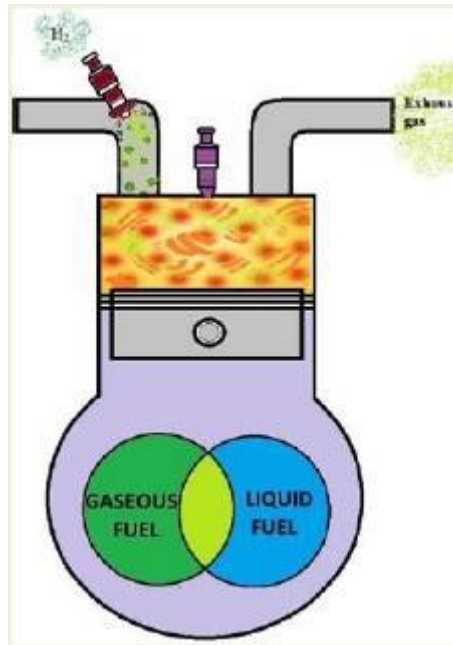


A report
on
ISTE approved and GTU sponsored
Faculty Development Programme
On
Recent Trends in Automobile Engineering
(February 4 – 9, 2019)



COURSE COORDINATOR
Dr. R. Balasubramanian



Department of Automobile Engineering
A.D. Patel Institute of Technology
New Vallabh Vidyanagar, Anand - 388121, Gujarat



INDIAN SOCIETY FOR TECHNICAL EDUCATION

(Under the Societies' Registration Act XXI of 1860)

Prof. Vijay D. Vaidya
Executive Secretary, ISTE

ISTE/GTU-ISTE FDP/2018

December 3, 2018

Dear Sir,

Sub : ISTE-GTU Faculty Development Programmes - regarding

Ref : 1. Our offer letter dated October 31, 2018
2. Your willingness to conduct the program.

Sanction is hereby accorded to conduct ISTE approved and GTU sponsored Faculty Development Program on **Recent Trends in Automobile Engineering** during **04-02-2019 to 09-02-2019**.

You are requested to take steps to conduct the program subject to the following terms and conditions (as laid down by the GTU):

1. The total budget sanctioned for the program is Rs.1,00,000/-. The additional expenses over the budget limit of Rs.1,00,000/- shall be borne by the host institution if any. The host institute may get the sponsorship from other organization to cover the additional expenses. The duration of the program is for one week.
2. If the actual expenses are below the limit of Rs.1,00,000/-, GTU shall provide the financial assistance equal to the actual expenses only (after deducting the amount of Registration Fees & Income from other sources).
3. GTU will not provide any advance amount to host institute. The host institute will submit the original bills along with other required documents to ISTE Gujarat. After verification (having original bills, report of FDP with Photographs, Fund Utilisation Certificate, TDS declaration, Feedback form and Attendance sheet duly signed by participants for all days) ISTE Gujrat will hand over the file of respective host institute to GTU for reimbursement of bills.
4. Please prepare an information brochure on the program containing desired information and salient features of the program inviting applications from all the institutions in your area. Preference should be given to the participants having ISTE Life Membership and those who are not members, kindly ensure and arrange to enroll them as members of ISTE before/during commencement of the program.
5. ISTE will do the certification of these programs jointly with GTU.
6. The coordinator must be a full time regular faculty and must of ISTE Life Member with adequate experience in teaching and research with publication.

