SCHEDULE

"AICTE Sponsored STTP-3 on
Battery Management and Control Techniques in EVs"
14th to 19th December 2020

Day 1: 14/12/2020		
Time	**Programme**	
9.00 am – 10.00 am	Inauguration Key Note Address by Dr. H. P. Kincha, Former Vice Chancellor, Visvesvaraya Technological University, Belagavi.	
	Overview and History of Electric Vehicles	
10.00 am – 11.30 am	Session 1:	**Environmental Impacts and History of Modern transportation.** By- Dr. H N Nagaraja Pro-VC GE, University, Dehradun
11.30 am – 11.45 am	**Tea/Coffee Break**	
11.45 am – 01.15 pm	Session 2:	**EV/HEV Configuration and Architecture.** By- Dr. L. Ashok Kumar, Professor, Dept. of EEE PSG College of Technology, Coimbatore.
1.15 pm -2.15 pm	**Lunch Break**	
2.15 pm – 3.45 pm	Session 3:	**Control Applications to HEV.** By-Dr Bhanu Pratap Asst. Professor, Dept. of EEE NIT, Kurukshetra

Day 2: 15/12/2020		
Time	**Programme**	
	Battery Technology	
10.00 am – 11.30 am	Session 1:	**Battery Technology and Future trends.** By-Mr. Gopal Athani, Automotive Electrical/Electronic Systems Engineer, Tata Technologies, Pune.
11.30 am – 11.45 am	**Tea/Coffee Break**	
11.45 am – 01.15 pm	Session 2:	**Battery Management Systems.** By-Dr. Abhijeet Kshirsagar, Asst. Professor, Dept. of Electrical Engg. IIT, Dharwad
1.15 pm -2.15 pm	**Lunch Break**	
2.15 pm – 3.45 pm	Session 3:	**Energy Management in EVs.** By-Dr Chandrasekhar P, Asst. Professor, School of Electrical Sciences, IIT, Bhubaneshwar.

Day 3: 16/12/2020		
Time	**Programme**	
	Electric Drives	
10.00 am – 11.30 am	Session 1:	**Electric Drives for EV applications.** By-Dr. Ramulu, Asst. Professor, Department of Electrical Engineering, NIT, Warangal.
11.30 am – 11.45 am	**Tea/Coffee Break**	
11.45 am – 01.15 pm	Session 2:	**Suitability of BLDC Motor for EV Application.** By-Dr. Ragavan K Associate Professor, Dept. Electrical Engineering, IIT, Gandhinagar.
1.15 pm -2.15 pm	**Lunch Break**	
2.15 pm – 3.45 pm	Session 3:	**SRM Drives for EVs.** By- Dr. D. S. More, Professor, Electrical Engg. Dept. Walchand College of Engg. Sangli.

Day 4: 17/12/2020		
Time	**Programme**	
	P. E. Converters and Controls	
10.00 am – 11.30 am	Session 1:	**P. E. Converters for EVs.** By- Dr. B. V. Madiggond, Professor and Head, Dept.of EEE Hirasugar Institute of Technology, Nidasoshi.
11.30 am – 11.45 am	**Tea/Coffee Break**	
11.45 am – 01.15 pm	Session 2:	**Safety, Testing , Regulation and Standards in EVs.** By-Dr. Sanjeevkumar R. A., Asst. Professor, Dept. of EEE PDA College of Engineering, Gulbarga.
1.15 pm -2.15 pm	**Lunch Break**	
2.15 pm – 3.45 pm	Session 3:	**Control Techniques for P. E. Converters.** By- Dr. Suryanarayana K, Professor, EEE Dept. NMAMIT, Nitte.

Day 5: 18/12/2020		
Time	**Programme**	
	Modeling and Simulations	
10.00 am – 11.30 am	Session 1:	**Modeling and Simulations of Batteries and Balancing.** By-Dr. K. Selvajyoti, Asst. Professor, E&C Engg. Dept. IIITDM, Kancheepuram.
11.30 am – 11.45 am	**Tea/Coffee Break**	
11.45 am – 01.15 pm	Session 2:	**Modeling and Simulations of Batteries and Balancing.** By-Dr. K. Selvajyoti, Asst. Professor, E&C Engg. Dept. IIITDM, Kancheepuram.
1.15 pm -2.15 pm	**Lunch Break**	
2.15 pm – 3.45 pm	Session 3:	**G2V, V2G Communication.** By- Dr. Dharavath Kishan, Asst. Professor, Dept. of EEE NIT, Surthkal.

