

SRI VENKATESWARA COLLEGE OF ENGINEERING

(An Autonomous Institution, Affiliated to Anna University, Chennai)

Pennalur, Sriperumbudur Taluk – 602117.

Department of Mechanical Engineering



A Report on

“NATIONAL WORKSHOP ON CHALLENGES IN ELECTRIC AND HYBRID VEHICLES (NWCEHV 2K19)”

Venue	: Seminar Hall, Dr. A.C.Muthiah Central Library
Date	: 22.03.2019 to 23.03.2019
Time	: 09:00am to 12:30pm & 01:30pm to 04:00pm


Coordinator






Hod

Dr. S. RAMESH BABU, M.E., Ph.D
Professor & Head
Department of Mechanical Engineering
Sri Venkateswara College of Engineering
Pennalur, Sriperumbudur (TK) - 602117
Tamilnadu, INDIA

Department of Mechanical Engg.
23.11.18

Submitted to the Principal

Sir,

Sub: Requesting permission to organize a National workshop-Reg

Department of Mechanical Engineering is proposed to conduct a Two day National workshop on "**Challenges in Electric and Hybrid Vehicles**" during **22-23 March 2018**. It is planned to invite eminent persons from industries to deliver invited talk during the two days of the workshop. Soft copy of the workshop Proceedings will be given to the participants..

The details of expenditure are enclosed herewith.

We request your kind approval and also an amount of **Rs.25, 000/** (Rupees twenty five thousand only) may be sanctioned to organize the workshop. Proposals will be submitted to **SERB, CSIR and DRDO** requesting financial support to organize the workshop. If the grant is received sanctioned amount from the college will not be utilized.

We also request your kind approval to utilize the unspent amount of **Rs. 18,108**(Rupees eighteen thousand one hundred and eight only) from the National workshop we organized during March 2018.

S. Sar 23/11/18
Dr. S. Saravanan
Prof/ME

Ramunth
HOD/ME 23/11/18

To
Dr. SSN
Ram
26/11/18

To: HOD-ME
Approved
SLP
23/11

To: AB
We shall
Consider the
meeting of
Expenditure
from the budget
allocated for ME
SLP

BROCHURE

WORKSHOP ADVISORY COMMITTEE

CHIEF PATRON Dr. A. C Muthiah, Chairman, Governing Council	
PATRON Dr. M Sivanandham, Secretary	Co-PATRON Dr. S. Ganesh Vaidyanathan, Principal

Mr. I Meenakshi Sundaram, Director, M/s Gates Unitta (I) Ltd
Mr. R Senthikumar, Asst. Director-Training, NPTI
Mr. Nandkumar Karale, Head-Vehicle Engg, M/s Ather Energy
Mr. Vignesh Jayenthiran, M/s Valeo India Private Limited
Prof. G Nagarajan, CEG, Anna University, Chennai
Prof. P Narasimman, Professor, TPGIT, Vellore
Dr. Anand Gurupatham, DGM, Power Train, M/s Renault Nissan Ltd
Mr. G Senthil kumar, Divisional Manager M/s Ashok Leyland Ltd.

Workshop Chair	Dr. S Ramesh Babu HoD/ME
Convenor and Organizing Secretary	Dr. S Saravanan, Professor
Coordinators	Mr. R Kalyanasunder, Asst. professor Mr. S. Arumugam, Asst. professor Dr. M. Gajendiran, Asst. professor Mr. G Logachandar, Asst. professor

National Workshop on CHALLENGES IN ELECTRIC AND HYBRID VEHICLES (NWCEHV2K19) 22nd- 23rd March 2019



Organized by
DEPARTMENT OF MECHANICAL ENGINEERING
SRI VENKATESWARA COLLEGE OF ENGINEERING
(An Autonomous Institution affiliated to Anna University, Chennai)

ABOUT THE INSTITUTION:

Sri Venkateswara College of Engineering was established in the year 1985, with three academic departments. Ever since, it has grown into a premier institution imparting knowledge and excellence through academic, research and infrastructural developments. The college offers 10 UG and 10 PG courses in various Engineering disciplines. It is actively involved in many research projects funded by various industries and organizations, supported by well dedicated faculty, staff and student community. The institute is accredited by NAAC and recently granted Autonomous status by UGC.