7. The fund will be sponsored by GTU and the sanction budget is Rs.1,00,000/- . The host institute may get the sponsorship from other organisations to cover the additional expenses and also from the participants through "Registration Fees". Colleges may charge upto Rs.1000/- per participants for one week FDP as registration fees. Fees received from the participants will be utilized by institutes to conduct the event.
8. GTU will not provide any advance amount to host institute.
9. Minimum 25 participants are required to conduct the FDP and maximum 40 participants can be accommodated in one batch. It is mandatory to invite 60% speakers/subject experts from other institutes/organisations.
10. While making claim, institute will clearly mention income from all sources. Total actual expenses after deducting registration fees and income from other sources will be reimbursed by GTU subject to maximum ceiling of Rs.1,00,000/- e.g.:

Total expenses	: Rs.1,50,000/-
Registration fees & income from other sources	: Rs.60,000/-
Amount to be reimbursed by GTU to host institute	: Rs.90,000/- (Rs.1,50,000 – Rs.60,000)

11. **A test should be conducted at the end of the programme and the certificates will be issued only for those participants whose attendance is full and should qualify the test.**

BUDGET FOR ONE FACULTY DEVELOPMENT PROGRAMME

Tentative heads and approximate amount of budget to be sponsored by GTU

1. Boarding & Lodging charges for participants (Rs.250/- × 5×40)	-		Rs. 50,000/-
2. TA Boarding & Lodging for the invited experts	-		Rs. 13,000/-
3. Honorarium to the invited experts (5 days × 4 sessions=20 @1000/-)	-		Rs. 20,000/-
4. Honorarium to course coordinator	-		Rs. 2,000/-
5. Ancillary Staff	-		Rs. 2,000/-
6. Publication	-		Rs. 10,000/-
7. Contingencies, Consumables & Office expenditure	-		Rs. 3,000/-
=			-----
			Rs. 1, 00,000/-
			=====

12. At the end of the programme, an evaluation/test is conducted to assess the performance of each participant. **Only those participants whose attendance and performance in the test have been found satisfactory will be awarded the ISTE-GTU Joint Course Certificate.** The following details are to be sent to ISTE, New Delhi for the further evaluation:
 - 1) Certified xerox Copy of Attendance of the participants.
 - 2) Programme schedule detail with brief bio-data of resource persons.
 - 3) Assessment about the effectiveness and usefulness of the programme by evaluators.
 - 4) The feedback from participants and coordinators
 - 5) Expenditure details (copy of audited statement of programme signed by practicing Chartered Accountant)
 - 6) Selected photographs of programme
 - 7) Conclusion.

13. Any change in the schedule for holding the program, change of Coordinator's name, venue and date would require prior approval, failing which the offer for the grant already issued would be treated as automatically withdrawn.
14. Surprise visits will be planned by GTU and ISTE during the Program. They will have discussions with the course coordinator, resource persons and the participants. They will be submitting their report to ISTE which in turn will be submitted to GTU.
15. Eminent personalities in the field must be invited as the resource person and minimum one good resource person from industry should be invited during the program.
16. You are requested to introduce one session on **Art of Living** during the program .

I am confident that the program being organized at your institute under your able leadership would be a grand success. Assuring you the best cooperation from our end at all times.

With best regards,

Yours sincerely,



(Prof. Vijay D. Vaidya)

To

Dr. R. Balasubramanian
Assistant Professor
A.D. Patel Institute of Technology
New V.V. Nagar, V.U. Nagar (Post)
Anand – 388 121

LIST OF PARTICIPANTS
GTU SPONSORED AND ISTE APPROVED FDP ON
"RECENT TRENDS IN AUTOMOBILE ENGINEERING"