Day 6: 19/12/2020		
Time	**Programme**	
	Charging of EVs	
10.00 am – 11.30 am	Session 1:	**EMI/EMC issues in Power Converters used in EVs.** By- Ms. Uma Maheswari Y, Manager Technology, Pramura Software Private Limited, Coimbatore.
11.30 am – 11.45 am	**Break**	
11.45 am – 01.15 pm	Session 2:	**Research Avenues in EVs.** By- Dr Sreejith S, Asst. Professor, Dept. of EEE, NIT, Silchar
1.15 pm -2.15 pm	**Lunch Break**	
2.15 pm – 3.45 pm	Session 3:	Test & Valedictory -

H. O. D.
Electrical & Electronics Engg.
Hirasugar Institute of Technology
NIDASOSHI-591236.

"AICTE Sponsored STTP-3 on
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Proceedings of STTP-3

Day: 1	Date: 14/12/2020
Session: 1	**"Environmental Impacts and History of Modern transportation"**
Resource Person:	**Dr. H N Nagaraja Pro-VC GE, University, Dehradun**
Contents delivered:	In this session, impact of pollution on environment was discussed. Because of green house effect, global warming takes place. There will be rise in the sea level, depletion of ozone layer due to pollution. It also affects the ocean climate. Different modes of transportation such as vehicles, ships, train and aviation also causes environmental pollution. The evolution of vehicles was discussed during the session. Electric vehicles are advantageous over conventional fuel vehicles. Brief information about different types of electric vehicles such as BEV, PHEV, Fuel cell electric vehicle, etc was given.

Day: 1	Date: 14 /12/2020
Session: 2	**"EV/HEV Configuration and Architecture"**
Resource Person:	**Dr. L. Ashok Kumar, Professor, Dept. of EEE,** **PSG College of Technology, Coimbatore**
Contents delivered:	The rapid consumption of fossil fuel and increased environmental damage caused by it have given a strong impetus to the growth and development of fuel-efficient vehicles. Hybrid electric vehicles (HEVs) have evolved from their inchoate state and are proving to be a promising solution to the serious existential problem posed to the planet earth. Not only do HEVs provide better fuel economy and lower emissions satisfying environmental legislations, but also they dampen the effect of rising fuel prices on consumers. HEVs combine the drive powers of an internal combustion engine and an electrical machine. The main components of HEVs are energy storage system, motor, bidirectional converter and maximum power point trackers (MPPT, in case of solar-powered HEVs). The performance of HEVs greatly depends on these components and its architecture. In this session, an extensive review on essential components used in HEVs such as their architectures with advantages and disadvantages, choice of bidirectional converter to obtain high efficiency, combining ultra capacitor with battery to extend the battery life, traction motors' role and their suitability for a particular application were discussed. Inclusion of photovoltaic cell in HEVs is a fairly new concept and has been discussed in detail.

Day: 1	Date: 14/12/2020
Session: 3	**"Control Applications to HEV"**
Resource Person:	**Dr Bhanu Pratap Asst. Professor, Dept. of EEE, NIT, Kurukshetra**
Contents delivered:	An HEV combines some of the benefits of electric vehicles (efficient and clean motive power supplied by an electric motor, regenerative braking) with the features of a conventional vehicle that consumers expect (convenient refueling, long driving range). However, these benefits come with increased complexity in the power train design. Instead of having one motive power source, there are two that can each act independently or in combination. The complexity of an HEV power train together with the vehicle's many operating modes demand that a supervisory or hybrid controller be developed at the vehicle level to guarantee stable and consistent operation. Inherent in this controller is a logical structure to guide the vehicle through its various operating modes and a dynamic control strategy associated with each operating mode to specify the vehicle demands to each subsystem controller. Capturing all possible operating modes and guaranteeing smooth dynamic control transitions from one operating mode to the next are significant challenges in the controller design. A formal method for designing this supervisory controller has been discussed in this session.

