Rajiv Gandhi Institute of Technology

GOVT.ENGINEERING COLLEGE KOTTAYAM

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY)

PROFILE

Name : **Dr. PRINCE A.**

Designation : **PRINCIPAL**

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Education Summary

Qualification	Name of the Educational Institution/ University	Year
Ph.D	IIT Delhi	2013
M.Tech.	IIT Delhi	2005
B.Tech.	T K M College of Engineering Kollam, Kerala University	1996

Employment History

From - To	Name of the Post	Institution	Category
20-08-1997 to 31-03-1998	Lecturer	Rajiv Gandhi Institute of Technology, Kottayam	Teaching
08-10-1998 to 09-11-2001	Lecturer	L B S College of Engg. Kasaragod. Govt. of Kerala	Teaching
12-11-2001 to 30-06-2022	Assistant/ Assoc.Professor/Professor	Rajiv Gandhi Institute of Technology, Kottayam	Teaching
01-07-2022 to 02-09-2022	Professor	Government Engineering College, Thrissur	Teaching
03-09-2022 to 31-03-2023	Professor	Rajiv Gandhi Institute of Technology, Kottayam	Teaching
01-04-2023 to 01-06-2023	**Principal**	**Government Engineering College Idukki**	**Administration**
02-06-2023 to Till date	**Principal**	**Rajiv Gandhi Institute of Technology, Kottayam**	**Administration**

Duties in the Government/University Level and others

Sl. No.	Details
1	Convener, Kerala Technical Education service special rule modification committee
2	Interview Board Member (Faculty Recruitment), Polytechnics Colleges
3	Interview Board Member (Faculty Recruitment), Engg. Colleges
4	Core Team member, Electrical engineering, Kerala Infrastructure Investment Fund Board(KIIFB)
5	Board of Studies Member, APJKTU Kerala
6	Curriculum Committee Member, APJKTU Kerala
7	Doctoral Committee Member, APJKTU Kerala at various research centres

Membership in Professional bodies

Sl. No.	Professional body	Type of membership
1	**IEEE (SENIOR MEMBER)**	Member since 2007 (No.80487644) IEEE Young Professionals IEEE Power & Energy Society Membership IEEE Industry Applications Society Membership
2	**ISTE**	Life Member
3	**ECS**	Life Member

Research Activities

1. **Areas of research interest**
   - Power Systems
   - Renewable Energy
   - AI applications in Power Systems

2. **Research Supervisor**

Sl. No.	Name of Research Scholar with Reg. No.	Date of Joining	University	Scheme/ Category	Research Topic
1	Ginu Ann George (D-KTE16JUL001) ***PhD Awarded on 07/06/2022***	16/08/2016	APJ AKTU	Full Time QIP	Modular Cell Balancing Integrated with Intelligent Mono-Circuitry for Electric Vehicle Applications
2	Fossy Mary Chacko (D-KTE16JUL002)	16/08/2016	APJ AKTU	Full Time QIP	Investigation on a Modified SRF Theory-Based Multifunctional

	PhD Awarded on 08/06/2022				Control Strategy for Power Quality Enhancement in Grid Integrated Photovoltaic Systems
3	Tomson Thomas (D-KTE17JAN004) ***PhD Awarded on 27/12/2022***	29/06/2017	APJ AKTU	Full Time CERD	Performance Analysis of Doubly Fed Induction Generator based Wind Energy Conversion System with Enhanced Low Voltage Ride-Through Capability
4	Sreelekha V. (D-KTE17JUL001) ***PhD Awarded on 04/05/2024***	04/12/2017	APJ AKTU	Part Time	Development of a WAMS based backup protection scheme for FACTS compensated transmission system
5	Ani Harish (D-KTE18JAN002) ***PhD Awarded on 25/03/2024***	04/06/2018	APJ AKTU	Full Time High.Edn	A data-driven framework for transmission line fault diagnosis using wide-area measurements data.
6	Jasmy Paul (D-KTE17JAN005)	16/06/2017	APJ AKTU	Part Time	Virtual inertia control for frequency stability in microgrid
7	Anoopraj M.R. (D-KTE20JAN008)	30/07/2020	APJ AKTU	Full Time CERD	Virtual Inertia support to enhance the frequency stability of Renewable Energy integrated Power System
8	Anet Jose (D-KTE21JAN006)	08/11/2021	APJ AKTU	Part Time	Machine Learning Applications in Wind Energy System

3. KCSTE/CERD funded projects

Sl. No.	Project Title	Funding agency/scheme	Year
1	Design and implementation of Single Phase Phasor Measurement unit	KCSTE	2019
2	Design and Implementation of Photovoltaic system with Maximum Power Point Tracking	CERD	2013

