

# ANDHRA LOYOLA INSTITUTE OF ENGINEERING AND TECHNOLOGY (Approved by AICTE, New Delhi & Affiliated to JNTU Kakinada) Accredited by NAAC & An ISO 9001:2015 Certified Institution

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Name of the Faculty	Mr. Krishna Mohan Tatikonda	
Designation	Associate Professor	
Department	Electrical & Electronics	<b>Date of Birth</b> 02/06/1988
Date of Joining the Institution	06-06-2013	<b>Native place</b> Mylavaram Andhra Pradesh, India
Academic Qualification with Class/Grade	<ul> <li>Master of Science in Fower &amp; Industrial Drives, Dadi Institute of Engg and Tech, Vizag, India Jun.2012 with Distinction.</li> <li>Bachelor of Science in Electrical &amp; Electronics Engineering, LBRCE, Vijayawada, India, May 2009, with Distinction.</li> <li>Intermediate from M.V.R Jr. College during (200 2005) Secured 89%.</li> <li>X class from Z.P. High school, Mylavaram Secured 77.6% (SSC, Board of Secondary Education).</li> </ul>	
Professional Qualification	• A two week staff development program on "Soft Computing Application to Power System and Control Matlab" conducted at AITAM, Tekkali.	

Employee ID	ALIET-13-12		
E-mail / Mobile	krishnamohan@andhraloyola.org t.krishnamohan02@gmail.com 9908039885 / <u>9676800222</u>		
Total Experience in Years	Teaching: 8 years	Indus trial:	Research:
Papers Published in Journals -	SCOPUS-1UGC - 3A Peer-Reviewed- 5		
Faculty Development Programmes attended:	41	<b>Guest Lectures Delivered:</b> 3	
Papers presented in Conferences/ attended	National: 6	International: 10 / Workshops: 6	
PhD Guide? Give field & University	Field: Supervisor	Univer	sity:
PhDs / Projects Guided	PhDs: MPhil -	Project Project	ts at Masters Level: ts at UG Level: - 22
Books Published/IPRs/Patents/Chapters?	<ul> <li>Chapter in Advances in Electrical Technology published by Mcgraw hill Education, in the year 2015.</li> <li>Chapter in Microgrid Technologies published by Willey Publications in 2020.</li> </ul>		
Professional Memberships - 2	<ul> <li>One of the SCIENTIFIC COUNCIL MEMBER of the International Association of Engineering &amp; Technology for Skill Development.</li> <li>Life Time SCIENTIFIC COUNCIL MEMBER of the International Society for Research and Development.</li> </ul>		
Editorial Board Membership -	<ul> <li>One of the EDITORIAL BOARD MEMBERS in International Journal Of Electrical and Electronics Engineering Advanced Research(IJEEEAR)</li> <li>One of the TECHNICAL BOARD MEMBERS in International Journal of Engineering Research and Innovative Applications (IJERIA)</li> <li>One of the REVIEWER for International Journal of International Journal Of Electrical and Electronics Engineering (IJEEE)</li> <li>One of the REVIEWER for International Journal of International Journal Of Engineering Research (IJER)</li> <li>One of the REVIEWER for International Journal of International Journal Of Engineering Research (IJER)</li> <li>One of the REVIEWER for Transactions of Engineering Science Journal (TES)</li> </ul>		

	<ul> <li>One of the REVIEWER for International Journal of Advanced Technology in Engineering and Science (IJATES)</li> <li>One of the REVIEWER for International Journal of Advanced Technology in Engineering and Science (IJARSE)</li> </ul>
Subjects handled for B. Tech Students	<ul> <li>Control Systems</li> <li>Power Electronics.</li> <li>Grid Interconnection.</li> <li>Flexible AC Transmission Systems.</li> <li>Renewable Energy Sources.</li> <li>Electric Drives</li> <li>Power Quality Improvement</li> <li>Fuzzy Logic &amp; Neural Network</li> </ul>
Conferences/ Seminars / Workshops / FDP Organised @ ALIET	<ul> <li>National Conference on Emerging Trends in Electircal Technology (National Conference) on Mar 2018</li> <li>National FDP on Application of Labview in 2018</li> <li>National Workshop on Application of Dialux in 2020.</li> <li>National Level FDP on IoT Technology 2018.</li> <li>National Level Workshop on MATLAB Tools in 2017, 2018.</li> </ul>
Any Other Achievements	<ul> <li>Organized Events at U.G level.</li> <li>Organised literary Events.</li> </ul>
Other Responsibilities	NBA C-5 coordinator
Whether Ratified by University (Yes/No)	YES

