

Dr. N.G.P. INSTITUTE OF TECHNOLOGY

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

News Letter

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Mr. S.S. Karthikeyan, AP/EEE

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Ms. D. Nirmala, AP/EEE



ABOUT THE DEPARTMENT

The Electrical & Electronics Engineering Department was one of the first few disciplines that was started at the time of inception of the Institution in the year 2007. It strives to produce electrical engineers, who can participate in technical advancements, enable social upliftment of the country and to meet growing global challenges. At present, the department is equipped with the qualified and experienced faculty members having a broad spectrum of specialization. The department consists of eleven laboratories with state of the art facilities. The department has collaboration with National Instruments, Siemens and other corporates to cater the needs of student community. The department offers an undergraduate course, BE in Electrical & Electronics Engineering and a PG Programme in ME Power Electronics and Drives.

Student Editors:

Mr. K.E.Boopathi Rajan, Final Year/EEE

Mr. K. Prabhakaran, Final Year/EEE

COMMON PROGRAMMES FROM APRIL 2015 TO MARCH 2016



Career Day on 08th July 2015.

Chief Guest 1: Mr. N. Jayabal, Executive Director, Salzer Electronics Ltd, Coimbatore.

Chief Guest 2: Mr. G. Ravichandran, General Manager, Lakshmi Electrical and Control Systems Limited, Coimbatore.

Chief Guest 3: Mr. Aravind Govindaraj, Business Consultant /UTL Technologies Ltd, Bangalore.

Chief Guest 4: Capt. N. Saravanan (Retd.) Indian Army, Coimbatore.



Association Inauguration on 31st July 2015.

Chief Guest: Dr L. Ashok Kumar, Professor/EEE, PSG College of Technology.



National Level Technical Symposium (**HENOSIS'15**) on 19th September 2015. Project Expo at Dr. NGPIT.

Judge: Mrs S. Rajeswari, Asso Prof/EEE, Info Institute of Technology, Coimbatore.



A Two day National Level workshop on "Advances in Renewable Energy Technologies" from 20.08.15 to 21.08.15.

Chief Guest: B. Somasundaram, Manager, Plant Engineering, ZF Wind Power, Coimbatore.



Orientation Program on IEEE Membership and its benefits on 21-10-2015.

SPONSORED PROJECTS & RESEARCH GRANTS

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Name of Investigator/ Co- ordinators	Project Title	Funding Agency	Amount Sanctioned
Dr.K.Porkumaran Principal Dr.M.Gopinath Prof/EEE Mr.E.Kannapiran AP/EEE	Advances in Renewable Energy Technologies	ISRO	25,000
Dr.K.Porkumaran, Principal/Dr.NGP IT	Torque Ripple and Harmonics reduction in BLDC drive using SVPWM Cascaded Multilevel Inverter	IEEE	5,000
Mr.A.Senthilnathan, AP/EEE	Real-time Public Road Transport Information & Monitoring System	IEEE	5,000

PAPERS PRESENTED/ PUBLISHED/ AWARDS RECEIVED/CONSULTANCY/ SHORT TERM COURSES/ LECTURES DELIVERED/ FORTH COMING EVENTS/ OTHERS

Papers Presented

- [1]. **Dr. S. Jaganathan**, has Presented the paper "ELECTRICAL ENERGY AUDITING OF EDUCATIONAL INSTITUTION" under "RENEWABLE ENERGIES" conference held at Government college of Technology on 07-04-2016.
- [2]. **Dr. M. Gopinath**, has Presented the paper "SOLAR BASED POWER CONTROL FOR HEART PUMPING APPLICATIONS" under "RENEWABLE ENERGIES" conference held at conference held at Government college of Technology on 07-04-2016.
- [3]. Ms. C. Maheswari, has Presented the paper "COMPARITIVE ANALYSIS OF VARIOUS POWER ELECTRONIC CONVERTER FOR SWITCHED RELUCTANCE MOTOR DRIVE" under "RENEWABLE ENERGIES" conference held at conference held at Government college of Technology on 07-04-2016.
- [4]. Mr. A. Senthilnathan, has Presented the paper "HARMONIC REDUCTION IN BLDC MOTOR USING CARRIER BASED PWM SWITCHING CASCADED MULTILEVEL INVERTER" under "RENEWABLE ENERGIES" conference held at conference held at Government college of Technology on 07-04-2016.
- **[5]. Ms. D. Nirmala**, has Presented the paper "ARDUNIO CONTROLLER BASED PRODUCTION MONITORING AND DATA LOGGING SYSTEM" under "POWER ELECTRONICS IN SMART GRID" conference held at R.M.D. Engineering college, Chennai on 02-05-2016.
- **[6]. Mr. K. Bharanidharan**, had Presented the paper "ARDUNIO CONTROLLER BASED PRODUCTION MONITORING AND DATA LOGGING SYSTEM" under "POWER ELECTRONICS IN SMART GRID" conference held at R.M.D. Engineering college, Chennai on 02-05-2016.

