# SRI SHRIDEVI CHARITABLE TRUST (R.)



# SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

Sira Road, NH-4, Tumakuru - 572 106. Karnataka



NAME: Dr.TANUJA K.S

**Designation: Associate Professor** 

**Department: Electrical and Electronics Engineering** 

Date of Joining	01.07.2011		
Professional Experience	Teaching	Industry	Research
Experience	22	Nil	05

Contact Details				
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Academic Background			
• Ph.D	VTU, Belagavi	Awarded on 10 -07-2024	
• M Tech	Bangalore University	First Class	
• BE	Bangalore University	First Class	

Areas of Interest		
Power Systems	• FACTS	
Power Electronics	Genetic Algorithm	

# **Significant Publications**

- 1. No. of Papers Published in Journals (5)
  - 1. Tanuja K.S, Shanmukha Swamy, H.B.Gurushankar, H.A. Dinesha " Dynamic Bandwidth

- Allocation Scheme For Enhanced Performance in 5G Point-To-Point Networks" has been published in ICTACT Journal on Communication Technology(IJCT), Volume 14, No 02, pp.2945-2951, June 2023.
- 2. Tanuja Koppa Shankaregowda, Dr.Shankaralingappa Channappa Byalihal, "Optimal Location of Multiple FACTS Devices in N-1 Contingency Conditions Using Traditional Genetic Algorithm," International Journal of Power Electronics and Drive Systems (IJPEDS), Vol.14, No. 3, September 2023,pp 1876-1884. [SCOPUS]
- 3. Tanuja Koppa Shankaregowda, Dr.Shankaralingappa Channappa Byalihal, "Economic Flexible AC Transmission System devices placement/Sizing with (N-1) Contingency using Genetic Algorithm," Indonesian Journal of electrical Engineering and Computer Science(IJEECS), Vol.32, No. 2, November 2023, pp.664-675. [SCOPUS]
- 4. Tanuja Koppa Shankaregowda, Dr.Shankaralingappa Channappa Byalihal, "A Novel Accelerated Genetic Algorithm-Based Technique for Optimal Placement of Multiple FACTSDEV in Power Systems under N-1 Contingency" has been Accepted in the Journal International Journal of Power Electronics and Drive Systems (IJPEDS).[SCOPUS]
- 5. Dr. Hanumesh, Tanuja K.S, Dr. Venugopal , Dhamodharan, "PV Powered UPQC using ANFIS Controller in a Standard Microgrid Test Environment" has been Accepted in the Journal International Journal of Power Electronics and Drive Systems (IJPEDS).[SCOPUS]

#### 2. No. of Papers Presented in Conferences (2)

- Tanuja K.S, Shankaralingappa C B, "Optimal Location and Sizing of FACTS Controllers In Transmission System Using Genetic Algorithm Under Contingency Condition," International Conference on Power, Control and Sustainable Energy Systems(ICPCSES-2022), Aarhus University, Denmark, July 28-30, 2022. [SCOPUS INDEXED]
- 2. Tanuja K.S, Shankaralingappa CB" Optimal Location of FACTS Controllers Under Contingency Condition Using GA Technique" presented on 24/02/2024 and Published in International Multi-Conference(Springer) on Advances in information Technology, Communication and Energy Systems (AITCES) Organised by Dr. AIT Bengaluru, India. [SPRINGER]
- Tanuja K.S "Analysis of PWM Inverter Fed Squirrel Cage IM with PI SIM" presented in National Conference on Emerging Trends in Engineering Sciences and Management(NCESM)-2016, held on 23<sup>rd</sup> and 24<sup>th</sup> March 2016, organized by SIET, Tumakuru.