Day: 2	Date: 15/12/2020
Session: 1	**"Battery Technology and Future trends"**
Resource Person:	**Mr. Gopal Athani, Automotive Electrical/Electronic, Systems Engineer, Tata Technologies, Pune**
Contents delivered:	Batteries are widely used due to increase in the usage of portable and mobile equipments, so does the battery technology. It was discussed about the history of electrification in automotive application. Looking at the very basics of battery technology, a battery is a combination of two or more electrochemical cells. There is a wide variety of different battery and cell technologies available. These range from the established non-rechargeable technologies such as zinc-carbon and alkaline batteries to rechargeable batteries that have moved from NiCd through NiMH cells to the newer lithium ion rechargeable batteries. Another area of battery technology that is becoming more important is the green or environmental aspects and commercial aspects.

Day: 2	Date: 15/12/2020
Session: 2	**"Battery Management Systems"**
Resource Person:	**Dr. Abhijeet Kshirsagar, Asst. Professor, Dept. of Electrical Engg. IIT, Dharwad**
Contents delivered:	Battery Management Systems (BMS) are used in many industrial and commercial systems to make the battery operation more efficient and to keep the battery heath in good condition away from destructive state to increase battery life time. The main functions of a Battery Management System for electric vehicles are Battery protection, Battery monitoring (SOC and SOH) and battery optimization. In this session it was explained about evolution in batteries and challenges faced with battery chemistry and also explained about structure of different type of batteries. It was discussed about the terms Safe Operating Area (SOA), Energy Efficiency, Cell Modeling and sources of Unbalance in cells of a battery. It was explained about BMS Mediated Charging & Discharging methods and BMS Solutions like Custom vs OTS, BMS topologies and also discussed about EV Battery Reuse Challenges.

Day: 2	Date: 15/12/2020
Session: 3	**"Energy Management in EVs"**
Resource Person:	**Dr Chandrasekhar P, Asst. Professor, School of Electrical Sciences, IIT, Bhubaneshwar.**
Contents delivered:	Energy management systems are the key technologies of EV and HEV, they have functions of managing, monitoring, and recovering the energy of the vehicle propulsion system which is used to release, store, distribute, and braking time. In this session it was discussed about growth of EV in India. And further discussed about hybridization factor for different types of electrical vehicles. It was explained about Electrical vehicle classification such as series, parallel and series parallel combinations and terms like efficiency improvement, complexity of design and control of application with examples.EMS operation chart on PHEV and its challenges were discussed.

Day: 3	Date: 16/12/2020
Session: 1	**"Electric Drives for EV applications"**
Resource Person:	**Dr. Ramulu, Asst. Professor, Department of Electrical Engineering, NIT, Warangal.**
Contents delivered:	In this session, six types of the drive train systems of electric motor drives for EVs were discussed. Furthermore, the requirements of EVs on electric motor drives were presented. The comparative investigation on the efficiency, weight, cost, cooling, maximum speed, and fault-tolerance, safety, and reliability is carried out for switched reluctance motor, induction motor, permanent magnet blushless DC motor and brushed DC motor drives in order to find most appropriate electric motor drives for electric vehicle applications. The study shows that switched reluctance motor drives are the prior choice for electric vehicles.

Day: 3	Date: 16/12/2020
Session: 2	**"Suitability of BLDC Motor for EV Application"**
Resource Person:	**Dr. Ragavan K Associate Professor, Dept. Electrical Engineering, IIT, Gandhinagar.**
Contents delivered:	Use of Electric Vehicles is increasing due to zero carbon emission,its sustainability and energy saving capability. Comparison of performance, efficiency and reliability of different motors which can be used as drive train of electric vehicles is discussed during the session. Characteristics of vehicle load & various motors used for EV's and operation of BLDC motor for EV applications were discussed. Movement of mmf, operation of trapezoidal back emf motor and Operation of sinusoidal back emf motor are discussed.

