



ATAL FDP on “Alternate Fuels”

06-10 December 2021

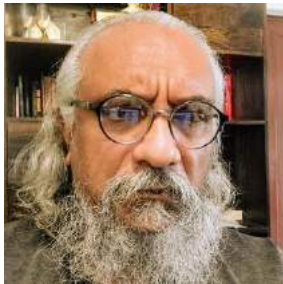
**MECHANICAL ENGINEERING DEPARTMENT
GOA COLLEGE OF ENGINEERING, GOA**

ALTERNATE FUELS WORKSHOP

ATAL Faculty Development Programme was organized by Mechanical Engineering Department of Goa College of Engineering from 06/12/2021 to 10/12/2021. This was attended by faculty members from various technical and non – technical institutions from the country along with representatives from industry and research scholars.

Eminent resource persons from institutions of repute. The participants were exposed to techniques of Meditation and relaxation through an expert session on this topic.

Dr. Manoj Borkar, Professor, , Carmel College for Women, Goa



Gold Medalist in Marine Zoology & Bombay University Topper at MSc exams 1987

- *PhD in Endocrinology from Institute of Science, Bombay.
- *Masters in Ecology & Environment from IIEE, New Delhi
- * NESA Environmentalist of the Year Award 2003
- * Air India BOLT Award 2007
- * Goa State Meritorious Teacher Award in Higher Education 2015.
- * Goa State Biodiversity Conservation Award 2021.
- * 34 years of Teaching Experience at UG & PG
- * Member of several national & international Professionals bodies, editorial boards of 9 research journals.

Dr. Suresh Mane Principal, Principal GSIT Karwar, Karnataka



- Dr Suresh D Mane Principal GSIT Karwar has undergone schooling in Kendriya Vidyalayas, studied Mechanical Engineering from Karnatak University, M.Tech from VTU, Belagavi and research from Kuvempu University Karnataka. He secured third position to university in his PG studies.He has served S.W. Railways for over two decades and took voluntary retirement in 2012 to join academics.
- He holds international certification from Chartered Management Institute UK at Level 5 in Management and leadership He has served as Professor at two AICTE approved Engineering institutions. He is a certified energy manager and energy auditor from Bureau of Energy Efficiency, Govt. of India, Ministry of Power, New Delhi.

Dr. Kumar G. N. Associate Professor, NITK , Surthkal, Karnataka



- PhD in Mechanical Engineering, IIT Delhi (2011)
- MTECH in Heat and Power from KREC, Surthkal (1999)
- B. E. in Mechanical Engineering, Bangalore University (1996)
- Area of Research: Alternative fuels for IC engines, Simulation of IC engines, Heat Transfer

Dr. Dinesha P. Associated Professor, Manipal Institute of Technology



Qualification: BE, MTech, PhD

- Associate Professor - Department of Mechanical and Manufacturing Engineering, MIT.
- Department coordinator - IET - Industrial and Production Engineering.
- Department coordinator - Faculty research activities.
- Department coordinator - UG/PG/PhD research.
- Area of Interest -Biomass Waste Management; Bioenergy Management; Alternative Fuels; Renewable Energy Technology
-

Dr. Sachin Kumar, Scientist, National Institute of Bio Energy, Kapurthala , Punjab



Dr. Sachin Kumar is a Deputy Director in the Biochemical Conversion Division at the Sardar Swaran Singh National Institute of Bio-Energy, Kapurthala, India. He was as a Visiting Professor in the Department of Chemical and Biological Engineering at South Dakota School of Mines and Technology, Rapid City, USA for a year. He obtained his Ph.D. in Chemical Engineering from Indian Institute of Technology, Roorkee, India and has more than seventeen years of research experience in Biochemical Conversion of Biomass to Biofuels including lignocellulosic ethanol, biogas, biohydrogen, etc. He has completed eight research projects and one consultancy project and actively engaged in on-going research projects. Dr. Sachin has published more than 60 papers in peer reviewed journals, book chapters and papers in conference proceedings and 7 edited books. He has one granted US patent and one filed Indian patent. He has delivered more than 40 invited/plenary lectures and presented more than 75 papers in national and international conferences.

Dr. Dhinesh Balasubramanian, Khon Kaen University, Thailand.