ABOUT THE DEPARTMENT:

The Department of Mechanical Engineering is one of the three major departments established during the beginning of the College. The department has well experienced faculty and staff members of proven ability and administrative skills. It has well equipped state-of-the-art laboratories that cater to the needs of the students. The department also takes up industrial consultancy works from various industries. Three PG and one UG programmes are offered by the department. The UG programme is accredited by National Board of Accreditation (NBA) since 1998.

THEME OF THE WORKSHOP:

NWCEHV 2019 is focussed to explore the recent developments of Electric and Hybrid Vehicles and also to create a platform for initiating further developments in the field of Electric and Hybrid Vehicles. This workshop also aims to find a methodology to create awareness in increasing the utilization of Electric and Hybrid Vehicles. It is also focussed to bring the progress in Electric and Hybrid Vehicles to meet the international standards with customer safety and satisfaction.

This workshop on Challenges in Electric and Hybrid Vehicles is devoted to bring the experts from automotive industries, scientists and researchers in the field of electric and hybrid vehicles to discuss the regional, national and international issues with electric and hybrid vehicles and develop a feasible practical plan for effective speedy growth in achieving sustainable energy and environment.

PARTICIPANTS:

Faculty members, Scientists, Research scholars, PG and UG students of Mechanical, Automobile, Electrical & Energy Engineering and Engineers engaged in teaching and research aiming to progress their understanding of future trends in Electric and Hybrid Vehicles can register for the workshop.

IMPORTANT DATES

Registration	: 01.03.2019
Intimation of acceptance (by email)	: 12.03.2019

REGISTRATION FEES:

Industry	Rs. 1000/-
Researcher/Academia	Rs. 500/-
UG/PG students	Rs. 300/-

Registration fee is to be paid as demand draft in favour of 'The Principal, Sri Venkateswara College of Engineering' payable at Chennai. It includes conference kit, proceedings, certificates, lunch and refreshment.

ACCOMODATION & TRANSPORTATION:

Accommodation will be arranged in nearby hotels on payment basis to participants on request. All participants can commute using college buses from nearby area. The details of bus routes are available on our website www.svce.ac.in.

Address for correspondence:

Dr. S Saravanan,
Organizing Secretary, NWCEHV2K19,
Dept. of Mechanical Engineering,
Sri Venkateswara College of Engineering,
Pennalur, Sriperumbudur tk., Tamilnadu - 602117.
Mob. -9994752977, 9043734824
Email - nwcehv2k19@svce.ac.in

National Workshop on Challenges in Electric and Hybrid Vehicles (NWCEHV 2K19)

March 22-23, 2019

The poster features a green and yellow gradient background. At the top left is the AAERI logo with the text 'EDUCATION IN AUSTRALIA' and 'AAERI'. At the top right is the MMT logo, a gear with 'MMT' written below it. The main title 'National Workshop on Challenges in Electric and Hybrid Vehicles' is written in large, bold, blue and purple letters. Below the title is '(NWCEHV2K19)' and '22-23 March 2019' in a dark green rounded rectangle. The bottom section contains two images: on the left, a green electric car with a charging cable; on the right, a cutaway diagram of a blue car with labels for 'CDI internal combustion engine', 'Integrated power electronics', 'Battery pack', 'Final drive', '5-speed manual transmission & automated clutch', and 'Electric machine'. At the bottom left is the Sri Venkateswara College of Engineering logo, a circular emblem with 'SRI VENKATESWARA COLLEGE OF ENGINEERING' and '1984' around it. To the right of the logo, the text reads 'Organized by DEPARTMENT OF MECHANICAL ENGINEERING SRI VENKATESWARA COLLEGE OF ENGINEERING (An Autonomous Institution affiliated to Anna University, Chennai)'.