Day: 3	Date: 16/12/2020
Session: 3	**"SRM Drives for EVs"**
Resource Person:	**Dr. D. S. More, Professor, Electrical Engg. Dept.** **Walchand College of Engg. Sangli.**
Contents delivered:	Permanent magnet synchronous motors are widely accepted in automotive applications. The high torque density, high rotational speed with maximum efficiency in electric vehicle applications is technically challenging for motor design. However, these machines are expensive and difficult to work at high-temperature harsh environment due to permanent magnets demagnetization features. Alternatively, switched reluctance motors can provide similar output characteristics and a wider speed. Introduction to battery operated EV was given in brief. Construction & working principle of SRM for EVs were discussed in detail. Torque & speed control of SRM were discussed which proved its suitability. Converters for SRM & their Operating modes were discussed. Closed loop speed control of SRM shows its compatibility to EV applications. Applications of SRM for EVs were elaborated.

Day: 4	Date: 17/12/2020
Session: 1	**"P. E. Converters for EVs"**
Resource Person:	**Dr. B. V. Madiggond, Professor and Head, Dept.of EEE** **Hirasugar Institute of Technology, Nidasoshi.**
Contents delivered:	In this session, Power electronic converter and their vehicular applications were discussed. Power electronic converter requirements and evolution of PE in EVs are explained. Classification of DC-DC Converters with their topologies and comparison of DC-DC Converter topologies were discussed.

Day: 4	Date: 17/12/2020
Session: 2	**"Safety, Testing , Regulation and Standards in EVs"**
Resource Person:	**Dr. Sanjeevkumar R. A., Asst. Professor, Dept. of EEE** **PDA College of Engineering, Gulbarga.**
Contents delivered:	Introduction to remote attestation and intelligent intrusion detection systems and intrusion prevention systems were discussed. Cyber Forensics, High Assurance architecture, Non-cryptographic security solutions, Sensor signal anti-spoofing and application of artificial intelligence in cyber security were discussed.

Day: 4	Date: 17/12/2020
Session: 3	**"Control Techniques for P. E. Converters"**
Resource Person:	**Dr. Suryanarayana K, Professor, EEE Dept. NMAMIT, Nitte.**
Contents delivered:	Need of power Electronic converters and Impact of source, load and control parameters variation in DC-DC converters are discussed. Need of converter modeling, transfer functions are explained. The regulatory design concepts and compensator design are discussed and demonstrated the hardware systems.

Day: 5	Date: 18/12/2020
Session: 1	**"Modeling and Simulations of Batteries and Balancing"**
Resource Person:	**Dr. K. Selvajyoti, Asst. Professor, E&C Engg. Dept.** **IIITDM, Kancheepuram.**
Contents delivered:	Session started with the discussion of role of battery in Automotive sector & certain issues with batteries. Further session Continued with the discussion about what are the importance of mathematical modeling, different types of modeling, modeling of integrated equivalent circuit & electrical equivalent circuit. State space modeling & discrete state space model is discussed and demonstrated. Hands on session on battery modeling were carried out and all participants were actively involved in practice.

Day: 5	Date: 18/12/2020
Session: 2	**"Modeling and Simulations of Batteries and Balancing"**
Resource Person:	**Dr. K. Selvajyoti, Asst. Professor, E&C Engg. Dept.** **IIITDM, Kancheepuram.**
Contents delivered:	Modeling and simulation of batteries in MATLAB is done hands on, pulse discharge test is discussed with the help of flowchart & Kalman filter is discussed in MATLAB by hands on with participants. Curve fitting is done in MATLAB, error in estimated value of OCR, SOC & estimation of range/charge of EV were discussed.

Day: 5	Date: 18/12/2020
Session: 3	**"G2V, V2G Communication"**
Resource Person:	**Dr. Dharavath Kishan, Asst. Professor, Dept. of EEE, NIT, Surthkal.**
Contents delivered:	In this session, the current status and implementation impact of V2G/G2V (Vehicle- to-Grid and Grid-to-Vehicle) technologies are discussed on Distributed Generation (DG) systems, illustrating requirements, benefits, challenges and strategies for interfaces of both individual vehicles and fleets. Two of the key aspects for the diffusion of these technologies related to batteries and charging systems were highlighted.

Day: 6	Date: 19/12/2020
Session: 1	**"EMI/EMC issues in Power Converter- EVs"**
Resource Person:	**By- Uma Maheswari Y, Manager Technology, Pramura Software Private Limited, Coimbatore.**
Contents delivered:	Electromagnetic compatibility of power electronic systems becomes an engineering discipline and it should be considered at the beginning stage of a design. Thus, a power electronics design becomes more complex and challenging and it requires a good communication between EMI and Power electronics experts. Three major issues in designing a power electronic system are Losses, EMI and Harmonics. These issues affect system cost, size, efficiency and quality and it is a tradeoff between these factors when we design a power converter. Discussed on EMI-EMC aspects of electrical systems for vehicles and effects of electromagnetic fields in organs and Tissues.