Dr. Dhinesh Balasubramanian is currently pursuing his Post-Doctoral Fellowship in the area of Hybrid Vehicle Technology and Battery Thermal Management System for Electric Vehicle from Mechanical Engineering Division, Faculty of Engineering, & Center for Alternative Energy Research and Development, Khon Kaen University, Thailand. And he is also working as Assistant Professor in the Department of Mechanical Engineering, Mepco Schlenk Engineering College, Sivakasi, and Tamil Nadu Since July 2017. He has acquired B.E. in Mechanical Engineering under Anna University, Coimbatore, and M.E in Automobile Engineering from Madras Institute of Technology Anna University, Chennai and Ph.D. in Mechanical Engineering from Madras Institute of Technology Anna University, Chennai.

Dr. Surajit Debnath Head, Medical Laboratory Technology, Women's Polytechnic (AICTE) , Tripura



Dr. Debnath currently is the Head, Department of Medical Laboratory Technology, Women's Polytechnic (AICTE) , Tripura with more than 13 years of experience in Biomedical Research and high level teaching. Dr. Debnath participated in various academic work in Institutions of Germany , Denmark and Hongkong besides in premier Indian labs such as AIIMS (Cytogenetics) , IIT Kharagpur (Biotechnology) , IIT Guwahati (Biomedical Engineering) , NBPGR (Plant Genomics). Dr. Debnath is the recipient PhD in Wireless Sensor Network from JUIT, Solan (2016)

Dr. Ritesh Malani, Department of Petrochemical and Energy Engineering, ICT, Mumbai



Dr. Ritesh Malani is having Bachelor's degree in Petrochemical Technology from University Department of Chemical Technology, Sant Gadge Baba Amravati University, Amravati, Maharashtra. He have completed M. Tech. and Ph.D. from Indian Institute of Technology Guwahati. He has 2.5 years of industrial experience and over 4 years in teaching and research.

His has authored several publication which includes 15 research articles in reputed international journals and 6 book chapters. He has presented his work at several national and international conference.

Dr. Sanieevakumar Khandal. Associate professor. Saniav Ghodawat University Kolhapur



He obtained first class with distinction and first class in Bachelor of Engineering and Master of Technology respectively. His Ph.D. thesis title was "Performance, combustion and emission characteristics of a common rail direct injection diesel engine and HCCI engine fuelled with different alternative fuels" This work yielded 7 articles in reputed journals. I have published 40 plus articles in the field of alternative fuels for diesel engine and other areas of research so far. Published one book chapter in reputed peer reviewed international journal. I attended more than 20 faculty development programs to acquire the current global trends and issues.

. Dr.Mahesh shelar. K. K. Wagh Institute of Engineering Education & Research. Nashik



He obtained first class with distinction from Government College of College of Engineering, Karad, MTech in Energy Systems Engineering from IIT Bombay, Mumbai and PhD in Mechanical Engineering from Pune University. He has published around 25 papers in different International Journals

Mr. Flovd D'Silva. Facilitator & Trainer. Self-growth modalities



Floyd D'Silva describes himself as an Evolution Catalyst - fascinated beyond measure with the myriad dimensions of human evolution, he is a devoted facilitator and practitioner of various self growth modalities. His academic accomplishments include a masters degree in telecommunications and software engineering from BITS, Pilani, while his career journey spans over a decade in the arena of software services, academics and social media marketing. He travels all over the world to places like Dharamsala, London, Scotland, Kuala Lumpur to conduct workshops related to life skills and realizing one's peak potential.

ATAL workshop on Alternate Fuels

Dr. Jagannath Hirkude, Professor, Goa College of Engineering, Goa



Completed his graduation from PVPIT Sangli in Mechanical Engineering in 1995, MTech in Energy Systems Engineering from IIT Bombay and PhD in Mechanical Engineering from University of Pune. He is also certified Energy Auditor by Bureau of Energy Efficiency. He is having 25 years of teaching experience with 2 years of Industrial Experience. He is presently working as Professor in Mechanical Engineering Department at Goa College of Engineering, Government of Goa. He has published more than 30 papers in different International conferences and International Journals. His published work is published in reputed referred Elsevier Journals like Applied Energy, Fuel, Fuel Processing Technology, Energy, Energy Procedia etc. He is also in Editorial member and reviewer of different International Journals. His areas of Interests are Thermal Engineering, Energy Systems Engineering, Alternate fuels and Energy Management

The schedule of the workshop was as below-

The Inaugural function was conducted on 06th December 2021 at 9.30 am. Dr. Vivek Kamat Director,