Sr. No.	Name	Department	Institute	ISTE No.
1	Samarth J. Shelat	Automobile	A.D.Patel Institute of Technology	LM 111327
2	Kuldip D. Patel	Automobile	A.D.Patel Institute of Technology	LM 111329
3	Maheshkumar R. Phogat	Automobile	A.D.Patel Institute of Technology	LM 111325
4	Yagnesh J. Gambhava	Automobile	A.D.Patel Institute of Technology	LM 111326
5	Nimit M. Patel	Automobile	A.D.Patel Institute of Technology	LM 53318
6	Sachin B. Patel	Automobile	K.J.Institute of Engineering and technology, Savli	Applied
7	Sanket H. Patel	Automobile	Knowledge Institute of Technology and Engineering	Applied
8	Ronald S. Fernandez	Automobile	Parul Institute of Technology	Applied
9	Manish M. Rehavar	Automobile	Parul Institute of Technology	Applied
10	Mehulkumar S. Padhiyar	Mechanical	Parul Institute of Engineering and Technology (DS)	Applied
11	Prakash Shakti	Automobile	K.J.Institute of Engineering and technology, Savli	Applied
12	Satyavrat P. Patel	Automobile	K.J.Institute of Engineering and technology, Savli	Applied
13	Ratnesh T. Parmar	Mechanical	Government Engineering college, Bharuch	LM 89723
14	Snehal V. Trivedi	Mechanical	Parul Institute of Technology	Applied
15	Shaileshkumar F. Parmar	Automobile	Parul Institute of Engineering and Technology (DS)	Applied
16	Abhishek S. Pandey	Mechanical	A.D.Patel Institute of Technology	LM 111384
17	Sanjiv Y. Rajput	Mechanical	A.D.Patel Institute of Technology	LM 111383
18	Maharshi H. Thakkar	Mechanical	A.D.Patel Institute of Technology	LM 119158
19	Harsh B. Joshi	Mechanical	A.D.Patel Institute of Technology	LM 111381
20	Vaishal J. Banker	Mechanical	A.D.Patel Institute of Technology	LM 119156
21	Krunal J. Shah	Mechanical	A.D.Patel Institute of Technology	LM 111380
22	Manoj Kumar	Mechanical	A.D.Patel Institute of Technology	LM 119160
23	Bala Dutt	Mechanical	A.D.Patel Institute of Technology	LM 111370
24	Niravkumar V. Parmar	Mechanical	A.D.Patel Institute of Technology	LM 119159
25	Tejas R. Prajapati	Mechanical	A.D.Patel Institute of Technology	LM 111374
26	Manisha V. Makwana	Mechanical	A.D.Patel Institute of Technology	LM 52455
27	Ruchi J. Desai	Mechanical	A.D.Patel Institute of Technology	LM 111382
28	Sankalp G. Soni	Mechanical	A.D.Patel Institute of Technology	LM 119157
29	Mitul R. Malli	Mechanical	A.D.Patel Institute of Technology	LM 111377

30	Dr. Ronakkumar R. Shah	Mechanical	A.D.Patel Institute of Technology	LM 111378
31	Sankalp B. Bhatia	Mechanical	A.D.Patel Institute of Technology	LM 111371
32	Ayanesh Y. Joshi	Mechanical	A.D.Patel Institute of Technology	LM 111379
33	Mehul B. Patel	Mechanical	A.D.Patel Institute of Technology	LM 111372
34	Rajesh R. Lakhani	Mechanical	Government Engineering college, Bharuch	LM 103280
35	Bhaumikkumar J. Sheth	Mechanical	A.D.Patel Institute of Technology	LM 111369
36	Kalpesh N. Shah	Mechanical	A.D.Patel Institute of Technology	LM 52458

A. D. PATEL INSTITUTE OF TECHNOLOGY
DEPARTMENT OF AUTOMOBILE ENGINEERING
 GTU Sponsored and ISTE Approved Faculty Development Programme
 On
Recent Trends in Automobile Engineering
 (February 4 – 9, 2019)