Day: 6	Date: 19/12/2020
Session: 2	**"Research Avenues in EVs"**
Resource Person:	**Dr. Sreejith S, Asst. Professor, Dept. of EEE, NIT, Silchar**
Contents delivered:	In recent years, due to the pressure of energy crisis and environmental pollution, Electric Vehicle (EV) has gained opportunities for development. With the large-scale construction of charging station, the wide use of EV will cause the rapid growth of the power load in local areas. As the essential part of grid loads in the future, the charging station load forecasting, especially the short-term load forecasting, will play a very important role in production arrangement, economic dispatching, and safe operation of electric power system. In this session various research avenues in electric Vehicle are highlighted. Reduction of losses in Vehicle to Grid (V2G) and Grid to Vehicle (G2V) technology and management of power at charging were discussed. Cyber security issues in Electric Vehicle were discussed in the session.

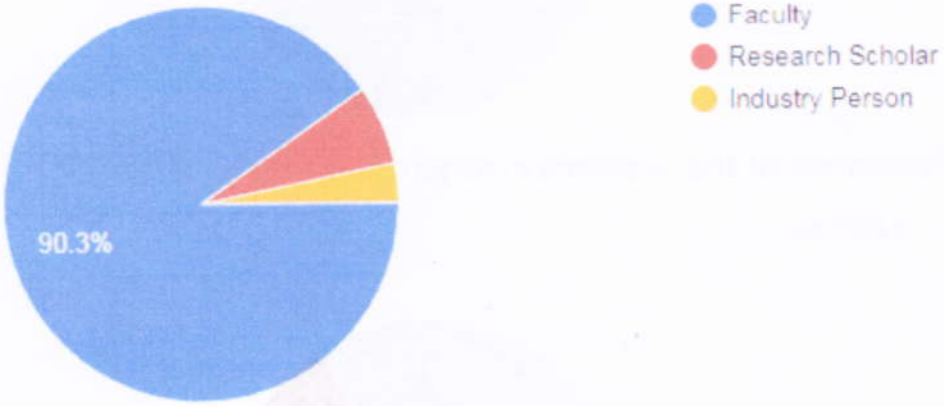
7/1/21
Dr. B. V. Madiggond
Program Coordinator
HOD, EEE Dept.
Electrical & Electronics Engg
Hirasugar Institute of Technology
NIDASOSHI-591236.

Overall Feedback (14.12.2020-19.12.2020) : AICTE Sponsored One Week STTP on "Battery Management and Control Techniques in EVs" organized by Dept of EEE, H.S.I.T Nidasoshi, Belagavi, Karnataka