Date & Time	Event Schedule & Time			
	06.12.2021 9.00 to 9.30 AM Inauguration			
	9:30 to 11:30 AM		11:30 AM to 1:30 PM	2:00 PM to 4.00 PM
Monday 06-12-2021	Green fuels: Pragmatic intervention to slow down climate change: Dr. Manoj Borkar, Carmel College for Women, Goa	T e a B R E A K L u n c h B R E A K	Biofuels prospectus and challenges : Dr. Jagannath Hirkude, Goa College of Engineering	Hydrogen: Alternate Fuel for IC Engines: Dr. Suresh Mane, Principal, GSIT, Karwar, Karnataka
Tuesday 07-12-2021	Bioethanol: Dr. Sachin Kumar, Scientist, National Institute of Bio-Energy, Kapurthala, Punjab		Net Energy Analysis of ethanol : Dr. Mahesh shelar, K. K. Wagh Institute of Engineering Education & Research, Nashik	Hands on session on : Optimization of Biofuel recovery using engineered microbial process and minimizing cost of centrifugation: Dr.Surajit Debnath
Wednesday 08-12-2021	CNG as alternate fuel for Indian Railways: Dr. Kumar G. N., NITK Surthkal		Nano additives for Biofuels: Dr. Dinesha P. , Manipal Institute of Technology, Manipal	Optimization of engine operating parameters with biodiesel: Dr. Jagannath Hirkude, Goa College of Engineering
Thursday 09-12-2021	"Production of biofuels and their application in CRDI & HCCI engines": Dr. Sanjeevakumar Khandal		"Ultrasound assisted biodiesel synthesis from mixed oil feedstock - process optimization and kinetic analysis using heterogeneous kinetic model: Dr. Ritesh S. Malani, ICT Mumbai	Virtual visit to biodiesel production facility at GSIT, Karwar: Dr. Suresh Mane, Principal, GSIT, Karwar, Karnataka
Friday 10-12-2021	Meditate, relax and excel: Mr. Floyd D'Silva, Facilitator & Trainer, Self-growth modalities		Recent Research Progress on advanced diesel engine combustion modes for cleaner combustion in Hybrid vehicles: Dr.Dhinesh Belasubramanian	Feedback ,Valedictory Function & Online test

Directorate of Technical Education, Goa and Dr. Rajesh Lohani addressed the participants as chief Guest and Guest of Honour. Dr. Kamat addressed issues of global warming and climate change due to fossil fuels and need of biofuels. Dr. Lohani briefed about electric vehicles. The inaugural session "Green fuels: Pragmatic intervention to slow down climate change:" was delivered by Dr. Manoj Borkar.

ATAL workshop on Alternate Fuels



Department of Mechanical Engineering
Goa College of Engineering

Cordially invites you for the Inauguration of

AICTE (ATAL) Sponsored Online Faculty Development
Program on

ALTERNATE FUELS

Monday, 06th December 2021 at 9.30 Hrs

Venue

Virtual Event Link

<https://meet.google.com/hhm-zvxn-pvq>

Dr. Vivek Kamat

Director, Directorate of Technical Education, Goa

Has Consented to be the Chief Guest

Dr. Rajesh B. Lohani

Principal, Goa College of Engineering, Goa

Will be the Guest of Honour

Dr. Jagannath Hirkude
FDP, Coordinator

Dr. Akshay Nigalye
Head, Mech. Engg. Dept.

Some screenshots of the inaugural function and sessions are as below.



ATAL workshop on Alternate Fuels

The image displays three sequential screenshots from a video conference. The top screenshot shows Chief Guest Dr. Vivek Kamat, Director, DTE, Goa, addressing the session. The middle screenshot shows a presentation slide by Dr. Jagannath Hirkude, Professor at Goa College of Engineering (Govt. of Goa), titled "Optimization of Engine Operating parameters by using Bio-diesel from Waste cooking oil". The bottom screenshot shows a presentation slide by Dr. Kumar G.N., Associate Professor at the Department of Mechanical Engineering, National Institute of Technology Karnataka, Surathkal-575025, titled "CNG as alternate fuel for Indian Railways". Each screenshot includes a small video inset of the respective speaker.