# Publications:-

- Krishna Mohan Tatikonda, Udaya K. Renduchintala, Chengzong Pang, and Lin Yang, "ANFISfuzzy logic based UPQC in interconnected microgrid distribution systems: Modeling, simulation and implementation," 2021 The Authors. The Journal of Engineering published by John Wiley & Sons Ltd on behalf of The Institution of Engineering and Technology, https://doi.org/10.1049/tje2.12005.
- T. Eswara Rao, Krishna Mohan Tatikonda, S. Elango, and J. Charan Kumar, "MICROGRID TECHNOLOGIES", Edited by C. Sharmeela, P. Sivaraman, P. Sanjeevikumar, and Jens Bo Holm-Nielsen, Scrivener Publishing, ISBN: 9781119710790.
- Tulasichandra Sekhar Gorripotu, Krishna Mohan Tatikonda, B. Omkar Lakshmi Jagan, "Performance Analysis of Grid Synchronization Method for Three-Phase Three-Wire Networks"

under Grid Fault Conditions", International Journal of Advanced Science and Technology, Vol. 29, No. 6, (2020), pp. 3451-3458.

- Published a paper titled "A FUZZY CONTROLE SCHEME FOR DAMPING OF OSCILLATIONS IN MULTI-MACHINE SYSTEM USING UPFC" in International Journal for Emerging Trends in Engineering and Development.
- Accepted my paper titled "FUZZY BASED UPFC CONTROL FOR POWER FREQUENCY OSCILLATIONS" in NCACC-2012, GITAM UNIVERSITY, Visakhapatnam.
- Published a paper title of "UNIFIED POWER FLOW CONTROL IN THE PRESENCE OF PSS WITH FUZZY CONTROLLER FOR A MULTI-MACHINE SYSTEM" in International Journal of Engineering and Research Application.
- Published International Journal paper on "MODELING OF THE HYBRID WIND/SOLAR ENERGY SYSTEMS - A NEW RECTIFIER TOPOLOGY", International Journal of Engineering Research and Industrial Applications (IJERIA) Vol. 1 Issue 4, December- 2013 ISSN 2248-9278
- Published International Journal paper on 'Thermal Unit Commitment using Extended Priority List Algorithm', International Journal of Engineering Research & Technology (IJERT) Vol. 2 Issue 10, October- 2013 ISSN: 2278-0181
- Presented a paper 'A New Rectifier Stage Topology for Wind Solar Energy System' A National Conference in GREEN TECHNOLOGY, Visakhapatnam.
- Published International Journal paper on 'A BOOST CONVERTER SUPPLIED BY A COCKCROFT-WALTON VOLTAGE MULTIPLIER', International Journal of Electrical & Electronics Engineering in Advance Research (IJEEEAR).
- Presented a paper 'COMPARISON OF FACTS CONTROLLER FOR POWER QUALITY PROBLEMS IN POWER SYSTEM' 2014 NIT-MTMI International Conference on Emerging Paradigms and Practices in Global Technology, Management & Business Issues December 22-24, 2014, NIT HAMIPUR.
- Accepted my paper titled "IMPROVEMENT OF POWER QUALITY FOR MICROGRID USING FUZZY BASED UPQC CONTROLLER" in International Conference on Electrical, Electronics, Signals, Communication and Optimization (EESCO) - 2015, Vignan College, Visakhapatnam (IEEE Explorer).
- Published Journal paper on 'A Multi Boost and Full Bridge Converters for Power Management for Hybrid Vehicle by Battery and Super Capacitors', American Journal of Engineering Research (AJER).
- Presented a paper titled "A Neuro-Fuzzy Controller for Multilevel Renewable Energy System" in International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT) -2016, DMI College, Chennai (IEEE Explorer).