PROGRAMME SCHEDULE

Venue: Room No. 141, A D Patel Institute of Technology, New v v nagar

Time Date & Day	10:00 to 11:30	11:30 to 01:00	2:00 to 3:30	3:45 to 5:00
04/02/19 Monday	Registration & Inauguration	Prof. Salim. A Channiwala SVNIT, Surat	Prof. Dr. S.K.Gupte ADIT	Dr. Mitesh I Shah ADIT
05/02/19 Tuesday	Dr. Brijesh P Patel Ex. Deputy manager, ARAI	Dr. R. Balasubramanian Course coordinator, ADIT	Dr. Brijesh P Patel Ex. Deputy manager, ARAI	Dr. Niraj K Chavada ADIT
06/02/19 Wednesday	Dr. Ajit T James ADIT	Dr. Sanjay M Patel ADIT	Dr. Absar Lakdawala Nirma University	Mr. Varun Parikh ART of living
07/02/19 Thursday	Industrial Visit (EME School, Army Training Center, Vadodara)			
08/02/19 Friday	Dr. B. L. Salvi MPUAT, Udaipur	Dr. Anand B Dhruv Vishvakarma Govt Engg College, Ahmedabad	Dr. B. L. Salvi MPUAT, Udaipur	Automobile Laboratory visit ADIT
09/02/19 Saturday	Mr. Vipul John General Manager R&D CEAT Ltd, Halol	Feedback & Valedictory Function		

Breakfast: 09.30 A.M. To 10.00 A.M.

Lunch: 01.00 P.M. to 02.00 P.M.

Tea: 03.30 P.M. to 3.45 P.M.

Lectures with Title-

Date/Time	Time	Speaker	Title
04.02.2019	10:00 - 11: 00 A.M	Chief Guest	Inauguration
	11:30 - 1:00 P.M	Prof. Dr. Salim. A Channiwala, SVNIT, Surat	Hybrid electric vehicle
	2:00 - 3:30 P.M	Prof. Dr. S. K. Gupte, ADIT	Design of Automotive vehicle
	3:45 - 5:00 P.M	Dr. Mitesh I Shah, ADIT	CFD Modeling of Heat transfer and fluid flow inside a combustion chamber of an I C engine.
05.02.2019	10:00 - 11: 30 A.M	Dr. Brijesh P Patel, Ex. Deputy manager, ARAI	Advance combustion
	11:30 - 1:00 P.M	Dr. R. Balasubramanian, Course coordinator, ADIT	Biofuels utilization in I C engines
	2:00 - 3:30 P.M	Dr. Brijesh P Patel, Ex. Deputy manager, ARAI	Advance combustion
	3:45 - 5:00 P.M	Prof. Dr. Niraj K Chavada, ADIT	Application of ANN in automobile engineering
06.02.2019	10:00 - 11: 30 A.M	Dr. Ajit T James, ADIT	Reliability and maintainability of automobile systems
	11:30 - 1:00 P.M	Dr. Sanjay M Patel, ADIT	Dynamic modeling of Automotive systems
	2:00 - 3:30 P.M	Dr. Absar Lakdawala, Nirma University	Tribological analysis of CI engine fuelled with Bio-diesel
	3:45 - 5:00 P.M	Mr. Varun Parikh, ART of living	Introduction to Art of living
07.02.2019	09:00 AM - 3:30 PM	EME school, Visit	Visit to the EME school
08.02.2019	10:00 - 11: 30 A.M	Dr. B. L. Salvi, MPUAT, Udaipur	Utilization of hydrogen in I C engines
	11:30 - 1:00 P.M	Dr. Anand B Dhruv, Vishvakarma Govt Engg College, Ahmedabad	Improvements in I C engines
	2:00 - 3:30 P.M	Dr. B. L. Salvi, MPUAT, Udaipur	Dual fuel mode engine operation
	3:45 - 5:00 P.M	Automobile Laboratory visit, ADIT	Laboratory facilities visit
09.02.2019	10:00 - 11: 30 A.M	Mr. Vipul John, General Manager R&D, CEAT Ltd, Halol	Tyre Technology
	11:30 - 1:00 P.M	Feedback and Valedictory	

Dr. S. A. Channiwala is a professor from mechanical engineering department of S. V. National Institute of Technology, Surat. His research area includes turbo machines, hydrogen fuelled engine, hybrid electric vehicle and gas turbine combustion chamber.

Dr. Sudhir Gupte B.E. (Mech.), M.E. (Mech.), Ph.D Professor and Head of Automobile engineering department having industrial and teaching experience of over 35 years.