Chief Guest Dr. Vivek Kamat, Director, DTE, Goa Addressing during Inaugural Session

Optimization of Engine Operating parameters
by using Bio-diesel from Waste cooking oil

By
Dr. Jagannath Hirkude
Professor
Goa College of Engineering (Govt. of Goa)

At
ATAL FDP on
"ALTERNATE FUELS"
Organized By
Department of Mechanical Engineering
Goa College of Engineering, Bangalore

CNG as alternate fuel for Indian Railways


Dr. KUMAR G.N.
ASSOCIATE PROFESSOR

DEPARTMENT OF MECHANICAL ENGINEERING,
NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL-575025

ATAL workshop on Alternate Fuels

AICTE Training and Learning (ATAL)
Sponsored
One Week Online Faculty Development Program
on
Alternative fuels
from 06-10 December 2021
Organised by Goa College of Engineering, GOA

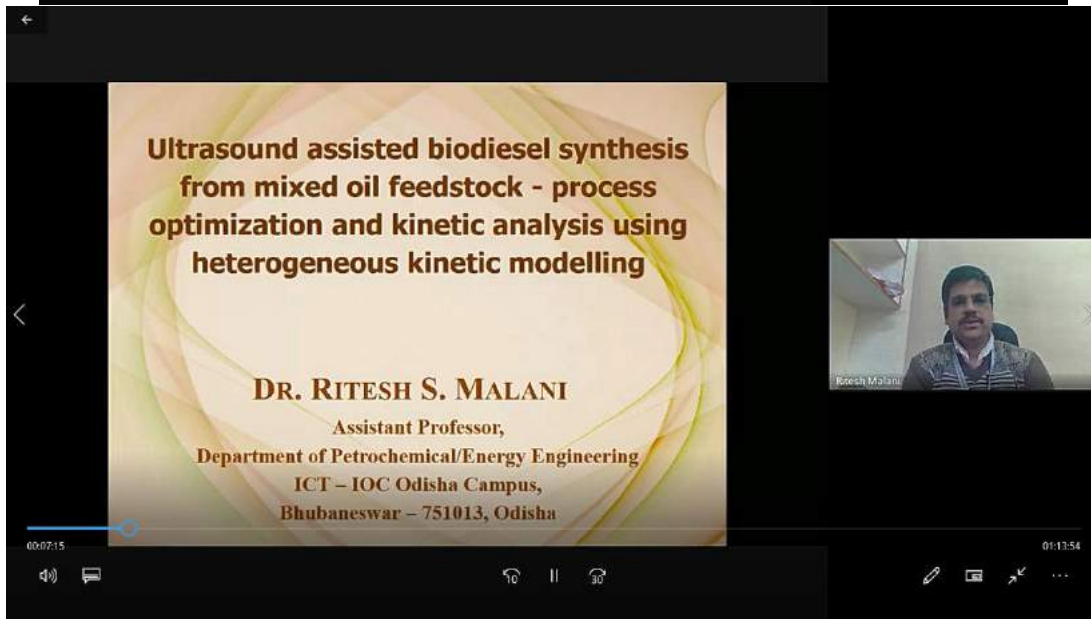
Production of Biofuels and their application in CRDI and HCCI engines
By
Dr. Sanjeevakumar Khandal
PhD Program Coordinator, Sanjay Ghodawat University, Kolhapur
Maharashtra



00:02:06 01:29:41


Ultrasound assisted biodiesel synthesis from mixed oil feedstock - process optimization and kinetic analysis using heterogeneous kinetic modelling

DR. RITESH S. MALANI
Assistant Professor,
Department of Petrochemical/Energy Engineering
ICT – IOC Odisha Campus,
Bhubaneswar – 751013, Odisha



