Name Dr. MONISHA PATHAK.

Designation Associate Professor.

Department Instrumentation Engineering , Jorhat Engineering College, Jorhat, Assam

Mail Id. mamup@yahoo.co.in

Contact no.. 8638981110

Area of Specialization: Instrumentation and Control

Educational Qualification:

BE (Instrumentation)	2000	Jorhat Engineering College, Dibrugarh University.
M Tech (Power and Control)	2015	Department of Electronics & Electrical Engineering, IIT Guwahati .
PhD (Sliding Mode Control Strategies for Uncertain Robotic Manipulators)	2023	Department of Electrical Engineering, Dibrugarh University.

Experience: From 02/03/2007 - till date: Faculty, Jorhat Engineering College.

Courses Taught: Transducers, Industrial Instrumentation, Process Control, Analytical Instrumentation, Biomedical Instrumentation, Fluid Power and Control, Advanced Process Control , Electrical Measurements.

Projects guided: UG: More than 70, PG: 2.

Membership:

- Life Member of Instrument Society of India
- Life Member of Biomedical Society of India

Additional Responsibilities:

- College Media Cell Coordinator.
- College IQAC Member.
- Dept NBA Coordinator (2017-2021)

Sponsored Research Project:

Sl no	Coordinators PI/Co PI	Project title	Funding Agency	Amount	Duration
1	PI: Dr. Monisha Pathak.	Robust Control of uncertain Robotic Manipulator	TEQIP III of ASTU	2.25 lakhs	July2019-Dec2020
2	Co PI: Dr. Monisha Pathak	Enhancement of Electric Vehicle Stability and Minimize its Energy Requirements	TEQIP III of ASTU	2.20 lakhs	July2019-Dec2020
3	Co PI: Dr. Monisha Pathak	Development of Advanced Sensor and Transducer Laboratory	AICTE MODROB	13.41 lakhs	Jan2022-Jan2024

Sl no	**Research Publications**
1	P.Das[1], M. Pathak[2] **,** ***An Industrial Safety Automation System Using GSM Technology,*** Technologia en Marcha, June 2024, Vol 37, (special issue LAEDC 2023) Multidisciplinary Sciences (Q4) WOS – ESCI
2	M. Pathak[1], M. Buragohain[2]***, Fuzzy System Approximation based Adaptive Sliding Mode Control for Nonlinear System,*** International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249-8958 (Online), Volume-13 Issue-2, December 2023.
3	M. Pathak[1], M. Buragohain[2]***, Adaptive Sliding Mode Controller for Robotic Manipulator Tracking Control with Fuzzy Design,*** International Journal of Engineering and Advanced Technology (IJEAT) IlSSN: 2249-8958 (Online), Volume-11 Issue-6, August 2022.
4	M. Pathak[1], M. Buragohain[2]***, A New Neural Network Based Sliding Mode Adaptive Controller for Tracking Control of Robot Manipulator,*** International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249-8958 (Online), Volume-11 Issue-2, December 2021.
5	M. Pathak[1], M. Buragohain[2]***, Sliding Mode with Adaptive Control of Robot Manipulator Trajectory Tracking using Neural Network Approximation,*** International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249-8958 (Online), Volume-10 Issue-6, August 2021
6	A. Saikia[1], M. Pathak[2] **,** ***Second Order Sliding Mode based Vehicle's Lateral Stability Enhancement by Integrating Active Front Steer angle and Direct Yaw Moment Control***. National Conference on Recent Advances in Science and Technology, NCRAST 2020, 17-19 th August, 2020, ASTU, Guwahati, Assam.
7	A. Saikia[1], M. Pathak[2]*,* ***Vehicle stability enhancement based on unified chassis control with electronic stability control and active front steering***. Advanced Research in Electrical & Electronics Engg , KrishiSanskriti Publications. Jan- March 2019
8	A. Saikia[1], M. Pathak[2], ***Integrated Control of Active Front Steer Angle and Direct Yaw Moment Using Nonsingular Terminal Sliding Mode Technique***. The National Conference on ETEES-19, 29-30th March, 2019, AEC, Guwahati, Assam.
9	M. Pathak[1], A. Saikia[2], Dr. M. Buragohain[2], " ***Trajectory Tracking of Robotic Manipulator using Terminal Sliding Mode Control***," International Conference On "Electronics Communication, Robotics, Data Mining, Information Sciences and Electrical Engineering"(ERDIE-2019), 27th April 2019, Jawaharlal Nehru University, New Delhi.
10	T Rasul[1], M. Pathak[2]***, Robust Control of Thermal Mixing Process using Sliding Mode Control***, Advanced Research in Electrical and Electronic Engineering (AREEE), Vol 3, Issue 5, 2016, pp. 349-353, Krishi Sanskriti Publications.
11	M. Pathak[1]**,** M Buragohain[2], "***Finite Time Continuous Terminal Sliding Mode Control for Trajectory Tracking of Robotic Manipulator***", International Conference on Innovative Research In Applied Physics, Material Sciences, Instrumentation, Electronics, Communication, Electrical, Power Control, Computer Science and Information Technology (TECHNOVA-2016), 22nd and 23rd December, 2016 , USIC, Gauhati University, Gauhati , Assam, India.
12	T Rasul[1], M. Pathak[2]***,Control of nonlinear chemical process using sliding mode control,*** 2016 1st International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES 2016), 4- 6 July' 2016, Delhi Technological University, Delhi.

FDP/ Workshop attended (2023):

Sl No.	Name of the Course/ Summer School	Place	Duration	Sponsoring Agency
1	Applications of Technology in Environmental Sustainability	NITTTR, Chandigarh	17/04/2023 to 21/04/2023 (One Week)	MHRD, Govt of India
2	IoTs and Sensor Networks	NITTTR, Chandigarh	09/10/2023 to 13/10/2023 (One Week)	MHRD, Govt of India
3	Curriculum Implementation	NITTTR, Chandigarh	20/11/2023 to 24/11/2023 (One Week)	MHRD, Govt of India
4	Enterprise Resource Planning	NITTTR, Chandigarh	27/11/2023 to 01/12/2023 (One Week)	MHRD, Govt of India
5	Academic Writing and Tools	NITTTR, Kolkata	4/12/2023 to 15/12/2023, (Two weeks)	MHRD, Govt of India
6	STEM Teaching	NITTTR, Chandigarh	18/12/2023 to 22/12/2023 (One Week)	MHRD, Govt of India