Brief Bio-Data of Dr. Mitesh I shah

Mitesh Shah did his Ph.D. from Department of Mechanical Engineering at the Indian Institute of Technology Delhi (IIT-Delhi) in 2011. His doctoral research is focused on radiation heat transfer in participating media using a discrete ordinates method and flame tomography using maximum entropy technique. He has more than 15 years of experience in teaching as well as industry. Presently; He is working as professor in A D Patel Institute of Technology (ADIT)- New Vallabh Vidyanagar. He has published more than 20 papers in various international journals and reputed conferences. He was also awarded DST travel grant to present his research work in one of the reputed ASME conference in China.

He was also awarded MHRD scholarship during his M.Tech. (Thermal Engineering) Program. Frequently he has delivered the guest lecturer in various reputed institutions Like, Nirma, PDP, GPERI, PIT and GTU etc. He has guided more than 33 M.Tech students in his career. His area of interest is in Computational Heat Transfer, Renewable Energy and Flame Tomography.

Brief Bio-Data of Dr. Brijesh P Patel

Dr. Brijesh Patel is a 37 years young scientist and educationist with Ph.D. degree from Indian Institute of Technology Bombay, India in Mechanical Engineering. After 15 years of experience in research institutes and automobile organizations, he has become social entrepreneur since January 2019. He had published more than 30 research papers in reputed journal and conferences and filled one patent. He is founding director of "Gdhyana Sanshodhana Nagari". He has been working to develop research activities and factual situation based primary education and also planning to work on appropriate technological solutions in the area of renewable energy, water & Sanitation, waste management and livelihood support systems.

Dr.R.Balasubramanian is presently working as Assistant Professor in Automobile Engineering Department at A. D. Patel Institute of Technology, New Vallabh Vidyanagar.

R.Balasubramanian received the B.E. degree in Automobile engineering and M.Tech degree in Thermal Engineering from Indian Institute of Technology Roorkee, India. He pursued the Ph.D. degree from Centre for Energy Studies, Indian Institute of Technology Delhi. His area of research includes internal combustion engines, alternate fuels for compression ignition engines and renewable energy.

Brief Bio-Data of Dr.Neeraj K Chavada

Dr. N. K. Chavada is presently working as Associate Professor in Mechanical Engineering Department at A. D. Patel Institute of Technology (A CVM Institution), New Vallabh Vidyanagar. He has completed his B. E. (Mech) and M. E. (Mech) from Government Engineering College, Modasa and Sardar Vallabhbhai National Institute of Technology, Surat. He has completed Ph.D. from The M. S. University of Baroda, Vadodara. He has about 22 years of teaching experience. He has presented/published many research papers at National/International Conferences/Journals. He has published four books. He has been awarded with Best Polytechnic Teacher for the year 2001 by ISTE, New Delhi and Dronacharya Award for contribution in teaching-learning and overall development of students adjudged by A. D. Patel Institute of Technology, New Vallabh Vidyanagar and CVM, Vallabh Vidyanagar on 9th Annual Day of ADIT held on 23rd April, 2009.

Dr. **Ajit T James** is presently working as Assistant Professor in Automobile Engineering Department at A. D. Patel Institute of Technology (A CVM Institution), New Vallabh Vidyanagar. His area of research includes reliability and maintainability.

Dr. Sanjay M Patel is presently working as Assistant Professor in Automobile Engineering Department at A. D. Patel Institute of Technology (A CVM Institution), New Vallabh Vidyanagar. His area of research includes internal combustion engines, alternate fuels for engines and dynamic modeling.

BioSketch: Absar M Lakdawala

Associate Professor in Mechanical Engg Dept., Institute of Technology, Nirma University

PhD from IIT Bombay and M.Tech from IIT Delhi

Teaching Experience: 18 years

Area of Expertise: Computational Fluid Dynamics, Multiphase Flow, Alternative Fuels

Research: 20 international journal papers, 40 international conference papers, guided 38 M.Tech dissertations, Guiding 4 PhD.

