

Name: Dr. SUBRATA SAMANTA



Department: MECHANICAL ENGINEERING

Contact Nos.: 9434340418

Qualifications: PhD

Designation: Associate Professor

VIDWAN ID: 186976

Experience (Teaching / Research / Industry, in years): 22years

Date of Joining at the Present Institution: 16/10/2014

Examinations Cleared: GATE

Qualifications Summary (Reverse chronological order):

Degree	Institute	From	To	Subjects
PhD	IIT (ISM), Dhanbad	2008	2013	Mechanical Engineering
M Tech	Jadavpur University	2001	2003	Energy Science & Technology
B.E	NIT Durgapur	1990	1994	Mechanical Engineering

Experience Summary (In chronological order):

Designation	Organization	Date From	Date To
Associate Professor	Dr. B.C Roy Engineering College, Durgapur	16.10.2014	-
Assistant Professor	Asansol Engineering College, Asansol	08.07.2008	15.10.2014
Lecturer	Asansol Engineering College, Asansol	05.08.2005	08.07.2008
Lecturer	Aryabhatta Institute of Engg. And Mgmt., Durgapur	01.07.2003	04.08.2005
Project Research Associate	Indian Institute of Technology, Kanpur	27.07.2000	11.08.2001
Lecturer (part time)	Institute of Mining, Raniganj	12.01.1998	20.07.2000
Site Engineer	Elgie Engineering Works, Durgapur.	02.05.1997	10.01.1998
Service Engineer	Cargo Inspecta, Dhanbad	01.11.1995	30.04.1997

Specialization/Research Interest: Thermal Engineering, Thermo fluid system, Solar Energy.

Courses taught:

B.Tech:

Engineering Mechanics, Engineering Thermodynamics and Fluid Mechanics, Heat Transfer, Thermal Power Engineering, I.C engine and Gas Turbine, Engineering Drawing, Heat transfer lab, IC Engine Lab, Thermal Power Engineering Lab. Engineering Graphics Lab etc.

M.Tech: specify the name of the Subject/s:

Project and seminar.

Online Mode of Teaching: Google Drive , Google Meet

Publications:

Journal:

1. Ghoshal S.K., Samantaray A.K., **Samanta S.** (2009): Model based fault diagnosis, fault tolerant control and reconfiguration of hydraulic and thermo-fluid processes using analytical redundancy. International journal of automation and control, Vol.3 No.4, pp 363-384.
2. Ghoshal S.K., **Samanta S.**(2011): Robust fault diagnosis and prognostics of a hoisting mechanism: A simulation study. International journal of engineering science and technology (IJEST). Vol.3 No.2,pp 962-980.
3. Sanjay K. Ghoshal., **Subrata Samanta.**, Arun K Samantaray. (2012): Robust fault detection and isolation of hybrid system with uncertain parameters. Proceedings of the Institution of Mechanical Engineers, Part I: Journal of Systems and Control Engineering. Vol. 226 Issue 8.pp 1013-1028.
4. **Subrata Samanta.**, Sanjay K. Ghoshal. (2012): Online model based fault diagnosis with a case study of belt conveyor system. International journal of Advanced Computer Engineering and Architecture. Vol. 2 No. 2.pp 211-221.
5. **Subrata Samanta.**, Sanjay Kumar Ghoshal. (2013): Single fault isolation of a Hydrostatic Transmission System: Simulation and Experimentation. Columbia International Publishing Journal of Modeling, Simulation, Identification, and Control. Vol. 1 No.3.pp 115-136.
6. Sanjoy K Ghoshal, Sarnendu Paul, **Subrata Samanta** and Jay P Tripathi. (2016): System identification and multi-fault isolation for a hydraulic drive with pump loading. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability. Vol. 230(4) pp 427-440.
7. Sarnendu Paul., Sanjoy K. Ghoshal., **Subrata Samanta.**, Jayanta Das. (2017): Model based single fault disambiguation and fault tolerant control for a hydraulic drive using receding horizon. Journal of the Brazilian Society of Mechanical Sciences and Engineering. 39:2405-2419,DOI 10.1007/s40430-017-0754-4.