- Presented a paper titled "Power Quality Improvement of Grid Connected Photovoltaic System Using Statcom Controller" in International Conference on Computer Electronics Electrical Mechanical and Civil-2015, Trivandrum.
- Presented a paper titled "SVPWM Based DTC Controller for Brushless DC Motor" in ICCIDM 2016 at KIIT University, Bhubaneswar (SPRINGER Special Issue).
- Presented a paper titled "Power management strategy for SMC based grid connected hybrid fuel cell system" in 40<sup>th</sup> National Systems Conference - 2016, at NIT Warangal.
- Presented a paper titled "Enhancement of Power Quality in Grid Connected Isolated Power System" in 1<sup>st</sup> National Conference on Recent Advances in Control of Energy Systems (RACES-2K16), at Sri Sivani Engineering College, Srikakulam.
- Presented a paper titled "Comparison of MPPT Techniques for SEPIC Converter Based Photovoltaic System" in 2016 Online International Conference on Green Engineering and Technologies (IEEE Explorer).
- Presented a paper titled "Modelling of Photo Voltaic Module Under Partial Shaded Conditions using MPPT" in 12<sup>th</sup> International Conference on Recent Innovations in Science Engineering and Management-2018 at Sri Venkateswara College of Engineering & Technology Srikakulam and published in International Journal of Advance Research in Science and Engineering (IJARSE), (PAGE: 194-204) ISSN:2319-8354, Volume-07 Issue-02, Feb 2018.
- > Published a Paper titled, "Performance Analysis of Grid Synchronization Method for
- Three-Phase Three-Wire Networks under Grid Fault Conditions", International Journal of Advanced Science and Technology, Vol. 29, No. 6, (2020), pp. 3451-3458.

# **Extra Activities:-**

- One of the EDITORIAL BOARD MEMBERS in International Journal Of Electrical and Electronics Engineering Advanced Research(IJEEEAR)
- One of the TECHNICAL BOARD MEMBERS in International Journal of Engineering Research and Innovative Applications (IJERIA)
- One of the REVIEWER for International Journal of International Journal Of Electrical and Electronics Engineering (IJEEE)
- One of the REVIEWER for International Journal of International Journal Of Engineering Research (IJER)
- > One of the REVIEWER for Transactions of Engineering Science Journal (TES)
- One of the REVIEWER for International Journal of Advanced Technology in Engineering and Science (IJATES)
- One of the REVIEWER for International Journal of Advanced Technology in Engineering and Science (IJARSE)

- ▶ Worked as Exam-Cell In-charge in Sri Vani Educational Society from 2010-2011.
- Participated in "National Workshop on Smart Electric Grids" conducted at LBCE COLLEGE, Mylavaram.
- Participated in A two week staff development program on "Soft Computing Application to Power System and Control Matlab" conducted at AITAM, Tekkali.
- One of the SCIENTIFIC COUNCIL MEMBER of the International Association of Engineering & Technology for Skill Development.
- Life Time SCIENTIFIC COUNCIL MEMBER of the International Society for Research and Development.
- Acted as a Resource Person for Three day Faculty Development Program on "Applications of MATLAB in Electrical Engineering", at Sri Venkateswara Engineering College, Etcherla.

#### **KEY COMPETENCIES**

- Control Systems
- Mechatronics
- Robotics
- Neural Networks
- Fuzzy Logic
- Power Electronics
- Electrical Sytems
- Digital Logic Design
- Motor Controls
- Grid Interconnection
- MATLAB
- PSPICE
- LabView
- PSCAD

### SUMMARY OF COMPETENCIES

- > Expertise on designing lab equipment.
- > Research on implementation of various control systems.
- Capability to create schematics/designs for electrical and electronic systems.
- > Proven ability to draw and interpret drawings and schematics.
- ➢ Expertise on robotics.
- Research experience in dealing with robotics and mechatronics.
- Proficient in designing analog control circuits.
- Good computer skills and proficient in MS Office including Microsoft Visio for drawing schematics.

#### **Assistant Professor**

#### June.2013 – Till Date

#### ANDHRA LOYOLA INSITUTE OF ENGINEERING AND TECHNOLOGY, INDIA

- Taught Electrical Machines, Digital Logic Design for a class of 60 BSEE students.
- Prepared and maintained detailed lab manuals for Electrical Machines and Power Electronics laboratories.
- Looked after the training and placement activities of students.
- Instructor for soft skills and for interview facing skills for the students using institutional and external expertise.
- Head of Power Electronic Laboratory and Electrical Simulation Laboratory, responsible for experiment layout and equipment maintenance.
- Develop and direct research activity independently which includes data collection, evaluation and analyses for research