Impact Analysis

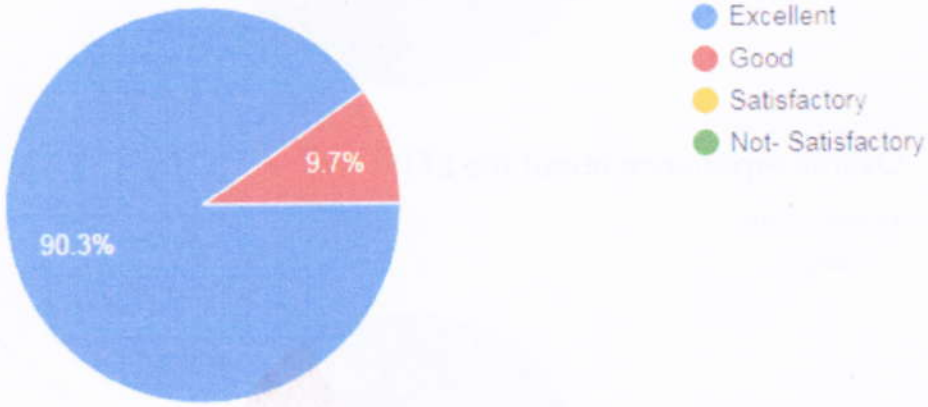
Profession

31 responses



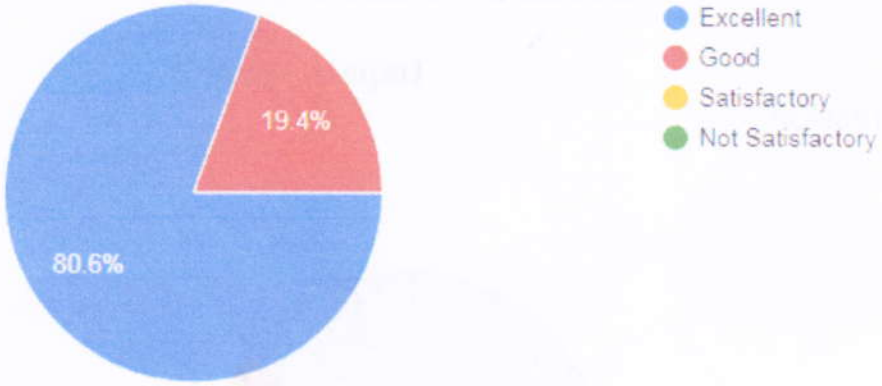
Effectiveness in conduction of STTP

31 responses



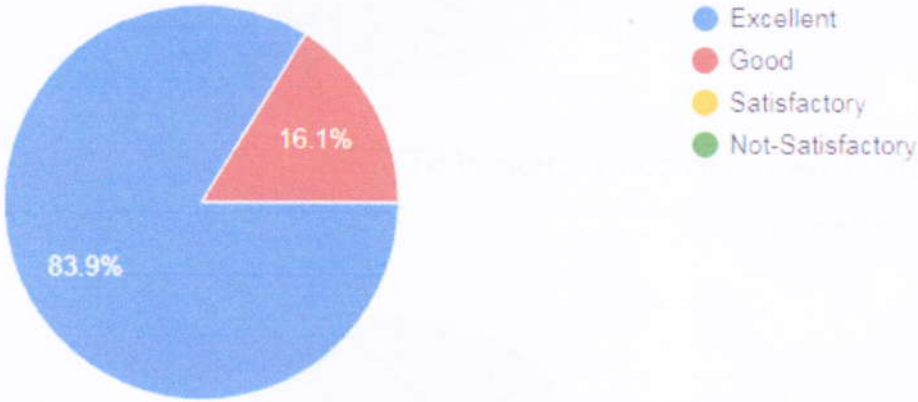
Relevance of the contents delivered

31 responses



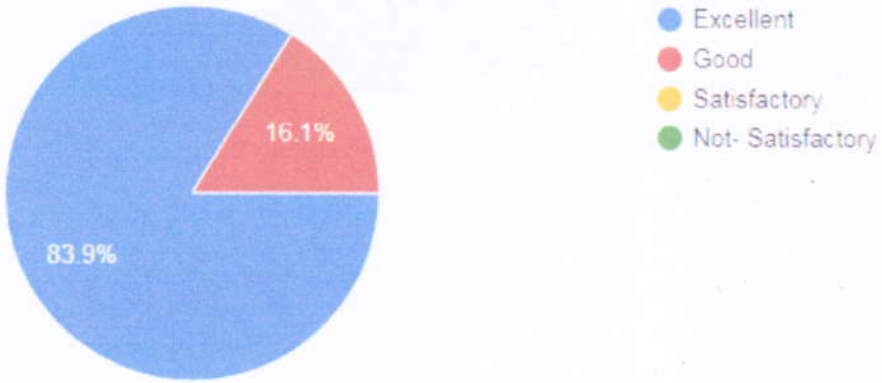
Relevance of the sessions in regard to the title of the STTP

31 responses



Overall experience about the STTP

31 responses



30/12/21

Programme Coordinator

H. O. D.
Electrical & Electronics Engg
Hirasugar Institute of Technology,
NIDASOSHI-591236.

Annexure -I

SHORT TERM TRAINING PROGRAM

FEED BACK FORM

1. AICTE File No. & Date of Offer Letter : 34-66/9/FDC/STTP/Policy-1/2019-20
   10/08/2020

2. Name of the Coordinator :Dr. Basavaraj Madiggond

3. Name and Address of the Institution :Hirasugar Institute of Technology, Nidasoshi
   Nidasoshi, Taluka: Hukkeri
   District: Belagavi, State: Karnataka
   PIN: 591236