Reviewer in Int. J. of Multiphase Flow, Chemical Engineering Science, Electrostat, Fuel, Atomization and Spray, Biofuels, etc.

Mr. Varun Parikh, M.Sc.(Organic Chemistry)

PGT – Chemistry @ SSRVM, Anand, Faculty @ Art of Living Organization

(M) 9428900339, varunparikh111@live.in

A person with Patriotic, cultural and Traditional temperament. Fond of Meditation and Spiritual Activities. Also a stage Singer. A Chemistry teacher in renowned Sri Sri Ravishankar Vidya Mandir School at Anand. Passionate of teaching Chemistry with a Spiritual Blend. A youth Faculty in Art of Living Since 2012, also serving as Central Zone Teachers Coordinator of Gujarat in Art of Living.

BIOGRAPHY OF Dr. B.L. SALVI

B.L. Salvi received his Bachelor of Engineering Degree in Mechanical Engineering in year 2000 and M.Tech Degree in Manufacturing Systems Engineering (Mech.) in year 2006 from Malaviya National Institute of Technology (erstwhile MREC), Jaipur-302017, India. He received his Ph.D. Degree in year 2016 under QIP from Indian Institute of Technology Delhi, New Delhi in the area of Internal Combustion Engines and Hydrogen Fuel. He is in teaching profession since year 2000 and has worked as Lecturer (Mech. Engg.) at Sri Balaji College of Engineering and Technology, Jaipur up to March 2005; and then in March 2005, he joined as Assistant Professor at the Department of Mechanical Engineering, College of Technology and Engineering, MPUAT, Udaipur – 313001, India. At present he is working as Assistant Professor (Sr. Scale). He has more than 18 years of teaching and research experience.

His area of research work is Internal Combustion Engines, Alternative Fuels and Combustion, Thermal Engineering, Computational Fluid Dynamics and Manufacturing Systems Engineering & Ergonomics. He has undertaken 2 research projects funded by DST, Rajasthan, 1 MODROBS project funded by AICTE, New Delhi and currently working on ICAR funded AICRP scheme on Energy in Agriculture as Co-PI. He has guided 6 M.Tech Thesis. He has authored one book, and 2 edited books, published 18 papers in referred National and International Journals, and 20 research papers in international/national conferences and seminars. He has organized 7 different events as Organizing

secretary, Coordinator, Co-coordinator. He is working in the institute at various Administrative capacities including Nodal Officer (Tenders), Nodal Officer Accounts, Institute's MIS In-charge, and Hostel Warden. He is life member of ISTE, New Delhi and Member of The Institution of Engineers (India).

Dr. Anand B Dhruv
Prof. & Head Mech Engg DEPT.
Vishvakarma Govt Engg College
Chandkheda, Ahmedabad

DR. DHRUV ANAND BHANUPRASAD



Head of Department, Department of Mechanical Engineering
Vishwakarma government engineering college,

Email: hod_mech@vgecg.ac.in

Contact No.: 9428611963

Areas of Interest:

Metal Forming, Micro/Nano Manufacturing, CAD/CAM, Automobile engineering

Education

- Ph.D., Indian Institute of Technology Delhi
- M.Tech., L.D. College of Engineering, Ahmedabad
- B.Tech., L.D. College of Engineering, Ahmedabad

Academic Experience

1. Professor, Mechanical Engineering, VGEC, Chandkheda, December-2015 to till date
2. Associate Professor, Mechanical Engineering, 2009-2015
3. Lecturer, Mechanical Engineering, IIT Delhi, February 1995 to March 2009.

Publication

International journal:05

National Journal:03

International conference:06

National conference:05

Member of ISTE, IET, SAE

Board of Study member of: GTU, LDRP and Ganpat uni.