Conference:

1. Ghoshal S.K., **Samanta S.**(2009): Multiple fault isolation to a servo -valve controlled motor transmission system.7th IFAC symposium on fault detection ,supervision and safety of technical processes,Barcelona,Spain held on June 30 to July 3, 2009. pp 710-715.
2. Ghoshal S.K., **Samanta S.** (2012): Model based fault diagnosis of a belt conveyor through parameter estimation. International Conference on Recent Advances in Information Technology (RAIT-2012), Dhanbad, India, held on 15-17th March, 2012. pp 497-502.
3. Ghoshal S.K., **Samanta S.** (2012): System identification and qualitative fault detection and isolation of a hydrostatic transmission system: A bond graph approach. International congress on computational mechanics and simulation [ICCMS 2012], held at NOVOTEL, organized by IIT Hyderabad during 09-12 December, 2012.
4. S. K. Ghoshal, **Subrata Samanta** (2013): Single fault isolation of a power hydraulic system using unknown input observer, in the 2nd International Conferences on Engineering and Applied Science (ICEAS 2013) in Tokyo, Japan, held on 15 - 17 March, 2013, pp. 1176-1183.
5. **Subrata Samanta.**, Sanjoy K. Ghoshal., Subrata K. Ghosh. (2009):Model based supervision and monitoring of a hoisting mechanism: A simulation study. National conference on machines and mechanism (NaCoMM-2009), Dec 17-18, 2009. NIT, Durgapur, India, pp 366-371.
6. Ghoshal S.K., **Samanta S.**(2010): A model based dynamic performance study of rock drill. National Conference on Drills and Drilling- An Update (D&DU-2010), 23-24 September, 2010. ISM, Dhanbad, India, pp 231-238.
7. Ghoshal S.K., **Samanta S.**(2012): Modelling and identification of a hydrostatic system. National seminar on mining equipment: New Technologies, challenges & applications (MENTCA-2012), ISM Dhanbad, India, held on 19 - 21 January 2012. pp 179-187.
8. **Subrata Samanta.**, Sanjoy K. Ghoshal.(2014): Online monitoring of a Hydrostatic Transmission System undergoing multifault Scenario - A Simulation Study. National Conference on Emerging Trends in Engineering and Science (ETES-2014), Asansol Engineering College, Asansol,India held on 30-31 January, 2014. Pp 317-325.

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

Name of the student	Name of the supervisors	Title of the Thesis	Year	Name of the university	Status
Sarnendu Paul	Dr. Sanjay K Ghoshal, & Dr. Subrata Samanta	Fault Identification and fault tolerant control using receding horizon for a hydraulic drive system with pump loading.	2018	IIT (ISM), Dhanbad	Completed

Projects:

1. Name of the student/s (with university roll number), Name of the supervisor, " Title of the Project / thesis" , Year (only final year 8th Sem Project for B.Tech and Thesis for M.Tech)

2.

B.Tech Project				
Name of the students	University roll number	Name of the supervisors	Title of the project / Thesis	Year
Sayan Mondal	12000718010	Dr. Subrata Samanta & Prof. Subhajit Bhattacharya	Increase the efficiency Of Thermal Power Plant Through Waste Heat Recovery	2021
Vivek Kumar Burnwal	12000717025			
Subham Mukherjee	12000718009			
Vicky Kumar	12000717027			
Anirban Khatua	12000717116			
Anirban Hui	12000717117			
Vishal Kumar Singh	12000717026			
Uttam Kumar	12000718001			
Sushant Kumar	12000717030			
Akash Banerjee	12000718033			
Abhishek Kumar	12000717126			

Sudip Kumar Gorai	12000716047	Dr. Subrata Samanta & Prof. Subhajit Bhattacharya	360 degree flexible drilling machine	2020
Sudhir Kumar Das	12000716048			
Sudhir Kumar	12000716049			
Sudhanshu Kumar	12000716050			
Subhajit Ghosh	12000716051			
Subham Ghosh	12000716053			
Subhajit Konar	12000716054			
Subhajit Dutta	12000716055			
Subhadip Khan	12000716056			
Subhadeep Mukherjee	12000716057			
Souvik Sil	12000716058			
Souvik Ganguly	12000716059			
Sourav Kumar	12000716060			
Soumik Chatterjee	12000716061	Dr. Subrata Samanta &	Sustainable Energy: A Renewable Future	2019
Babloo Kumar	12000715027			
Bikash Kumar	12000715029			
Binay Roy	12000715030			
Vivekananda Majee	12000715031			
Chandan Giri	12000715032			
Debjit Sarkar	12000715033			
Debraj Ghosh	12000715034			

