

Name: Dr. Rajasekhara Reddy B

Designation: Assistant Professor

Department: Electronics & Instrumentation Engineering

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Experience (in years): Teaching: 6 Research: 6

1 Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	PhD	2017	Process Control & Instrumentation
2	MTech	2008	Instrumentation Engineering
3	BTech	2006	E. I. E

2 Teaching and Learning:

2.1 Teaching Interests: Control Systems, Process Control, Digital Control Systems, Modern Control Theory, System Identification and State Estimation.

2.2 Novel Teaching & Learning Techniques adopted:

2.3 Involvement in curriculum updating / Design:

3 Co-curricular and Extra-Curricular Activities

3.1 Interests and Hobbies:

3.2 CCA/ECA Organized:

3.3 CCA/ECA participated:

3.4 Counseling and Mentoring Activity:

3.5 Committees involved in:

Department level: Institute Level:

4 Conference / Workshop / Seminar / Guest Lectures :

4.1 Conducted:

4.2 Attended: 6

2022 "Python Data Science with TCLab". as taught by John Hedengren on Udemy.

2013 IEEE Workshop on "Compressive Sensing and Technical Writing". organized by Student Branch, IIT Guwahati.

2010 Workshop on "Engineering Teaching Methodologies". organized by JNTU Kakinada.

2009 IUCEE Workshop on "Teaching Engineering using LabVIEW". organized by LBRCE Mylavaram.

Workshop on "Transform Techniques in Signal Processing". organized by Dept. of ECE, LBRCE Mylavaram.

5 Academic Contribution and Research & Consultancy:

5.1 Invited Lectures: 2

5.2 Articles / Chapters published in Books:

5.3 Books published as single author or as editor:

B. Rajasekhara Reddy and P. Saha, "Real time model predictive control of a four tank interacting storage system," in *11th International Symposium on Process Systems Engineering*, ser. Computer Aided

Chemical Engineering, I. A. Karimi and R. Srinivasan, Eds., vol. 31, Elsevier, 2012, pp. 335–339.doi:

<https://doi.org/10.1016/B978-0-444-59507-2.50059-7>.

5.4.Projects Guided :

a) UG : b) PG : 1

5.5.Research Interests: Nonlinear System Identification and Model Based Control.

Granted **"MODULAR ENCLOSURE FOR CHEMICAL PROCESSING"**, Reference number:

342237-001

"Cooking Appliance", Reference number: 376991-001

"A Non-Invasive Device For Modulus Measurement Of Pavement Layers", Reference

number: 353540-001

Published

"Automatic Water Dispenser", Reference number: 369341-001

5.6.Ph.D students :

a) Enrolled: b) Submitted: c) Awarded:

5.7.Papers published in reviewed journals:

S.No	Title of the Paper	Journal Name Vol.No. PP	ISBN/ISSN No.	Citation Index	National/ International
1	Model based control of resonating processes	Robotics & Automation Engineering Journal, 1(4):555566		0	International
2	Modelling and control of resonating processes: Part I - System identification using orthogonal basis function	International Journal of Dynamics and Control,5(4),pp.1222-1236	ISSN: 2195-2698	2	International
3	Modelling and control of	International Journal of Dynamics and	ISSN: 2195-2698	1	International

	resonating processes: Part II - Model based control using orthogonal basis function-based Wiener models	Control, 5 (4),pp.1237-1251			
4	Kautz Filters based Model Predictive Control for Resonating Systems	International Journal of Dynamics and Control, 5 (3),pp.477-495	ISSN: 2195-2698	2	International
5	Model predictive Control for resonating Systems using Kautz model	International Journal of Automation and Computing, 13 (5), pp. 501-515	ISSN: 1476-8186 (print version) ISSN: 1751-8520 (electronic version)	2	International
6	Real time model predictive control of a four-tank interacting storage system	Computer Aided Chemical Engineering, 31 , pp .335-339	ISBN: 978-0-444-63965-3	1	International
7	Model predictive control using laguerre filters.,”	Journal of Seybold Report	vol. 15, 2021.	1	International
8	Optimization based internal model control design	IOP Conference Series: Materials Science and Engineering	vol. 12, 2021.	1	International
9	Classification of ecg signals imparted in machine learning	NeuroQuantology,	vol. 20, 2022.	1	International

10	Adaptive pi controller design and deployment for chemical reactor	International Conference on Smart Electronics and Communication (ICOSEC), 2020, pp. 1210–1215.	2020, pp. 1210–1215.	1	International
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5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed
1	Title: Real Time Implementation of Advanced Control Algorithm(s) on a Laboratory Scale Plant.		2019-21	3,00,000	Completed
2	Title: Identification of actuator dynamics and development of electronic circuits for smart materials actuated insect-scale legged robots.	DRDO Young Scientist Laboratories for Smart Materials, Hyderabad.			

5.10 Consultancy Projects:

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed

5.8..Papers published in reviewed journals

6.Awards / Honors received:

- Holding GATE rank, AIR-210 in GATE-2006 & Scholarship from MHRD, Govt. of India for pursuing M.E
- Research Assistance Scholarship from MHRD, Govt. of India for pursuing Ph.D.

7.Motto: Be good do good.