Mr. Vipul John is general manager R&D from CEAT Ltd, Halol.

EVALUATION OF PARTICIPANTS
GTU SPONSORED AND ISTE APPROVED FDP ON
"RECENT TRENDS IN AUTOMOBILE ENGINNERING"

Sr. No.	Name	Marks (30)
1	Samarth J. Shelat	25
2	Kuldip D. Patel	24
3	Maheshkumar R. Phogat	24
4	Yagnesh J. Gambhava	20
5	Nimit M. Patel	21
6	Sachin B. Patel	25
7	Sanket H. Patel	25
8	Ronald S. Fernandez	18
9	Manish M. Rahevar	19
10	Mehulkumar S. Padhiyar	21
11	Prakash Shakti	24
12	Satyavrat P. Patel	22
13	Ratnesh T. Parmar	21
14	Snehal V. Trivedi	21
15	Shaileshkumar F. Parmar	25
16	Abhishek S. Pandey	21
17	Sanjiv Y. Rajput	22
18	Maharshi H. Thakkar	20
19	Harsh B. Joshi	20
20	Vaishal J. Banker	24
21	Krunal J. Shah	22
22	Manoj Kumar	22
23	Bala Dutt	22
24	Niravkumar V. Parmar	25
25	Tejas R. Prajapati	22
26	Manisha V. Makwana	18
27	Ruchir J. Desai	24
28	Sankalp G. Soni	20
29	Mitul R. Malli	20
30	Dr. Ronakkumar R. Shah	20
31	Sankalp B. Bhatia	23
32	Ayanesh Y. Joshi	20
33	Mehul B. Patel	19
34	Rajesh R. Lakhani	23
35	Bhaumik Sheth	23
36	Kalpesh Shah	18

Effectiveness and usefulness of the programme

At the end of the faculty development programme a test was conducted about the topic covered during the programme. Most of the participants scored 60% and above in the test which shows that the participants gained knowledge about the recent topics. Thus the programme was effective that the faculties were able to acquire the recent developments in the field of automobile engineering. Also they were able to identify the current research problems to be solved for the improvement of the fast growing industry in the world.

During the programme also the participants interacted with the experts to clear their doubts about a particular topic of their interest for which a separate time slot was allotted so that the lectures were useful to the faculties. The faculties can inculcate this gained knowledge to the students which will improve their understanding in that domain. In this way the development programme was useful to the faculties to improve their subject knowledge and to identify the unsolved problem in their research area.

Programme report

1. Inauguration

The chief guest and the key note speaker of the inaugural function was Prof. S.A. Channiwala, SVNIT, Surat. The function started with Prayer (Saraswati vandan), followed by the lighting of the lamp by chief guest and principal. The welcome Address was delivered by Dr. R. Balasubramanian (Course Coordinator). A brief introduction of ADIT was given by Prof. V. N. Singh on behalf of Principal, ADIT. Prof. S.A Channiwala, delivered the inaugural address and the vote of thanks was given by Prof. Nikunj Yagnik (Co-coordinator) from department of automobile engineering.

2. Expert lecture

First day (4 February 2019)

After the inaugural function the first key note lecture was given by Prof. Salim. A Channiwala, SVNIT, Surat on “**Hybrid electric vehicle**”. The afternoon session lecture was given by Dr. S. K. Gupte, ADIT on Design of Automotive vehicle. The last session was delivered by Dr. Mitesh I Shah, Department of mechanical engineering, ADIT on “CFD Modeling of Heat transfer and fluid flow inside a combustion chamber of an I C engine.”

Second day (5 February 2019)

The second day morning session expert lecture was delivered by Dr. Brijesh P Patel Ex. Deputy manager, ARAI. The topic was “Advance combustion”. The afternoon session was delivered by Dr. R. Balasubramanian describing the details of “Utilization of Bio-fuels in I C engines” and the last session of the day was delivered by Dr. Niraj K Chavada, Department of mechanical engineering, ADIT on “Application of ANN in automobile engineering”.

