: 181263

Experience (Teaching / Research / Industry, in years): 10 years

Date of Joining at the Present Institution: 12/01/2016

Qualifications Summary (Reverse chronological order)



Degree	Institute	From - To	Subjects
Ph.D	Indian Institute of Engineering Science and Technology, Shibpur	January, 2019	Control Systems
M.Tech.	University College of Science and Technology	2009-2011	Electrical Engineering
B. Tech in	Netaji Subhash Engineering College	2005-2009 Engineering	Electrical
Standard XII	Balurghat Girls' High School, Balurghat	2005	-----

Experience Summary (In chronological order):

1. Dates: 27th July, 2011 - 29th Feb 2012

Organization: Sir J.C Bose School of Engineering, Mankundu, Hooghly, W.B.

Post Held: Assistant Professor

Department: Electrical Engg.

2. Dates: 1st March, 2012 – 11th January, 2016

Organization: Indian Institute of Engineering Science and Technology, Shibpur, Howrah

Post Held: Senior Research Fellow (SRF)

Department: Electrical Engg.

3. Dates: 12TH January, 2016 – Till date

Organization: Dr. B.C Roy Engineering College.

Post Held: Assistant Professor

Department: Electrical Engg.

Specialization/Research Interest:

Nonlinear Control systems, Time delay systems,

Awards & Recognitions

Best paper/ scholarship/Position in university exam / awards while at industry/ other organizations etc.

Courses taught:

B.Tech:

Basic Electrical Engineering (ES-EE-101), Network Theory (EC-EE-301), Control Systems-I(PC-EE-503), Control system-II (EE-601), Process Control (EE802D), Power Generation Economics (EE-704C)

M.Tech:

Advanced Control Systems (Code: PSM 205A), Power System Instrumentation (PSM 202)

Online Mode of Teaching:

- **Google Meet**
- **PPT presentation**
- **Google quiz**

Publications:

Journal:

1. Chaity Sarkar and Aparajita Sengupta , "LMI based LSVF Control of a Class of Nonlinear Systems with Parametric Uncertainty": An Application to an Inverted Pendulum System", *International Journal of Control*, Vol 89. Issue. 12, PP. 2520- 2532, 2016.
2. Chaity Sarkar and Aparajita Sengupta. "Robust control of an uncertain nonlinear system with unobservable dynamics." *IFAC Proceedings Volumes 47.1* (2014): 176-183.
3. Chaity Sarkar and Swaraj Banerjee. "Robust control of single-machine infinite bus system: a novel approach." *Sadhana* , Volume. 45, Issue. 1, 2020.

Conference:

1. Chaity Sarkar and Aparajita Sengupta "Control of a class of nonlinear systems with time delay using mean value theorem approach", *Fifth International Conference on Computational Intelligence Modeling and Simulation, IEEE Seoul*, 24-26 September, 2013.
2. Chaity Sarkar and Aparajita Sengupta "Robust control of a uncertain nonlinear system with unobservable dynamics" Third International Conference on Advances in Control and Optimization of Dynamical Systems, (ACODS), March 13-14, 2014, Indian Institute of Technology, Kanpur
3. Chaity Sarkar and Aparajita Sengupta, "Tracking of Uncertain Nonlinear Systems With Unobservable Dynamics and Time Delay", Michael Faraday IET International Summit (MFIIS-2015)
4. Chaity Sarkar and Aparajita Sengupta , "LMI based Robust LSVF Control of a class of nonlinear Systems," 34th Chinese Control Conference, IEEE, July 28th-30th , 2015 Hangzhou, China
5. Chinmoy Chakrabarty , Chaity sarkar and Dola Sinha "Design of a Priority Based Local Energy Market Using Blockchain Technology", Michael Faraday IET International Summit 2020
6. Soubarno Chowdhury, Chaity Sarkar, Aparajita Sengupta 'Improvement in ECG R-peak detection compared to conventional methods using LSTM', accepted as a full paper to appear at the conference and possible inclusion in the conference proceedings, INDICON-2021, IEEE.
7. Swaraj Banerjee and Chaity Sarkar, "A search-based technique to solve constrained ED problem with valve-point loading" accepted as a full paper to appear at the conference and possible inclusion in the conference proceedings International Conference on Electrical, Computer, and Energy Technologies (ICECET), IEEE, 2021