4. Title of the STTP :Battery Management and Control Techniques in EVs

5. Dates :Phase-1 23/11/2020 to 28/11/2020
   Phase-2 07/12/2020 to 12/12/2020
   Phase-3 14/12/2020 to 19/12/2020

6. Venue :Hirasugar Institute of Technology, Nidasoshi- 591236

7. Total No. of participants proposed and actually attended

Phase 1: Proposed	88	Attended	67
Phase 2: Proposed	102	Attended	66
Phase 3: Proposed	104	Attended	73

8. No. and date of the offer letter

Letter No.	Date
34-66/9/FDC/STTP/Policy-1/2019-20	10/08/2020

9. Total amount sanctioned :Rs. 2,93,333/-

10. No. and date of Sanction letter:

Letter No.	Date	Grant Released
34-66/9/FDC/STTP/Policy-1/2019-20	10/08/2020	Rs. 2,93,333/-

11. Total expenditure incurred in Conducting the Faculty Development Programme: Rs. 2,79,000/-

12. Grant received from various agencies other than AICTE for this Faculty Development Programme

Sl. No.	Name of Agency	Grant Received
	-Nil-	
	Total	

13. Details of internal revenue if any generated by the Institution/Department on account of this Programme: -Nil-

14. Briefly mention about the technological/ academic/or any other benefit generated by conducing this programme with respect to a) the institution, b) the faculty; c) students; d) industry/society.

The programme has dealt with a systematic exposition of topics such as Environmental Impacts and History of Modern transportation, EV/HEV Configuration and Architecture, Control Applications to HEV, Battery Technology and Future trends, Battery Management Systems, Energy Management in EVs, Electric Drives for EV applications, Suitability of BLDC Motor for EV Application, SRM Drives for EVs, P. E. Converters for EVs, Safety, Testing, Regulation and Standards in EVs, Control Techniques for P. E. Converters, Modeling and Simulations of Batteries and Balancing, Research Avenues in EVs, G2V V2G Communication, Power Electronics Applications to EV Charging Stations and Research Avenues in EVs. Besides giving a detailed discussion on the basic principles and practices, the program has provided hands on training on modeling on converters.

The course contents have been taught by eminent experts in the field having adequate teaching and research experience. This course will be beneficial to the faculty from EEE, E&C, and Mechanical Engineering disciplines as a potential and analytical tool in their research activities.

This institution has envisioned bringing in research excellence to cater to the needs of ever demanding industry and the society as well. This Programme has opened up several avenues for the research enthusiasts working as faculty members. The quality of work which they are about to pursue in future with the knowledge they acquired through this Programme, would certainly reflect on the enhancement of our students community.

This Programme also threw light on the potential areas where there is tremendous opportunity to start an enterprise. The entrepreneurial aspirants can make use of the vital inputs given by the eminent industrialist who were the resource persons on the occasion.

We hope the number of research scholars in our institution will shoot up in the years to come, which is beneficial to our students. The knowledge transfer that has happened on the purposeful occasion would reach the young and budding technocrats is a fact. The Programme not only promotes the research culture in the country but also helps to address the economic hurdles like unemployment. On the whole it has produced fruitful results by motivating the participants of other educational institutions, industries and to our own faculty members.

15. The soft as well as hard copy of the detailed study material/proceedings of the programme must be furnished to the Council.

30/1/21

Dr. B. V. Madiggond
Program Coordinator
H. O. D.
Electrical & Electronics Engg
Basavar Institute of Technology
BIDASOSHI-591236.