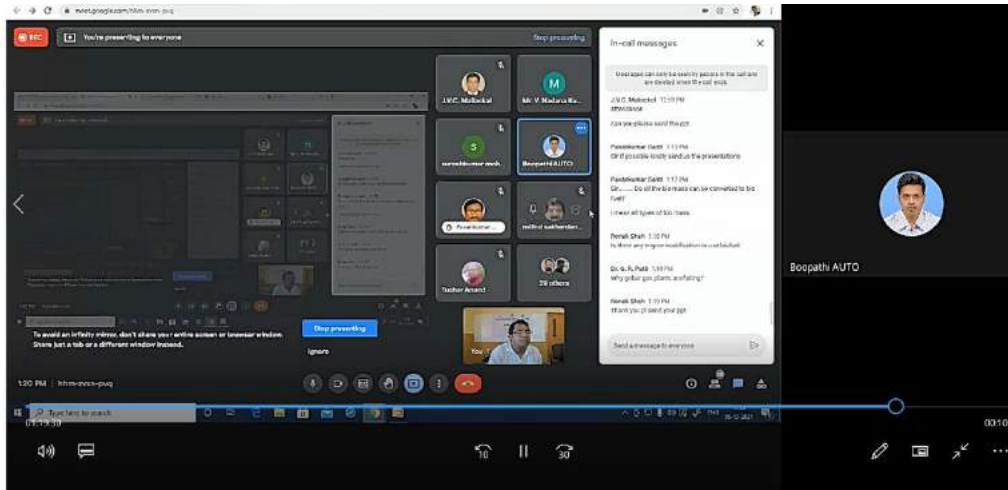
00:07:15 01:13:54

Meditate, Relax and Excel
For Atal FDP Programme



00:11:11 01:10:25

ATAL workshop on Alternate Fuels



ATAL workshop on Alternate Fuels

The list of participants was:-

Sr. No.	Name	Institute Name	Designation	Specialisation
1	C SREEDHAR	Siddharth Institute of Engineering and Technology, Puttur	Professor	I C Engines
2	K.K.HARI	Siddharth Institute of Engineering and Technology, Puttur	Assistant Professor	THERMAL ENGINEERING
3	A T PRAVEEN KUMAR	Siddharth Institute of Engineering and Technology, Puttur	Assistant Professor	THERMAL ENGINEERING
4	PEERAJ MAZUMDER	GKCEM, JIS GROUP, Kolkata	Assistant Professor	Manufacturing
5	Santosh Dabade	Sinhgad Institute of Technology Lonavala, Pune	Assistant Professor	heat Power Engineering
6	Dattaguru mohanlal sawardekar	Don Bosco college of engineering fatorda Margao Goa	Laboratory assistant	Automobile engineering
7	Sunil Dhondiram Bagade	DR. ASHOK GUJAR TECHNICAL INSTITUTE, Satara	Assistant Professor	Mechanical
8	Raymond Joseph	Don Bosco college of engineering fatorda Margao Goa	Assistant Professor	Machine Design
9	Suresh D Mane	Girijabai Sail Institute of Technology Karwar K	Professor	Mechanical Engineering
10	Boopathi M	kongu Engineering College, Pallipalayam	Assistant Professor	Automotive Engines
11	Raghavendra Datta Naik	Goa College of Engineering, Goa	Assistant Professor	Nonlinear Vibrations
12	Ronakkumar R shah	A D Patel Institute of Technology, Anand	Assistant Professor	Thermal
13	Bharati Pawar	Symbiosis Skill and Professional University	Assistant Professor	Applied Chemistry
14	Mahalingesh B	AITD Goa	Assistant Professor	Mechanical Engineering
15	RAMANUJ SHANKAR PANDEY	Indian Institute of Technology Guwahati	PhD Scholar	Energy Science and Engineering
16	T.Rajesh Kannah	Anjalai Ammal Mahalingam Engineering college Kovilvenni Thiruvavarur-Dist	Professor	Mechanical Engineering

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17	Chaitanya Lakshmi G	Presidency University, Rajanukunte, Bengaluru	Assistant Professor	Chemistry
18	Bijay Narayan Mohanty	NIT, Durgapur	Research Scholar	Thermal Engineering
19	R. VETHAVINAYAGAM	Bhaktavatsalam polytechnic college, Kancheepuram	Lecturer	Mechanical Engineering
20	MUNINATHAN K	St. Joseph's College of Engineering PERAMBUR, CHENNAI	Assistant Professor	Thermal Engineering
21	KANNAN M	Rane Polytechnic college, Tiruchirappalli	Assistant Professor	Operational Research
22	DHANA SEKHAR YEPURI	Kakinada institute of technology and science, DIVILI, peddapuram	Assistant Professor	Cad/cam
23	M. Hemalatha	Department of chemical engineering, A. C. Tech, Anna University	Assistant Professor	Chemical engineering
24	H K Amarnath	Don Bosco college of engineering fatorda Margao Goa	Professor	Thermal Engineering
25	J V C MALIACKAL	ALBERTIAN INSTITUTE OF SCIENCE AND TECHNOLOGY	Assistant Professor	ENERGY MANAEMENT, BIOFUELS
26	Geetesh Goga	IES College of Technology, Bhopal, Madhya Pradesh	Dean (Academics)	IC engines, Alternative fuels
27	R BRINDA	Mepco Schlenk Engg.College	Assistant Professor	RF and Microwave circuit design
28	GR Patil	PHCET, New Bombay	Professor	Structural Engineering
29	TUSHAR ANAND	National Institute of Technology, Silchar	Project Staff	Alternate Energy
30	Abhijit Madhav Date	Finolex Academy of Management & Technology, Ratnagiri.	Associate Professor	Thermal Engineering
31	Boopathi N	Vellore Polytechnic college	Assistant Professor	Mechanical
32	SACHIN VISHWANATH SHINDE	GURU GOBIND SINGH COLLEGE OF ENGINEERING	Assistant Professor	Heat and Power