Diwakar kumar Ranjan	12000715035	Prof. Subhajit Bhattacharya		
Gaurav Chakraborty	12000715036			
Gulshan Kumar	12000715037			
Gunjan Kumar Roy	12000715038			
Gyanji Vatsa	12000715039			
Asim Pal	12000714027	Dr. Subrata Samanta & Prof. Subhajit Bhattacharya	"A study on thermal performance on Refrigeration and Air-conditioning".	2018
Avishek Kumar	12000714028			
Ayan Sengupta	12000714029			
Binay Kumar	12000714030			
Bishal Karmakar	12000714031			
Biswajit Samanta	12000714032			
Brajesh Kumar Burnwal	12000714033			
Chandan Das	12000714034			
Chandrima Maji	12000714035			
Chintu kumar Jha	12000714036			
Debmalya Shukul	12000714037			
Deepak Kumar	12000714038			
E. Arun Naidu	12000714039			
Lalan Kumar	12000713049			

Manik Mahato	12000713050	Dr. Subrata Samanta	“Solar Air Conditioning System”.	2017
Manindra Kumar	12000713051			
Manish Kumar	12000713052			
Maynak Kumar Jha	12000713053			
Md. Safiur Islam	12000713054			
Amit Kr. Biswas	12000712107	Dr. Subrata Samanta	“A Study on Hybrid Electric Vehicle (HEVs)”	2016
Amit Kr. Nimo	12000712108			
Amit Ranjan	12000712109			
Anand Kumar	12000712110			
Anirban Dutta	12000712111			
Ankit Kumar	12000712112			
Ankur Mondal	12000712113	Dr. Subrata Samanta & Mr. Suman Karmakar	“Power Generation by Sterling Engine”	2015
Soumen Jana	12000711056			
Souvik Karmakar	12000711057			
Subodh Dutta	12000711058			
Suman Ghosh	12000711059			
Sumantra Chowdhury	12000711060	M.Tech Project/Thesis		
Name of the students	University roll number	Name of the supervisors	Title of the project / Thesis	Year
Soni Pratik Naresh Kumar	12062419004	Dr. Subrata Samanta	“Power Optimization of Gas Engine with Fuel Blending”	2021
Chiradip Pal	12012418007	Dr. Subrata Samanta	A study on thermal performances of	2020

			refrigerator	
Debabrata Ghosh	12012417003	Dr. Subrata Samanta	Study of Fly Ash extraction and Transportation system.	2019
Biswajit Ranjan	12012414001	Dr. Subrata Samanta & Prof. S.C Chakraborty	Performance & Analysis of combined heating and cooling system working on different refrigerants.	2016

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

Name of the event	duration	Year	Organized by
Seminar on advances in Nano satellite Technology	One day	2015	Dr. B. C Roy Engineering College
Seminar on advances in welding technology	One day	2015	Dr. B. C Roy Engineering College
National Conference on Emerging Trends in Engineering and Science	Two days	2014	Asansol Engineering College
National Seminar on Drills & Drilling- An Update	Two days	2010	ISM Dhanbad
14th National Conference on Machines & Mechanism.	Two days	2009	NIT. Durgapur
Modelling & Simulation of Dynamic systems.	Three days	2008	NIT. Durgapur

Participation in faculty development programmes:

Name of the FDP	Online/Face to Face	From Date	To Date	Duration	Year	Organized by
Applications of Soft Computing in Engineering.	Face to Face	1 st July	6 th July	One week	2013	Asansol Engineering College
Mission 10X workshop	Face to Face	17 th Jan	21 th Jan	One week	2012	WIPRO
Corrosion Fundamentals, Testing and Prevention.	Face to Face	14 th July	25 th July	Two weeks	2008	NIT. Durgapur
Microteaching for teaching skill development.	Face to Face	10 th July	14 th July	One week	2006	NITTR, Kolkata
Fundamentals of mechatronics	Face to Face	17 th July	21 st July	One week	2006	Kalyani Govt. Engineering College
Fundamentals and Applications of Computational Fluid Dynamics in Fluid-Thermal Systems"	online	13 th March	17 th March	One week	2021	NIT, Silchar
"Inculcating Universal Human Values in Technical Education"	online	2 nd August	6 th August	One week	2021	AICTE, New Delhi

Participation in administrative committees (selected)

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

1. PG Coordinator of ME Department.
2. Departmental NBA Committee Member.

Membership of professional bodies: Member of Institute of Engineers.