ORGANISED BY

**DEPARTMENT OF MECHANICAL ENGINEERING
SRI VENKATESWARA COLLEGE OF ENGINEERING
PENNALUR-602117, SRIPERUMBUDUR**

ACTIVITY REPORT

Department of Mechanical Engineering of **SRI VENKATESWARA COLLEGE OF ENGINEERING**, SRIPERUMBUDUR. TAMILNADU have organised a **National workshop on Challenges in Electric and Hybrid Vehicles** (NWCEHV 2K19) during March 22-23,2019.



The banner features a light blue background with a white border. At the top left is the AAERI logo with the text 'EDUCATION IN AUSTRALIA' and 'AAERI'. At the top right is the MMT logo, a gear with 'MMT' inside. The main title 'National Workshop on Challenges in Electric and Hybrid Vehicles' is written in large, bold, red and yellow letters. Below the title, '(NWCEHV2K19)' is written in blue. A dark green rounded rectangle contains the dates '22-23 March 2019'. On the left is an image of a green car with a charging cable. On the right is a technical diagram of a car chassis with labels for 'Distributor', '5-speed manual transmission & automated clutch', and 'Final drive'. At the bottom, a dark green banner contains the text 'Organized by DEPARTMENT OF MECHANICAL ENGINEERING SRI VENKATESWARA COLLEGE OF ENGINEERING (An Autonomous Institution affiliated to Anna University, Chennai)'. On the left of this banner is the college's circular logo with an Om symbol and the motto 'विद्या परा देवता'.

National Workshop on

Challenges in Electric and Hybrid Vehicles

(NWCEHV2K19)

22-23 March 2019

Organized by

DEPARTMENT OF MECHANICAL ENGINEERING
SRI VENKATESWARA COLLEGE OF ENGINEERING

(An Autonomous Institution affiliated to Anna University, Chennai)

COORDINATORS:

Dr.S.Saravanan, Professor
Mr. R Kaliyanasunder, Asst. professor
Mr.S.Arumugam, Asst. professor
Dr.M.Gajenduran, Asst. Professor
Mr. G. Logachandar, Asst. Professor

RESOURCE PERSON:

- **Dr.Shankar Venugopal**,Vice president,M/s Mahindra & Mahindra
- **B.K.Raj Mohan**,GM (Product Development) ,M/s Mahindra & Mahindra
- **Nandkumar Karale**, Head-Vehicle Engg, M/s Ather Energy
- **Vignesh Jayenthiran** , M/s Valeo India Private Limited
- **Mr.B.Prakash**, Principal member- (R & D), NVH,M/s TAFE
- **Mr. I. Meenakshi Sundaram**,
Director-Technical & Commercial,M/s Gates Unitta (I) Ltd, Sriperumbudur

NATIONAL **W**ORKSHOP ON **C**HALLENGES IN **E**LECTRIC AND **H**YBRID **V**EHICLES
(NWCEHV 2K19)-March 22-23, 2019

Programme schedule

Day	Session No	Timing in hrs	Title	Expert
22.03.19		8.30-9.15	Registration	
		9.15-10.30	Inauguration	Dr.Shankar Venugopal Vice president M/s Mahindra & Mahindra
		10.30-10.45	Tea break	
	I	10.45-11.30	Electric vehicles and the challenges ahead	B.K.Raj Mohan General Manager (Product Development) M/s Mahindra & Mahindra
	II	11.30-12.30	Chief Engineer's view of EV evolution	Nandkumar Karale, Head-Vehicle Engg, M/s Ather Energy
		12.30-13.30	Lunch	
	III	13.30-14.30	Design Fundamentals of Hybrid and Electric Power train	Vignesh Jayenthiran , M/s Valeo India Private Limited
23.03.19	IV	9.00-10.15	NVH challenges in Electric vehicle	Mr.B.Prakash Principal member- (R & D), NVH M/s TAFE
		10.15-10.30	Tea break	
	V	10.30-12.00	Role of Electronics in New Generation IC engines	Mr. I. Meenakshi Sundaram Director-Technical & Commercial M/s Gates Unitta (I) Ltd, Sriperumbudur
		12.00-13.00	Valedictory	