Book: NA

Book Chapter: NA

Supervision of Ph.D/M.Tech/ B.Tech Projects:

For M. Tech

Name of the student	University roll number	Name of the supervisor	Title of the Project/ thesis"	Year
Chinmoy Chakrabarty	12013418007	Chaity Sarkar	Blockchain based power flow control	2020
Rumi Ghosh	12013417004	Chaity Sarkar	Application on solar incubator using maximum power point tracking system	2019

For M.Tech

Name of the student	University roll number	Name of the supervisor	Title of the Project / thesis"	Year
Santanu Nandi Rahul Mondal Sazid Mondal Sukalyan Karmakar Tushar Kanti Chatterjee Rintu Dey Shounak Kr. Paul	12001617049 12001617061 12001617042 12001617018 12001617054 12001617027 12001617053 12001617047	Chaity Sarkar	IOT based energy transaction	2021
Sanju Nandan; Somnath Ghosh; Avijeet Kumar Singh	12001616056, 12001616044, 12001616092, 12001616145	Chaity Sarkar	Dual axis solar tracker	2020
Joydip Bhattacharjee ; Krishna Pal; Hayatul Islam; Dipak Mondal; Jeet Ghosh ; Debjyoti Mondal	12001615034, 12001615032, 12001615038, 12001615031, 12001615028, 12001615024, 12001615027	Chaity Sarkar	Control of a class of Multi-variable nonl-linear systems using Feedback Linearization	2019
Sanjoy Dey	12001614085	Chaity	Design of Solar	2018

Sayan Bhattacharjee	12001614087	Sarkar	Inverter	
Surya Shekhar Dhar	12001614106			
Tapas Dutta	12001614109			
Debabrata Sur	12001615128			

For Ph.D
NA

Invited Lectures: NA

Participation in seminar/conference/symposium/workshop/discussion meeting

1. DST-SERC School for Nonlinear Dynamics (30-11-12 to 22-12-12) at S.N Bose Centre for Basic Sciences, Kolkata.
2. 3rd Winter School on Optimization & Control, (January 13-17, 2014) at Indian Institute of Technology, Bombay.
3. *Fifth International Conference on Computational Intelligence Modeling and Simulation, IEEE Seoul, South Korea , 24-26 September, 2013.*
4. 34th Chinese Control Conference, IEEE, July 28th-30th , 2015 Hangzhou, China.
5. Third International Conference on Advances in Control and Optimization of Dynamical Systems, (ACODS), March 13-14,2014, Indian Institute of Technology, Kanpur

Participation in faculty development programmes

Name of the event	Online / Face-to-face	From Date - To Date	Year	Organized by.
Modern Trends of Electrical Engineering and its Applications (Webinar)	Online	20-24th December, 2020	2020	Department of Electrical Engineering, Dr. B C Roy Engineering College, Durgapur
Artificial Intelligence using Python (FDP)	online	14-09-2020 to 19-09-2020	2020	by Department of Computer Science & Technology of Dr. B. C. Roy Polytechnic

Organization of events (Dr. B. C. Roy Engineering College)

NA

Participation in administrative committees (selected)

Name of the post (Convener/Joint Convener/Member secretary/Co-ordinator etc.), Name of the committee, year

Name of the Post	Name of the committee	Year
Joint Convener	Fresher's orientation program	2016
Member	Wall Magazine	2017-18, 2018-19
Member	Fresher's orientation program	2019
Departmental CO-ordinator	NSS	2017-18,2018-19, 2019-20, 2020-21
Departmental CO-ordinator	MOOCS	2019-20, 2020-21

Project Ideas Submitted to Govt. Agencies/ On-going Projects / Research Ideas under preparation & execution:

Membership of professional bodies: NA