List of Publications - Journal/Conference Papers/Book chapters

1. Research Papers in (SCI Journals/UGC/AICTE approved list of journals.)

Sl. No	Title of the paper and journal details (Name, Year, Vol., Pages)	Sl. No. in UGC/ AICTE list	ISSN/ ISBN No	Whether peer reviewed, Impact factor if any
1	Prince A, N Senroy, R. Balasubramanian, "Targeted approach to apply masking signal-based empirical mode decomposition for mode identification from dynamic power system wide area measurement signal data", IET Gener. Transm. Distrib., 2011, Vol. 5, Iss. 10, pp. 1025-1032	UGC-CARE List Group II	ISSN 1751-8687, eISSN 1751-8695	Peer Reviewed, Impact factor (2021): 2.503 [SCIE & SCOPUS indexed]
2	Ani Harish, Prince, A., Jayan, M.V. (2024). "A Comparative Evaluation of Stacked Auto-Encoder Neural Network and Multi-Layer Extreme Learning Machine for Detection and Classification of Faults on Transmission Lines Using WAMS Data" Energy and AI, Volume 14, 2023, 100301	UGC-CARE List Group II	ISSN: 2666-5468	Peer Reviewed, Impact factor: 9.6 [ESCI & SCOPUS indexed]
3	V. Sreelekha and A. Prince, "ANFIS-Based Fault Distance Locator With Active Power Differential-Based Faulty Line Identification Algorithm for Shunt and Series Compensated Transmission Line Using WAMS," in IEEE Access, vol. 11, pp. 91500-91510, 2023,	UGC-CARE List Group II	ISSN: 2169-3536	Binary Peer Reviewed, IF : 3.476 [SCIE & SCOPUS indexed]
4	Ani Harish, Prince, A., Jayan, M.V. (2023). “Evaluation Of Wavelet Transform Based Feature Extraction Techniques For Detection And Classification Of Faults On Transmission Lines Using WAMS Data”. Journal: Advances in Electrical and Electronic Engineering	UGC-CARE List Group II	ISSN 1336-1376 (Print) ISSN 1804-3119 (Online)	Peer Reviewed [ESCI & SCOPUS indexed]
5	Sreelekha V, Prince A, Sabha Raj Arya “WAMS-based hierarchical active power differential signal algorithm for back up protection of a FACTS compensated transmission network” , AEEE journal - Special Theme Issue devoted to Emerging Technologies in the Evolution of Smart Grid, 2022	UGC-CARE List Group II	ISSN 1336-1376 (Print) ISSN 1804-3119 (Online)	Peer Reviewed [ESCI & SCOPUS indexed]

6	A. Harish, A. Prince and M. V. Jayan, “Fault Detection and Classification for Wide Area Backup Protection of Power Transmission Lines Using Weighted Extreme Learning Machine” Journal: IEEE Access vol. 10, pp. 82407-82417, Year: 2022	UGC-CARE List Group II	ISSN: 2169-3536	Binary Peer Reviewed, IF : 3.476 [SCIE & SCOPUS indexed]
7	Thomas, T., Prince, A., Kumar, P.R.S. et al. “Real-time hardware emulation of WECS based on DFIG during unbalanced type-B and type-E voltage dips for enhanced low voltage ride-through”. Journal: Electrical Engineering, Springer 104, 3717–3732 (2022)	UGC-CARE List Group II	eISSN: 1432-0487 Print ISSN: 0948-7921	Peer Reviewed, IF : 1.630 [SCI, SCIE & SCOPUS indexed]
8	George, G.A., Chacko, F.M., Prince, A. et al. “Integrated fuzzy-based modular cell balancing using mono circuitry for electric vehicle applications”. Electr Eng 103, 153–165 (2021). https://doi.org/10.1007/s00202-020-01068-6	UGC-CARE List Group II	ISSN 0948-7921	Peer Reviewed, Impact factor: 1.630 [SCI, SCIE and SCOPUS indexed]
9	Thomas, Tomson, Asok, Prince, Mattathil Radhakrishnan, Anoopraj and Puthenpurayil, Sunil Kumar P. R.. "Real-time hardware emulation of wind turbine model with asynchronous generator under hardware-in-the-loop platform" International Journal of Emerging Electric Power Systems, vol. 22, no. 5, 2021, pp. 533-546.	UGC-CARE List Group II	ISSN / eISSN: 2194-5756 / 1553-779X	Peer Reviewed, [ESCI & SCOPUS indexed]
10	Ginu Ann George, Fossy Mary Chacko, Prince A, Jayan M.V., Sunil Kumar S., “Charge Equalization of Electric Vehicle Battery System using Intelligent Controller” International Journal of Vehicle Design, Inderscience Publications,	UGC-CARE List Group II	ISSN online 1741-5314 ISSN print 0143-3369	Peer Reviewed, Impact factor (Clarivate Analytics) 2.037 [SCIE and SCOPUS indexed]
11	Thomas T., Asok P., "Event analysis and real-time validation of DFIG based wind energy system with grid reactive power exchange under sub-synchronous and super-synchronous modes," Engineering Reports, Wiley; Vol.2 (12), 2020	UGC-CARE List Group II	Online ISSN:2577-8196	Peer Reviewed, [ESCI & SCOPUS indexed]