SRI VENKATESWARA COLLEGE OF ENGINEERING

PENNALUR-602117, SRIPERUMBUDUR

DEPARTMENT OF MECHANICAL ENGINEERING

Solicits your esteemed presence for the

INAUGURAL FUNCTION

of

NATIONAL WORKSHOP

ON

CHALLENGES IN ELECTRIC AND HYBRID VEHICLES

(NWCEHV 2K19)

22nd MARCH 2019 9.00 a.m

Chief Guest

Dr. SHANKAR VENUGOPAL

Vice President

M/s Mahindra & Mahindra Ltd

will inaugurate and deliver the inaugural address

Dr. M. Sivanandham

Secretary, SVCE

will deliver the presidential address

Dr. S. Ganesh Vaidyanathan

Principal, SVCE

will preside over the function

Venue: Seminar Hall, Dr.A.C. Muthiah Central Library

National Workshop on Challenges in Electric and Hybrid Vehicles

(NWCEHV2K19)

Attendance Sheet on March 22nd and 23rd 2019

Sl.No	Participant Name	Institution Name	22/03/19	23/03/19
1	GUNDU VARDHAN	Jyothishmathi Institute of Technology and Science	<i>Vardhan</i>	<i>Vardhan</i>
2	VARALA GANESH	Jyothishmathi Institute of Technology and Science	<i>Varala</i>	<i>Varala</i>
3	G. SHANKAR BABU	Jyothishmathi Institute of Technology and Science	<i>G. Shankar</i>	<i>G. Shankar</i>
4	VEMULA SHASHIDRASAI	Jyothishmathi Institute of Technology and Science	<i>Shashi</i>	<i>Shashi</i>
5	MALYALA VAMSHI KRISHNA	Jyothishmathi Institute of Technology and Science	<i>Vamsi</i>	<i>Vamsi</i>
6	V.VINEETH	Jyothishmathi Institute of Technology and Science	<i>Vineeth</i>	<i>Vineeth</i>
7	PALTHI AKHIL	Jyothishmathi Institute of Technology and Science	<i>Palthi</i>	<i>Palthi</i>
8	MADISHETTY HARISH KUMAR	Jyothishmathi Institute of Technology and Science	<i>Harish</i>	<i>Harish</i>
9	PULI HARI	Jyothishmathi Institute of Technology and Science	<i>P. Hari</i>	<i>P. Hari</i>
10	A. RAJA	Jyothishmathi Institute of Technology and Science	<i>A. Raja</i>	<i>A. Raja</i>
11	RASURI VINAY	Jyothishmathi Institute of Technology and Science	<i>R. Vinay</i>	<i>R. Vinay</i>
12	SARAMPALLY NAVEEN	Jyothishmathi Institute of Technology and Science	<i>S. Naveen</i>	<i>S. Naveen</i>
13	CHEEKOTI Koushik KUMAR	Jyothishmathi Institute of Technology and Science	<i>Cheekoti</i>	<i>Cheekoti</i>
14	V. AKHIL	Jyothishmathi Institute of Technology and Science	<i>V. Akhil</i>	<i>V. Akhil</i>
15	KARWA NIKHIL	Jyothishmathi Institute of Technology and Science	<i>Nikhil</i>	<i>Nikhil</i>
16	SIRIMALLA PAVAN KUMAR	Jyothishmathi Institute of Technology and Science	<i>Pavan</i>	<i>Pavan</i>
17	NAVVOOTHU BHARGAV	Jyothishmathi Institute of Technology and Science	<i>Bhargav</i>	<i>Bhargav</i>
18	CHILUVERU SUJIL	Jyothishmathi Institute of Technology and Science	<i>Sujil</i>	<i>Sujil</i>
19	GUDURI AKSHAY KUMAR	Jyothishmathi Institute of Technology and Science	<i>G. Akshay</i>	<i>G. Akshay</i>
20	B. RAVITEJA	Jyothishmathi Institute of Technology and Science	<i>B. Raviteja</i>	<i>B. Raviteja</i>
21	GYAJANGI SAI RAMANA	Jyothishmathi Institute of Technology and Science	<i>G. Sai</i>	<i>G. Sai</i>
22	KOMMULA RANJITH	Jyothishmathi Institute of Technology and Science	<i>Ranjith</i>	<i>Ranjith</i>
23	KASIREDDY UDAY KIRAN REDDY	Jyothishmathi Institute of Technology and Science	<i>Uday</i>	<i>Uday</i>
24	P. ANIL BABU	Jyothishmathi Institute of Technology and Science	<i>Anil</i>	<i>Anil</i>
25	JAKKULA AKSHAY KUMAR	Jyothishmathi Institute of Technology and Science	<i>J. Akshay</i>	<i>J. Akshay</i>
26	K. SANJAY	Jyothishmathi Institute of Technology and Science	<i>K. Sanjay</i>	<i>K. Sanjay</i>
27	G. PREMRAJ	Sri Manakula Vinayagar Engineering College		
28	G. MUGUNTHAN	Sri Manakula Vinayagar Engineering College		
29	V. GURUMURTHY	Sri Manakula Vinayagar Engineering College		
30	M. SATHISH KUMAR	Sri Manakula Vinayagar Engineering College		
31	D. VIGNESH	Sri Manakula Vinayagar Engineering College		
32	M. RISHI VYAS	Sri Venkateswara College of Engineering	<i>Rishi</i>	<i>Rishi</i>
33	K. PRAYIND	"	<i>Prayind</i>	<i>Prayind</i>