PAPERS PUBLISHED

- [1]. C. Maheswari, Dr Rani Thottungal (June 2015) "A MODIFIED BRIDGELESS CONVERTER FOR SRM DRIVE WITH REDUCED RIPPLE CURRENT", International Journal of Power Electronics and Drive Systems, Vol 6, no: 2, pp 362-369. (Annexure II)
- [2]. C. Maheswari, A. C. Divya (May 2015) "A NEW CONVERTER FOR SWITCHED RELUCTANCE MOTRO WITH REDUCED TORQUE AND CURRENT

- RIPPLE" International of Applied Engineering Research" Vol 10, Special Issue, pp 9894-9899. (Annexure II)
- [3]. M. Gopinath, S. Sathiyamoorthy "A SURVEY ON CONVERTER TOPOLOGIES IN VARIOUS APPLICATIONS" ARPN Journal of Engineering and Applied Sciences, Vol 10, issue: 07. April 2015, pp. 2796-2801. (Annexure II)
- [4]. M. Gopinath, D.Saravanan "AN EFFICIENT PFC ZETA CONVERTER-BASED PMBLDCM DRIVE FOR AIR-CONDITIONERS" International Journal of Applied Engineering Research, Vol 10, issue: 07. MAY 2015, pp. 17393-17409. (Annexure II)
- [5]. M. Gopinath, M.Ramesh "A BRIEF ANALYSIS ON CONDUCTION MODE OF BRIDGELESS SINGLE ENDED PRIMARY INDUCTANCE CONVERTER" International Journal of Applied Engineering Research, Vol 10, issue: 13. June 2015, pp. 33148-33151. (Annexure II)
- [6]. M. Gopinath, G.Gopu "CLOSED LOOP ANALYSIS OF BRIDGELESS SEPIC CONVERTER FOR DRIVE APPLICATION" International Journal of Power Electronics and Drive System, vol 06, issue: 2. June 2015. (Annexure II)
- [7]. Dr.M.Gopinath, Dr. S. Jaganathan, "DESIGN AND SIMULATION OF AN ADVANCE RECTIFIER STAGE TOPOLOGY WITH MPPT FOR HYBRID ENERGY SYSTEM" MEDWELL Vol15, Issue1Page no, 162-168, March 2016. (Updated List)
- [8]. Dr. M. Gopinath, "A BRIDGELESS HIGH GAIN CUK CONVERTER FOR POWER FACTOR CORRECTION AND REDUCTION OF HARMONIC DISTORTION IN BLDC MOTOR" International Journal of Control Theory and Applications, Vol 09, issue: 02, pp. 1071-1082 MAY 2016. (Annexure II)
- [9]. Dr. M. Gopinath, "NOVEL HIGH GAIN SEPIC CONVERTER WITH THE TAPPED INDUCTOR MODEL OPERATING IN DISCONTINUOUS CONDUCTION MODE FOR POWER FACTOR CORRECTION", International Journal of power electronics and drives systems, Vol 07, issue: 02, JUNE 2016. (Annexure II)
- [10]. C. Maheswari, S. Priyanga "COMPARATIVE STUDY OF DIFFERENT TYPES OF CONVERTERS FOR SWITCHED RELUCTANCE MOTOR DRIVE" Pakistan Journal of Bio Technology, Vol 13, Special issue, pp 187-192, May 2016.(Annexure II)

Invited Lecture:

[1]. Dr. M. Gopinath, was invited to deliver a lecture on "MODELING AND SIMULATION STUDY ON MATRIX CONVERTER" on 28.08.15 at Muthayammal College of Engineering, Namakkal.

WORKSHOP /GUEST LECTURE/ CONFERENCE/ SYMPOSIA/ TRAINING PROGRAMME/ SEMINAR/ OTHERS

WORKSHOPS:

- **1.** A Two day National level workshop on "Advances in Renewable Energy Technologies" from 20.08.15 to 21.08.15.
- **2.** Mr. R. Srinivasa Prabu, Business Manager, LIVEWIRE Coimbatore, has conducted a workshop about "INDUSTRIAL AUTOMATION USING LADDER PROGRAMMING" on 31-03-16.

