

RESUME

Dr. Rammurti Meena

Assistant Professor-II

Dept of Electrical Engineering

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RESEARCH AREAS

Control System, Process Control, Fractional-order Control, Load Frequency Control of Power Systems

EXPERIENCE

- Institute Post-doctoral Fellow (IPDF), IIT (BHU) Varanasi, Uttar Pradesh, [Apr, 2026- Aug 2026]
- Worked as Guest Faculty at Department of Electronics & Communication Engineering, Assam University, Silchar, [Sep, 2025- Mar 2026]
- Worked as Assistant Professor at Department of Electrical Engineering, SKIT Jaipur, [Aug, 2013- Feb 2022]
- Taught UG/PG courses: Control Systems, Process Control, Digital Electronics, Instrumentation
- Mentored multiple B.Tech. projects
- Actively engaged in curriculum design and departmental coordination

ACADEMIC DETAILS

Examination	Specialization	University/Board	Year	CGPA/ %
Ph.D	Process Control	NIT Silchar	2025	9.3 CGPA
M.Tech	Control & Instrumentation	MNNIT Allahabad	2012	7.3 CGPA
B.Tech	EIC Engineering	Engineering College Ajmer (RTU Kota)	2010	64.63%
XII	PCM	RBSE	2006	77.23%
X	All Subjects	RBSE	2004	85.17%

PUBLICATIONS

Google Scholar Link:

https://scholar.google.com/citations?hl=en&user=tRjGGTMAAAAJ&view_op=list_works&gmla=AC6lMd-xgXFiqU05h_xnVtL6QFFPiOQP02t03L8vNjiGIQvA8PkoLbJQqh0TKInAgVt9YHi3yMOOjq9iogljfhid

Researchgate Link: <https://www.researchgate.net/profile/Rammurti-Meena>

Journals

1. **Rammurti Meena**, S. Chakraborty and V. C. Pal, " Experimentally validated IMC-based tuning of fractional filtered PI controller for time-delayed chemical processes", *International Journal of Dynamics and Control*, vol. 14, no. 8, 2026, pp. 289.
2. **Rammurti Meena**, S. Chakraborty and V. C. Pal, "Experimentally validated optimal control for fractional order stable and integrating processes", *International Journal of Modelling and Simulation*, (2026): 1-20.
3. **Rammurti Meena**, S. Chakraborty and V. C. Pal, " Designing a dual parametric fractional controller for delayed stable/unstable/integrating processes with experimental validation", *International Journal of Systems Science*, (2025): 1–18.
4. **Rammurti Meena**, S. Chakraborty, V. C. Pal and U. Mehta "Designing fractional-order ramp

controller with explicit formulae using non-integer plant parameters", *Proceedings of the Institution of Mechanical Engineers, Part I: Journal of Systems and Control Engineering* 239, no. 3 (2025): 490-506.

5. **Rammurthi Meena**, S. Chakraborty, V. C. Pal and H. Lala "Experimentally Validated Fractional order PI With Anti-windup for Fractional Order Plus Time-delay Processes", *International Journal of Dynamics and Control* 12, no. 12 (2024): 4232-4243.
6. **Rammurthi Meena**, S. Chakraborty and V. C. Pal, "Experimentally Validated Analytically Designed Single Parametric FOTID Control for Time-delayed Fractional Order Processes", *International Journal of Systems Science* 55, no. 15 (2024): 3223-3237.
7. **Rammurthi Meena**, D. Das, V. C. Pal and S. Chakraborty, "Smith-Predictor Based Enhanced Dual-DOF Fractional Order Control for Integrating Type CSTRs ", *International Journal of Chemical Reactor Engineering*, vol. 21, no. 9, 2023, pp. 1091-1106.
8. **Rammurthi Meena**, S. Chakraborty and V. C. Pal, "IMC based Fractional order TID controller design for different Time-delayed Chemical Processes: Case studies on Reactor Models", *International Journal of Chemical Reactor Engineering*, vol. 21, no. 11, 2023, pp. 1403-1421.
9. Prabir Singha, D. Das, **Rammurthi Meena** and Sudipta Chakraborty, " Experimentally validated predictive dual parametric fractional-order tuning approaches for time delayed chemical processes", *Journal of the Taiwan Institute of Chemical Engineers* 180 (2025): 106463.
10. Prabir Singha, **Rammurthi Meena**, Sudipta Chakraborty and G. Lloyds Raja, " Robust pidf-pid cascade control scheme for delay-dominant stable and integrating chemical processes", *Journal of the Taiwan Institute of Chemical Engineers* 173 (2025): 106165.
11. Prabir Singha, **Rammurthi Meena** and Sudipta Chakraborty, "2 -DOF fractional-order control for delay-dominant industrial processes with experimental validation", *International Journal of Dynamics and Control* 13, no. 2 (2025): 1-17.
12. Manidipa Sarkar, **Rammurthi Meena**, Sudipta Chakraborty, and Jupitara Hazarika, "Experimentally validated predictive fractional-order internal model control for time-delayed chemical processes and reactors", *International Journal of Chemical Reactor Engineering* 0 (2025).
13. Manidipa Sarkar, Prabir Singha, **Rammurthi Meena**, Dipjyoti Das, Sudipta Chakraborty, and Jupitara Hazarika. "Predictive two-loop fractional-order control law for industry-oriented integrating type chemical processes and reactors," *Chemical Product and Process Modeling* 0 (2025).