30/01/21

Dr. S. C. Kamate

M/s. P. G. GHALI & CO.
Chartered Accountant
Flat No.1, DRK Empire, 3rd Floor, Above Reliance Trends, Khanapur Road,
Tilakwadi, BELGAUM - 590 006.
E mail : pgghalico@gmail.com, capraveenghali@gmail.com
☎ : Off : +91 831 4210470
+91 831 4230920
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Annexure

UTILIZATION CERTIFICATE FOR THE FINANCIAL YEAR 2020-21

Name of the Scheme under which Grant was sanctioned AQIS

AICTE File No. : 34-66/9/FDC/STTP/Policy-1/2019-20

Name of Co-ordinator : Dr. Basavaraj Madiggond

Dates of the Programme : 1) 23rd to 28th November 2020
2) 07th to 12th December 2020
3) 14th to 19th December 2020

Title of the STTP Programme : Battery Management and Control Techniques in EVs

Sl. No.	AICTE Sanction Order/Letter No. & Date under which grant was sanctioned	Amount (Rs.)	
1.	34-66/9/FDC/STTP/Policy-1/2019-20	2,93,333/-	Certified that out of the grant-in-aid of Rs. 2,93,333/- (Two lack ninety three thousand three hundred thirty three rupees) sanctioned by the AICTE during the financial year 2020-21 in favour of Principal (Hirasugar Institute of technology, Nidasoshi) as per letter mentioned in the margin, Rs.00 on account of unspent balance of previous year, Rs.00 on account of other income / receipts, a sum of Rs. 2,79,000/- has been utilized for the purpose for which it was sanctioned and the balance of Rs. 14,333/- remained unutilized at the end of the year.

Certified that I have satisfied myself that the conditions on which the grant-in-aid was sanctioned have been duly fulfilled and that I have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Dr. Basavaraj Madiggond
Program Coordinator
Prof. & HOD, EEE Dept.
HIT, Nidasoshi

Shri. S. S. Dhange
Accountant
Hirasugar Institute of Technology
NIDASOSHI-591 236

Dr. S. C. Kamate
PRINCIPAL
Hirasugar Institute of Technology
NIDASOSHI-591236.

Name of the Chartered Accountant: Shri. P. G. Ghali & Co.

P.G. GHALI & CO. CHARTERED ACCOUNTANTS

Address: Flat No.1, DRK Empire,
3rd Floor, Above Reliance Trends,
Khanapur Road, Tilakwadi,
Belgaum-590006
UDIN:21215756AAAABJ1586

Date: 27/01/2021

M/s. P. G. GHALI & CO.
Chartered Accountant
Flat No.1, DRK Empire, 3rd Floor, Above Reliance Trends, Khanapur Road,
Tilakwadi, BELGAUM - 590 006.
E mail : pgghalico@gmail.com, capraveenghali@gmail.com
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+91 831 4230920
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Annexure-III

FORMAT FOR STATEMENT OF EXPENDITURE

AICTE File No. : 34-66/9/FDC/STTP/Policy-1/2019-20

Sanction No. and Date	Grant Sanctioned (Rs)	Details of expenditure Incurred Item wise	Amount Rs. (in each head)	No. of Participants	Duration of the Programme (with dates)
34-66/9/FDC/STTP/Policy-1/2019-20	2,93,333/-	1. Honorarium to Course Coordinator	15000/-	Phase 1 67 participants	Phase 1 23/11/2020 to 28/11/2020
		2. Honorarium to Resource person	2,25,000/-		
		3. Provision for payment Lab attendant engaged during lab practices	9,000/-	Phase 2 66 participants	Phase 2 07/12/2020 to 12/12/2020
		4. Miscellaneous Charges (Electronic Gadgets, Tea and Tiffin, Banner & Flowers, Xerox and Printing etc)	30,000/-		
		Total	**2,79,000/-**	Phase 3 73 participants	Phase 3 14/12/2020 to 19/12/2020
		Grant Received	**2,93,333/-**		
		Balance to be Received	**14,333/-**		

Title of the Programme : Battery Management and Control Techniques in EVs

Name of the Coordinator: Dr. Basavaraj Madiggond

Dr. Basavaraj Madiggond
Program Coordinator
Prof. & HOD, EEE Dept.
HIT, Nidasoshi

Dr. S. C. Kamate
PRINCIPAL
Hirasugar Institute of Technology
NIDASOSHI-591236.

Shri. S. S. Dhange
Accountant
Hirasugar Institute of Technology
NIDASOSHI-591 236

Name of the Chartered Accountant: Shri. P. G. Ghali

P.G. GHALI & CO. CHARTERED ACCOUNTANTS

Address: Flat No.1, DRK Empire,
3rd Floor, Above Reliance Trends,
Khanapur Road, Tilakwadi,
Belgaum-590006
UDIN:21215756AAAABJ1586

Date: 27/01/2021