30. R. Vigneshwara

Sri Manakula Vinayagar Engineering College

R. Vignesh

R. Vignesh

31. M. VASANTHAKUMAR

SRI MANAKULA VINAYAGAR ENGINEERING COLLEGE

M. Vignesh

M. Vignesh

ATTENDANCE SHEET

Sheet3

22.03.19 23.03.19

No.	Name	Institution	22.03.19	23.03.19
34	D.PREM KUMAR	Velammal Engineering College		
35	S.ARULMOZHI	Sri Venkateswara College of Engineering	SLM	SLM
36	N.RISHIKESH	Bannari Amman Institute of Engineering	✓	✓
37	M.BALA KUMAR	Sri Venkateswara College of Engineering		
38	A.KUMARASWAMY	Sri Venkateswara College of Engineering		
39	M.KALAIMANI	Sri Venkateswara College of Engineering	M.K	M.K
40	Dr.P.RAGHU	Sri Venkateswara College of Engineering		
41	M.ARUL KUMAR	Sri Venkateswara College of Engineering		
42	G.KIRUBAKARN	Sri Venkateswara College of Engineering	G.K	G.K
43	P. Raghuram	" "	P. Raghuram	P. Raghuram
44	Sabareesh Kumaran.s	" "	S. Sabareesh	S. Sabareesh
45	M. Manoj	" "	M. Manoj	M. Manoj
46	S. Rehan Abraham	" "	S. Rehan	S. Rehan
47	T.N.S Varadhachari	" "	T.N.S	T.N.S
48	S. Gowarthan	" "	S. Gowarthan	S. Gowarthan
49	Dhanush Karan	" "	Dhanush	Dhanush
50	Yuvaraj . V.	" "		
51	Shyam Sunder. M	" "	M.S	M.S
52	Medhankumar.C.	" "	C.M	C.M
57	David Allen varg. L.	" "	D.A	D.A
58	Kishore Kumar.D.	" "	D.K	D.K
59	Aswinkumar.D.	" "	A.D	A.D
60	Mohamed Salman.M	" "	M.S	M.S
61	Koushik Sekar	" "	K.S	K.S
62	Gnanamanola	" "	G.M	G.M
63	Kausik.S.	" "	K.S	K.S
64	Harish Kumar.S.	" "	H.K	H.K
65	Krishna Aadithya	" "	K.A	K.A
66	Prathap.A.	" "	P.A	P.A
67	S.S.SETHURAMAN	" "	S.S	S.S
68	M. Maheswaran	" "	M.M	M.M
69	B. Raja Pagalavan	P.T. Ce		
70	A. Magilan Xavier	" "	A.M	A.M
71				
72				
73				