12	Chacko, F.M., George, G.A., M.V., J. and A., P. (2020), "Improved multifunctional controller for power quality enhancement in grid integrated solar photovoltaic systems", World Journal of Engineering, Vol. 17 No. 4, pp. 585-598.	UGC-CARE List Group II	ISSN: 1708-5284	Peer Reviewed, [ESCI and SCOPUS indexed]
13	Prince A, Praveen Tiwari, "Coherency Identification of Generating Units based on Neural Network", Journal of Electrical Engineering, Volume 11, Edition:3 / 2011, pp 75-81	UGC-CARE List Group II	ISSN 1582-4594	Peer Reviewed [SCOPUS Indexed]

2. Books/Chapters Published/Edited

Sl no.	Title of book (with page numbers in case of book chapters), publisher, Nature of authorship (Author/Editor)	Nature of Publisher (International/ National)	ISSN/ISBN NO.
1	Shankar, G., Suthar, B., Balasubramanian, R., Ashok, P. (2010). Vulnerable Load Bus Identification Using Radial Basis Neural Network. In: Das, V.V., Stephen, J., Thankachan, N. (eds) Power Electronics and Instrumentation Engineering. PEIE 2010. Communications in Computer and Information Science, pp 87–90, vol 102. Springer, Berlin, Heidelberg.	International (Publisher : Springer, Berlin, Heidelberg) Part of the book series: Communications in Computer and Information Science (CCIS, volume 102)	Print ISBN: 978-3-642-15738-7 Online ISBN: 978-3-642-15739-4
2	Ani Harish, Prince, A., Jayan, M.V. (2023). "A Data-Driven Machine Learning Model for Transmission Line Faults Detection and Classification for the Smart Grid" Smart Energy and Advancement in Power Technologies. Lecture Notes in Electrical Engineering, pp 763–773, vol 926. Springer, Singapore.	International (Publisher : Springer Nature Singapore)	Print ISBN 978-981-19-4970-8 Online ISBN 978-981-19-4971-5
3	Ginu Ann George, Tomson Thomas, M. V. Jayan, and A. Prince "Charge Equalization of Battery System Considering State of Charge Variations in Electric Vehicle Application", Advanced Aspects of Engineering Research, pp. 26-33, Vol. 10, 29 April 2021.	International (Publisher: B P International)	ISBN 978-93-90888-85-6 (Print) ISBN 978-93-90888-93-1 (eBook)
4	Thomas, T, Anoopraj, M. R., Prince, A., & George, G. A. (2021). An Introduction to Wind Energy Conversion System with Low Voltage Ride-Through Capability. Advanced Aspects of Engineering Research, pp 112–122, Vol. 9, 2021.	International (Publisher: B P International)	ISBN 978-93-90888-74-0 (Print) ISBN 978-93-90888-79-5 (eBook)
5	George G.A., Jayan M.V., Chacko F.M., Prince A. "Novel Single Balancing Circuitry for Modular Cell for Electric Vehicle Applications." In: Nath V., Mandal J.K. (eds), pp 835–846, vol 673. Springer, Singapore.	International Lecture Notes in Electrical Engineering, Springer, Singapore.	ISSN: 1876-1100 eISSN: 1876-1119

6	Fossy Mary Chacko, Jayan M. V., Prince A. "Load harmonics extraction based decoupled control of grid connected solar photovoltaic system", IOP Conf. Series: Materials Science and Engineering 396 (2018) 012049. DOI 10.1088/1757-899X/396/1/012049	International 2018 IOP Conf. Ser.: Mater. Sci. Eng. 396	Online ISSN: 1757-899X Print ISSN: 1757-8981
7	Sreekumar, A., Prince, A., George, G.A. (2023). "An Improved Regenerative Braking and Drive Cycle Analysis of BLDC Motor for Electric Vehicles Using Fuzzy Logic". In: Namrata, K., Priyadarshi, N., Bansal, R.C., Kumar, J. (eds) Smart Energy and Advancement in Power Technologies. Lecture Notes in Electrical Engineering, vol 927. Springer, Singapore. https://doi.org/10.1007/978-981-19-4975-3_45	International (Publisher : Springer Nature Singapore)	Print ISBN 978-981-19-4974-6 Online ISBN 978-981-19-4975-3