GUEST LECTURES:

- [1]. **Mr. V. M. Manivasagam**, Associate Professor/Mech, delivered a lecture "THERMODYNAMIC CONCEPTS IN POWER PLANTS" on 29.09.15 to III year EEE students.
- [2]. **Dr S. Jaganathan**, Prof/ECE has delivered a lecture "CHARACTERISTICS AND APPLICATIONS OF OPERATIONAL AMPLIFIER" on 19.10.15 to II year EEE students.
- [3]. **Mrs. D. Hemapriya**, Assistant Professor/BME has delivered a lecture "TIMER AND VOLTAGE REGULATOR "on 19.10.15 to II year EEE students.
- [4]. **Mrs. Nagalakshmi Venugopal**, Associate Professor/CSE has delivered a lecture "PROCESS SCHEDULING AND SYNCHRONIZATION IN MULTIPROCESSOR" on 19.10.15 to final year EEE students.
- [5]. **Dr. S. Pugalendhi**, Scientist & Professor TNAU Coimbatore, has delivered a lecture "OPPORTUNITIES TO RAISE PUBLIC APPRECIATION ON SCIENTIFIC ISSUES FOR THE DEVELOPMENT OF NATION" on 26-02-16.
- [6]. **Dr. K. Raghavan**, Associate Professor, Indian Institute of Technology, Gandhinagar, Gujarat, has delivered a lecture "DRIVES FOR ELECTRICAL VEHICLES" on 03-03-16.
- [7]. **Dr. S. Jaganathan, Dr. M. Gopinath**, has delivered a lecture "ACADEMIC DEVELOPMENT CELL" on 24-06-16.
- [8]. **Dr. S. Jaganathan, Ms. V. Ranganayaki**, has delivered a lecture "E-LEARNING" on 27-06-16.

SYMPOSIA:

[1]. A National level technical symposium "HENOSIS" was conducted on 19.9.15.

SEMINAR:

- [1]. A National level seminar Title "SUSTAINABLE ENERGY MANAGEMENT" on 21.08.15.
- [2]. **Mr. Ramasundhar**, Founder Switchgear Training and Recruitment Solutions, Coimbatore, Retd.DGM, L&T Switchgear Ltd, Coimbatore, has delivered a lecture "CAREER OPPORTUNITIES FOR ELECTRICAL ENGINEERING IN CORE FUNCTIONS" on 13-04-16.

PROFESSIONAL CHAPTERS AND SOCIETIES

Name of Chapter/Society	Date of Inauguration	Chief Guest
IEEE	31.07.2015	Dr L.Ashok Kumar, Prof/EEE, PSG College of
		Technology

STUDENTS' ACTIVITIES

PAPER PRESENTATION / POSTER PRESENTATION / PROJECT DISPLAY / OTHERS

VOTER AWARENESS PROGRAME:



The IEEE Student's Branch (05511) and Department of Electrical & Electronics Engineering of Dr.N. G. P. Institute of Technology organized Voter awareness programme on 10.05.2016 at Kalapatti, Coimbatore.

MINI PROJECT:



The students of EEE batch (2013-2017) has conducted and participated in "Mini Project Expo" on 25-09-2015 held at Dr.NGP Institute of technology.

Chief Guest: Dr.K.Porkumaran, Principal, Dr.NGP IT.

INDUSTRIAL VISIT:





- 1. The students of EEE batch (2014-2018) has visited SWELECT SOLAR POWER PLANT on 06-02-16 at Karur.
- 2. The Students of EEE batch (2013-2017) has visited Industrial visit to ReGen Power Tech Pvt. Ltd., Udumalpet, Tamil Nadu, on 30/09/2015.

PAPER PRESENTATION:

Name of the Student	Name of the Event	Organiser	Date	Prize Won
ABHINOV RAGHAVAN	Photo Contest	Akshaya college of Engineering and Technology	16-09-15	I prize
T.M.ASARUDHEEN	Paper Presentation	Akshaya college of Engineering and Technology	16-09-15	I prize
ABHINOV RAGHAVAN	Paper Presentation	Akshaya college of Engineering and Technology	16-09-15	I prize
ABHINOV RAGHAVAN	Paper Presentation	Dr N.G.P IT	19-09-15	III prize
M.SWARNARATHNA	Paper Presentation	Dr N.G.P IT	19-09-15	III prize

SPORTS ACTIVITIES:

Name of the Student	Nature of the Sports	Organiser	Date	Prize Won
Student	Event			
ANAND M	BALL BADMINTON	TAMILNADU COLLEGE OF ENGINEERING	21.09.15 & 22.09.15	Participated
ANAND S	TABLE TENNIES	KUMARAGURU COLLEGE OF TECHNOLOGY	15.08.15 to 17.08.15	II Prize
ANAND S	TABLE TENNIES	PARK COLLEGE OF ENGINEERING AND TECHNOLOGY	12.08.15 to 14.08.15	II Prize
MAUTHUKANI B	CRICKET	PSG COLLEGE OF TECHNOLOGY	18.09.15	Participated
KARTHIKEYAN S	CRICKET	KPR INSTITUTE OF ENGINEERING AND TECHNOLOGY	19.09.15	Participated
KAMALAKANN AN G	CRICKET	KUMARAGURU COLLEGE OF TECHNOLOGY	17.08.15 to 19.08.15 & 21.08.15	Participated