Inaugural function of the workshop was held on March 22 2019 at 9.15 AM at the **Seminar Hall, Dr.A.C. Muthiah Central Library** of Sri Venkateswara college of Engineering. **Dr. S.Saravanan, Organising secretary** delivered the welcome address. **Dr.N. Muthukrishnan**, Professoer of Mechanical Engineering addressed about the workshop and the department. **Dr.S. Ganesh Vaidyanathan**, Principal, SVCE presided over the function. **Dr. M. Sivanandham, Secretary, SVCE** delivered the presidential address **Dr. SHANKAR VENUGOPAL, Vice President, M/s Mahindra & Mahindra Ltd** inaugurated the function and delivered inaugural address.



(Dr. SHANKAR VENUGOPAL, Vice President, M/s Mahindra & Mahindra Ltd inaugurating the workshop)

Technical sessions were started followed by inaugural function. Experts from leading industries handled the session and delivered technical talk.

Session I Electric Vehicles and the Challenges Ahead

by

B.K.Raja Mohan, General Manager (Product Development) ,M/s Mahindra & Mahindra.



Session II

Chief Engineer's view of EV evolution
by

Nandkumar Karale, Head-Vehicle Engg, M/s Ather Energy, Bangalore



Session III Design Fundamentals of Hybrid and Electric Power train
by
Vignesh Jayenthiran , M/s Valeo India Private Limited.



Day 2 (23.03.2019)

Session IV **NVH challenges in Electric vehicle**
by

Mr.B.Prakash, Principal member- (R & D), NVH, M/s TAFE.



Session V **Role of Electronics in New Generation IC engines**
by

Mr. I. Meenakshi Sundaram, Director-Technical & Commercial, M/s Gates Unitta (I) Ltd.



Valedictory function of the workshop was held on March 23 2019 at 12.15 PM at **Seminar Hall, Dr.A.C. Muthiah Central Library** of Sri Venkateswara college of Engineering. **Mr. I. Meenakshi Sundaram**, Director-Technical & Commercial, M/s Gates Unitta (I) Ltd, Sriperumbudur, India delivered valedictory address and distributed the certificates to the participants. **Dr.S. Ganesh Vaidyanathan**, Principal, SVCE delivered the presidential address and **Dr.S.Ramesh Babu**, Professoer and Head of Mechanical Engineering presided over the function. Mr.G.Logachander, coordinator delivered the welcome address and **Dr. S.Saravanan, Organising secretary** delivered vote of Thanks.





FACULTY & STUDENT WATCHING PHOTOS:



(ii) One Page write up program objectives & Benefits.

NWCEHV 2019 is focussed to explore the recent developments of electric and hybrid vehicles and also to discuss the challenges in implementing the electric and hybrid vehicles. This will create a platform for initiating further developments in electric and hybrid vehicles. This workshop also aims to find a methodology to create awareness in increasing the utilization of electric and hybrid vehicles. It is also focussed to bring the progress of electric and hybrid vehicles to meet the international standards with customer safety and satisfaction.

This workshop on Challenges in Electric and Hybrid Vehicles is devoted to bring the experts from automotive industries, scientists and researchers in the field of electric and hybrid vehicles to discuss the regional, national and international issues with electric and hybrid vehicles and develop a feasible practical plan for effective speedy growth in achieving sustainable energy and environment.