#### 3. List of FDP's/Workshops (Numbers and Description)

- 1. Solar Energy, SSIT, 1st & 2nd Dec 2006
- 2. Wind power generation, SSIT, 31st March & 1st April 2006
- 3. Recent Advances in Power Electronics, SSIT, 9<sup>th</sup> & 10<sup>th</sup> Dec 2007
- 4. Web Design, SSIT, 11<sup>th</sup> 13<sup>th</sup> Nov 2005
- 5. Introduction to Research Investigation in Recent years in Electrical & Electronics Engineering, 16<sup>th</sup> March 2009, BNMIT, Bangalore
- 6. One day workshop on power system simulation using standard MiPower Software package,

4<sup>th</sup>July 2009, PRDC, Bangalore

- 7. "Electrical CAD" M.S. Engineering College, Bangalore, 6th to 8th DEC-2012
- 8. Five Days Faculty development program (FDP) "National Board of Accreditation (NBA), conducted 23<sup>rd</sup> to 28<sup>th</sup> July 2015, SIET, Tumkuru
- 9. Faculty development program "Intelligent Algorithms & Applications", conducted from 17<sup>th</sup> to 19<sup>th</sup> Jan 2018 at Dr.Ambedkar Institute of Technology, Bengaluru.
- 10. One day work shop "New Model Curriculum for First Year B.E/B.Tech-CBCS Detailed Syllabus (2018-19) as per outcome-based Education (OBE) format including course outcomes (CO) and Bloom's Taxonomy" Under TEQIP-1.3 for the course Basic Electrical Engineering & Lab under EEE Board on 14/05/2018 at MS Ramaiah Institute of Technology, Bengaluru.
- 11. One day work shop "Role of Ratings, Rankings & Accreditation in Creating Institutions of Eminence and Excellence" organized by BITES on 21st JULY 2018 at PES University, Bengaluru.

## **Long Term Course attended**

One Month Course in "ELECTRICAL CAD" at Edu CADD Training Service, Tumkur, Feb 2013

#### **Research Conclave**

 Tanuja K.S, Shankaralingappa CB" Optimal Location of FACTS Controllers in Transmission System Under Contingency Condition Using Knowledge based Approach" presented the poster on 02/12/2023 in the First Research Conclave-2023, Organised by Dr. AIT Bengaluru, 560056...

## 4. Patents Published (Numbers and Description)

- Tanuja K.S has been published on "CEILING LIGHT" Design No. 393124-001 (20/08/2023)
   In patent office, Government of India
- 2. Anzum, Shankaralingappa C B, Arathi P.B, Tanuja K.S has been published on "APPLICATION OF HYBRID TLBO-PSO ALGORITHM FOR ALLOCATION OF DISTRIBUTED GENERATION AND STATCOM" Patent number: 202341055724 (01/09/2023).
- 3. Tanuja K.S, Shankaralingappa C B, Arathi P.B has been Filed on "ECONOMIC FLEXIBLE AC TRANSMISSION SYSTEM DEVICES PLACEMENT /SIZING WITH (N-1) CONTINGENCY USING GENETIC ALGORITHM" Patent number: 202341074769 (15/12/2023).
- 4. Arathi P.B , Shankaralingappa C B, Tanuja K.S has been Filed on "OPTIMAL PROTECTIVE RELAYING

SCHEME OF DISTRIBUTED GENERATION CONNECTED DISTRIBUTION NETWORK USING

PARTICLE SWARM OPTIMIZATION-GRAVITATIONAL SEARCH ALGORITHM TECHNIQUE" Patent

number: 202341075463 (22/12/2023).

5.Tanuja K.S has been published on "WIRELESS CHARGING PAD" Design No.412475-001(3-04-

2024) patent office Government of India

- 5. KSCST Student Projects Funded /Funded project and consultancy (Numbers and Information)
  - 1. "Bi-Model Spy copter" Project has done by Chethan T.R and Chandan Kumar It has been selected as one of the best project.
  - 2. "Alternate Energy From Busy Road Supporting Smart Street Lightning System With Fault Detection using GSM" project done by Rahul K R, Mobin Benny ,Shivannand. The Project has been selected as best project and sponsored with 5000/ cash prize. Project selected under the category of circuit branch for the VTU sponsored Project from Department of EEE.

## 6. Project Guided details:

Total Project guided in academic is 16

#### **Achievements**

#### 9. Editorial Board Member

Worked has a Board of Examiners (BOE), VTU Belagavi in the Academic Year 2022-23

#### 10. Reviewer for

"International Conference on Internet of Things, Communication, Intelligence and Computing "(IC-ICIC-2023) held on 5<sup>th</sup> and 6<sup>th</sup> May 2023, organized by Shridevi Institute of Engineering and Technology, Tumakuru, Karnataka, India-572106

#### 11. Professional Membership

Life member of Indian society of Technical Education (M.I.S.T.E)