Book Chapters

1. Prasad, Sheetla, **Rammurthi Meena**, and Vipin Chandra Pal. "Artificial Neural Network–Based Sliding Mode Controller for a Class of Nonlinear System." *Controller Design for Industrial Applications* (2025): 41-54.
2. **Rammurthi Meena**, S. Chakraborty and V. C. Pal. " Control performance in Fractional-order Modelling vs. Integer-order Modelling: An Experimental Study" *Modeling and Analysis of Sustainable Renewable Energy System*, 233-251.
3. **Rammurthi Meena**, D. Das, V. C. Pal and S. Chakraborty, "Intelligent Controller Design for Industrial Applications: Theory and Implementation", *Industrial Process Control Applications* (communicated)

Conferences

1. **Rammurthi Meena**, D. Das, S. Chakraborty and V. C. Pal" Target-Loop Based Cascaded Fractional-Order Control for Non-Integer Processes: Application on a PEM Fuel Cell", *2025 IEEE North-East India International Energy Conversion Conference and Exhibition (NE-IECCCE)*, July 04-06, 2025, NIT Silchar, India.
2. **Rammurthi Meena**, S. Chakraborty and V. C. Pal" Frequency Domain Specification Based Fractional Controller for Proton Exchange Membrane Fuel Cell", *2024 IEEE 11th Power India International Conference (PIICON)*, Dec 10-12, 2024, MNIT Jaipur, India.

3. Prabir Singha, **Rammurthi Meena**, and Sudipta Chakraborty. "Improved PI-PD Control Strategy for Unstable Delayed Industrial Processes." In *2024 3rd International Conference for Advancement in Technology (ICONAT)*, pp. 1-7. IEEE, 2024.
4. **Rammurthi Meena**, S. Chakraborty and V. C. Pal "Comparative Study on Unstructured Fractional Controller with Approximated Structured FOID Controller for Industrial Processes", *2024 IEEE Students Conference on Engineering and Systems (SCES)*, June 21-23, 2024, Prayagraj, India.
5. **Rammurthi Meena**, V. C. Pal and S. Chakraborty, "A Modified Tilt Integral Derivative (MTID) Controller Design Using Direct Synthesis Approach", *International Conference on Recent Trends in Communication & Intelligent Systems" (ICRTCIS)*, pp. 127-137.
6. **Rammurthi Meena**, V. C. Pal and S. Chakraborty, "A Modified PID control for tracking and rejection of Ramp-type signals", *2023 4th International Conference on Computing and Communication Systems (I3CS)*, Shillong, India, 2023, pp. 1-5.

PROFESSIONAL ACTIVITIES/RESPONSIBILITIES

• Events Organized

1. RTU TEQIP-III sponsored national FDP on "Green Energy: The Energy of Future (GEEF-2020)" (07-09-20 to 11-09-20) at Swami Keshawanand Institute of Technology, Jaipur.
2. RTU TEQIP-III sponsored national Workshop on "Hands On Training on MATLAB for Engineers" (12-12-20 to 16-12-20) at Swami Keshawanand Institute of Technology, Jaipur.
3. RTU TEQIP-III sponsored national Workshop on "Simulation Software for Electrical Engineer" (08-02-21 to 12-02-21) at Swami Keshawanand Institute of Technology, Jaipur.

• Workshops & FDPs Attended (Selected):

1. RTU TEQIP-III sponsored national Workshop on "Simulation Software for Electrical Engineer" (08-02-21 to 12-02-21) at Swami Keshawanand Institute of Technology, Jaipur.
2. ATAL FDPs on Systems Engineering, Energy Engineering, Power Electronics and Advances in Power Electronics for Hybrid Electric Vehicle-2020.
3. FDPs on Embedded Systems, IoT, Deep Learning, Data Analytics, Industry 4.0, Soft Computing Techniques, Recent Trends in Instrumentation Measurement & Automation and Control Application Effective Design & Delivery of Curriculum in Outcome Based Educations of Renewable Energy System-Recent Trends and Future Aspects.
4. STTP on Smart Grid Technology and Renewable Integration and Power System Restructuring, Data Analytics for Smart Grid Technology & Renewable Energy Integration (PSRREI).

PROFESSIONAL MEMBERSHIP

- Member IEEE

SKILLS AND TOOLS

- Technical Tools: MATLAB/Simulink, LabVIEW, draw.io
- Soft Skills: Team Leadership, Project Mentoring, Technical Writing, Presentation

REFERENCES

- Dr. Sudipta Chakraborty, Assistant Professor, NIT Silchar, email: sudipta@ei.nits.ac.in, ph. +91-9040429561.
- Dr. Vipin Chandra Pal, Assistant Professor, NIT Silchar, email: vipin@ei.nits.ac.in, ph. +91-7007231973.

- Dr. Akash Saxena, Professor, School of Engg. & Technology, Central University of Haryana, Mahendergarh Email- drakash@cuh.ac.in , Ph. +91-9672424999

PERSONAL DETAILS:

Date of Birth: December 15, 1989

Marital Status: Married

Husband's Name: Mr. Ravishankar Meena

Husband's Occupation: Teacher

Father's name: Mr. Machchandar Meena

Mother's Name: Mrs. Ramshri Meena