3. **Paper presentation in seminars/conferences/full paper in conference proceedings**

Sl no.	**Title of paper**	**Name of conference and by whom organized**	**Whether International/National/State/University level**
1	Modal phase identification from WAMS data using Hilbert transform and S-transform: A comparative study	IEEE Recent Advances in Intelligent Computational Systems, Trivandrum, India, 2011	International
2	LVRT capability evaluation of DFIG based wind energy conversion system under type-A and type-C grid voltage sags	2020 IEEE International Conference on Power Electronics, Smart Grid and Renewable Energy (PESGRE2020)	International
3	Comparative study between ZSI, SBI and CFSI	IEEE International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI), Chennai, India, 2017.	International
4	Analysis and validation of low voltage ride-through capability for DFIG based wind energy conversion system under symmetrical grid voltage sags	IEEE International Conference on Power Electronics Applications and Technology in Present Energy Scenario (PETPES), 2019, NITK.	International

5	Voltage Harmonics-Based Islanding Detection for Grid-Tied Photovoltaic Systems	Fourth International Conference on Electrical, Computer and Communication Technologies (ICECCT), Erode, India, 2021.	International
6	Power distribution network model of Jail substation of Guwahati city for EMT analysis	IEEE International Conference on Next Generation Intelligent Systems (ICNGIS), India, 2016	International
7	Load frequency control using linear quadratic regulator and differential evolution algorithm	IEEE International Conference on Next Generation Intelligent Systems (ICNGIS), India, 2016	International
8	Real-time simulation of DC-DC flyback converter using FSS Mini	IEEE International Conference on Next Generation Intelligent Systems (ICNGIS), India, 2016	International
9	Robustness evaluation of SMO based speed-position estimation in BLDC motor	IEEE International Conference on Advances in Electrical Engineering (ICAEE), Vellore, India, 2014	International
10	Robustness evaluation of SMO in sensorless control of BLDC motor under DTC scheme	IEEE International Conference on Power Signals Control and Computations (EPSCICON), Thrissur, India, 2014	International
11	ANFIS Based Fault Locator for STATCOM Compensated Lines	IEEE Second International Conference on Next Generation Intelligent Systems (ICNGIS), India, 2022	International
12	Power Quality Enhancement with Grid Integrated Solar Photovoltaic fed BESS using Unified Power Quality Conditioner	IEEE Second International Conference on Next Generation Intelligent Systems (ICNGIS), India, 2022	International
13	Machine Learning Based LVRT Enhancement of Wind Energy Conversion System using SFCL	IEEE International Conference on Innovations in Science and Technology for Sustainable Development 2022	International

List of STTP/FDP/Workshops organized

Sl No	Name of the Workshop	Sponsored by	Period	Venue	Role
1	Aplication s of microcontrollers, artificial intelligence, and simulation tools ***in power electronics***	DTE	4/02/2008 to 15/02/2008	RIT Kottayam	Coordinator
2	Potential research Areas in drives and power system	TEQIP Phase -II	08/07/2014 to 12/07/2014	RIT, Kottayam	Coordinator

3	Renewable energy technology and energy conservation with emphasis on solarification	TEQIP Phase -II	15/07/2014 to 17/07/2014	RIT, Kottayam	Coordinator
4	Familiarization of Advanced Equipment in Electrical and Electronics Engineering	TEQIP Phase -II	04/10/2016 to 06/05/2016	RIT, Kottayam	Coordinator
5	Electrical System Design	TEQIP Phase -II	13/03/2017 to 15/03/2017	RIT, Kottayam	Coordinator
6	Workshop on Technical Writing and Professional Ethics	QIP-AICTE	03/03/2017	RIT, Kottayam	Coordinator
7	Great Places to Work 2017: Opportunities Needs and Practices	TEQIP Phase -II	20/01/2017 to 21/01/2017	RIT ,Kottayam	Coordinator
8	Research Aspects of Power Electronics in Modern Power System-Simulation and Experimental Analysis	TEQIP Phase -II	08/08/2016 to 12/08/2016	RIT ,Kottayam	Coordinator
9	Research Perspectives On Solar And Wind Energy Systems	QIP-AICTE	15/01/2018 To 27/01/2018	RIT, Kottayam	Coordinator
10	DTE Kerala sponsored training programme on Recent Research Trends in Industrial drives and Power systems	EE Dept., RIT Kottayam	23-27, March 2021	RIT Kottayam	Coordinator
11	AICTE Sponsored FDP on Current Research Topics in Power Electronics, Power Systems and Electric Drives	EE Dept., RIT Kottayam	12-19, May 2021	RIT Kottayam	Coordinator
12	ATAL FDP on Power Electronics for Power Systems	EE Dept., RIT Kottayam	06-10, December 2021	RIT Kottayam	Coordinator