Star Performer Faculty Name:Dr.S.Saravanan, Professor/Mechanical

Star performer Student Name: R AADITYA (aadityaramesh3@gmail.com & 9791129927)

PARTICIPATION DETAILS:

No.of Internal/external Students participated:49

No.of Internal/external Faculties participated:15

MEDIA

ஸ்ரீ வெங்கடேஸ்வரா பொறியியல் கல்லூரியில் தேசிய பயிலரங்கம்



வாலாஜாபாத் மார்ச்.25-
ஸ்ரீ வெங்கடேஸ்வரா
பொறியியல் கல்லூரியில்
இயந்திரவியல் துறை சார்
பாக, மின்சாரம் மற்றும்
கலப்பு வாகனங்களில் உள்ள
சவால்கள் நடைபெற்றது.

பயிலரங்கம்

காஞ்சிபுரம் மாவட்டம்
ஸ்ரீபெரும்புதூர் அடுத்த பென
லூர் பகுதியில் உள்ள ஸ்ரீ
வெங்கடேஸ்வரா பொறியி
யல் கல்லூரியில் இயந்திரவி
யல் துறை சார்பாக, மின்சாரம்
மற்றும் கலப்பு வாகனங்க
ளில் உள்ள சவால்கள் என்ற
தலைப்பில், இரண்டு நாள்
தேசிய பயிலரங்கம் தொடங்
கியது. தொடக்க விழாவிற்கு
கல்லூரி செயலாளர் முனை

வர் சிவானந்தம் தலைமை
தாங்கினார்.

கல்லூரி முதல்வர்
கணேஷ் வைத்தியநாதன் மு
ன்னிலை வகித்தார் மகேந்
திரா நிறுவனத்தின் துணைத்
தலைவர் சங்கர் வேணுகோ
பால் நிகழ்ச்சியை தொடங்கி
வைத்து சிறப்புரையாற்றினா
ர். மின்சார வாகனங்களில் ப
யன்படுத்தி வரும் காலங்க
ளில், அதிகரிக்கும் இதன் வ
ளர்ச்சியால் சாலை கட்டமை
ப்பு வசதிகளை மேம்படும்
தக்க வைக்கப்பட்ட ஆற்ற
லின் வளர்ச்சியும் இணைந்து
வளர்வதன் மூலம் நாம் நம்
கற்றுப்புற சூழலையும் தக்க
வைக்க முடியும் தனியாக
வாகனம் மற்றும் இணைக்கப்

பட்ட வாகனங்களின் பயன்
பாடுகள் வரும் காலங்களில்
உபயோகத்தை காட்டிலும்
சாலை மற்றும் உள்கட்ட
மைப்புகள் வசதிகள்
மேம்படும் இதில் விழா
விற்கு வந்தவர்களை பயில
ரங்க செயலாளர் சரவணன்
வரவேற்றார்.

மேலும் இப்பயிலரங்கத்
தில் ஆந்திரா பாண்டிச்சேரி
மற்றும் பிற பகுதிகளிலி
ருந்து பேரா சிரியர்கள் மற்
றும் மாணவர்கள் பங்கேற்ற
னர். மேலும் மகேந்திர நிறுவ
னத்தின் ராஜா மோகன், ஏதேர்
எனர்ஜி நிறுவனத்தின் நந்த
குமார், வேலியோ மற்றும்
விக்னேஷ் ஆகியோர் சிறப்பு
ரையாற்றினார்.

REMARKS OF THE PROGRAMMER

The main theme of the workshop is to explore the challenges in Electric and Hybrid vehicles and also to make awareness about these vehicles among the students and researchers. Technical sessions were planned accordingly and experts have delivered technical talk exposing the challenges in Electric and Hybrid vehicles.

64 participants (49 UG & PG students and 15 faculty) have participated in the workshop and benefited with more about electric and Hybrid vehicles. This will be helpful for them to transform the economies, societies and cultures of the future.

S Saravanan

Dr.S.SARAVANAN
Organizing Secretary- NWCEHEV2k19