Third day (6 February 2019)

The third day the morning session was started by Dr. Ajit T James, Department of automobile engineering, ADIT, on “Reliability and maintainability of automobile systems.” The second session was delivered by Dr. Sanjay M Patel, Department of automobile engineering, ADIT on ‘Dynamic modeling of Automotive systems’. The afternoon session was started by Dr.

Absar Lakdawala, Nirma University on “Tribological analysis of CI engine fuelled with Biodiesel”. The last session of the day was delivered by Mr. Varun Parikh, Sri Sri Ravishankar Vidya Mandir, Anand on “Introduction to Art of living”.

Fourth day (7 February 2019)

Visit to Faculty of Vehicle Technology, EME School, Vadodra.

Fifth day (8 February 2019)

The fifth day session was started by Dr. B.L.Salvi MPUAT, Udaipur on Utilization of hydrogen in I C engines followed by Dr. Anand B Dhruv of Vishvakarma Government Engineering College, Ahmedabad on “Recent advances in manufacturing of automotive components”. The last session was delivered by Dr. B.L.Salvi on “Dual fuel engines” followed by visit to the automobile Laboratory.

Final day (9 February 2019)

The last day the session lecture was delivered by Mr. Vipul John, General Manager R&D, CEAT Ltd, Halol on ‘Tyre Technology’. The valedictory session was chaired by Mr. Vipul John and Dr. S.M.Patel. The course coordinator given a brief about the entire programme and the mementos were given to the experts by Mr. Vipul John. The vote of thanks was given by course coordinator and the function was concluded with the National anthem.

Some of the pictures taken during the Faculty Development Programme were given below:









એડીઆઈટી કોલેજ દ્વારા ફેકલ્ટી માટે ટ્રેનિંગ યોજાઈ



આણંદ | ચારુતર વિદ્યામંડળ ટ્રસ્ટ સંચાલિત એડીઆઈટી સંસ્થાના ઓટોમોબાઈલ એન્જિ. ડિપાર્ટમેન્ટ દ્વારા જીટીયુ સ્પોન્સરડ અને આએસટીઈ એપ્રેલ એક વીકનો ફેકલ્ટી ડેવલપમેન્ટ પ્રોગ્રામ 'રેસેન્ટ ટ્રેન્ડસ ઈન ઓટોમોબાઈલ એન્જિનિયરીંગ' વિષય પર 4 થી 9 ફેબ્રુઆરી, 2019 દરમિયાન યોજાયો હતો. જેમાં વિવિધ સંસ્થાઓ 8 કોલેજો, ઈન્ડસ્ટ્રીના નિષ્ણાંતોએ ઓટોમોબાઈલના આધુનિક બાબતોનું જ્ઞાન ફેકલ્ટીઓને આપ્યું હતું.

Feedback from the coordinator

The course was designed in such a way that it covers the entire spectrum of the automobile engineering starting with the automobile system and ending with the tyre technology. In between the simulation and modelling, advances in combustion, alternative fuels topics are incorporated. The following things were observed during this FDP

- The experts given in depth details about their topic which was very useful to the faculties.
- The interaction with the experts was good and answers to the queries asked by the participants were excellent.
- The topic -Introduction to the art of living had a positive effect on the participants
- The participants exposed to the current research trends and future scope in the specific field of their interest.
- The scope of funding for research and development was also discussed
- Overall experience was very good.

Conclusion

On Successful Completion of the faculty development programme, the Participants would be able to:

- Update the knowledge on Automobile engineering recent trends such as hybrid electric vehicles, CFD analysis, application of ANN, modelling and simulation.
- Participants could effectively teach internal combustion engine related courses.
- The participants could develop a state- of-art laboratory for automobile engineering related Subjects.
- The participants could supervise student projects (UG/PG) in automobile engineering.
- The participants could prepare project proposal for undertaking sponsored project.