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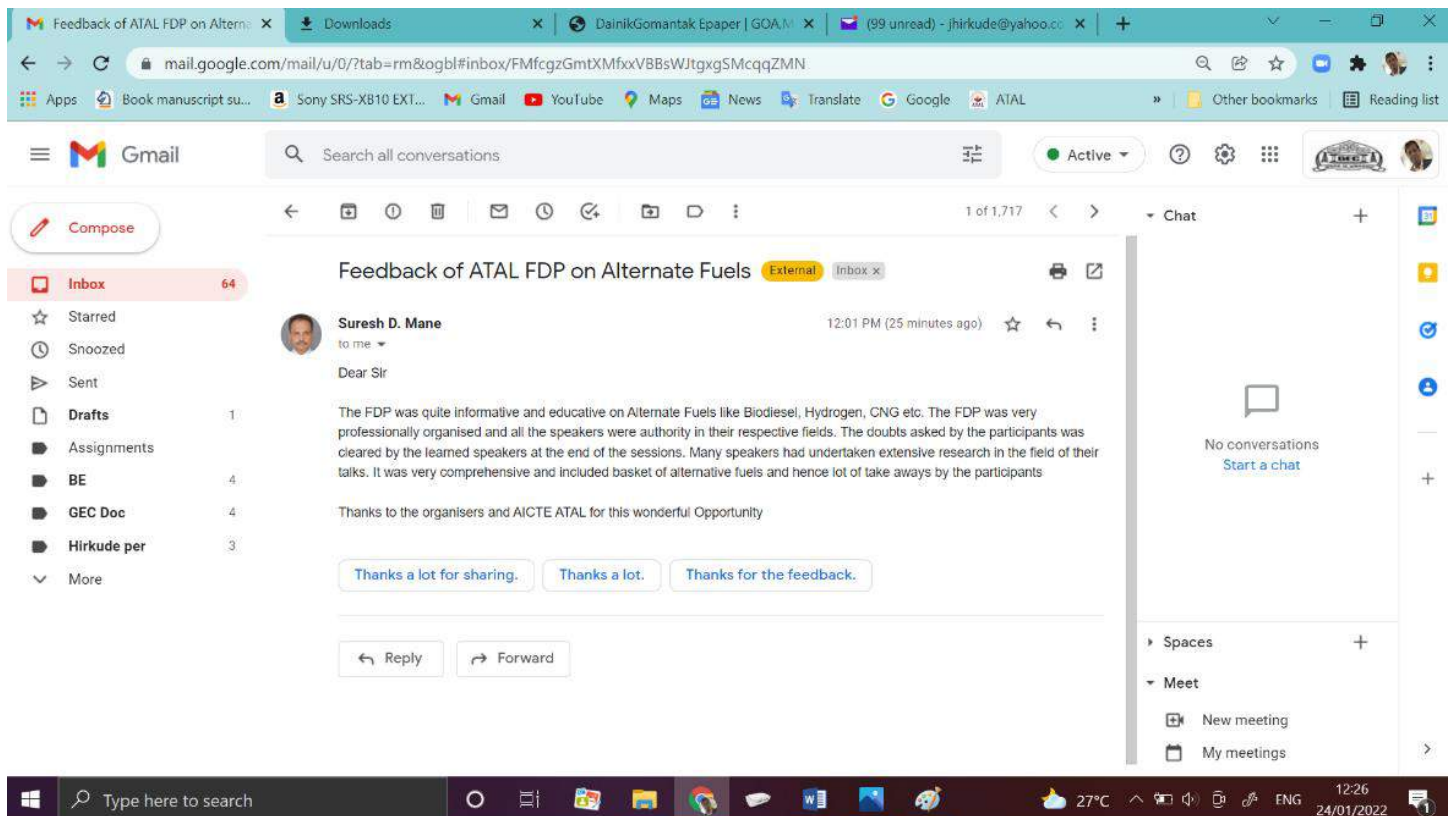
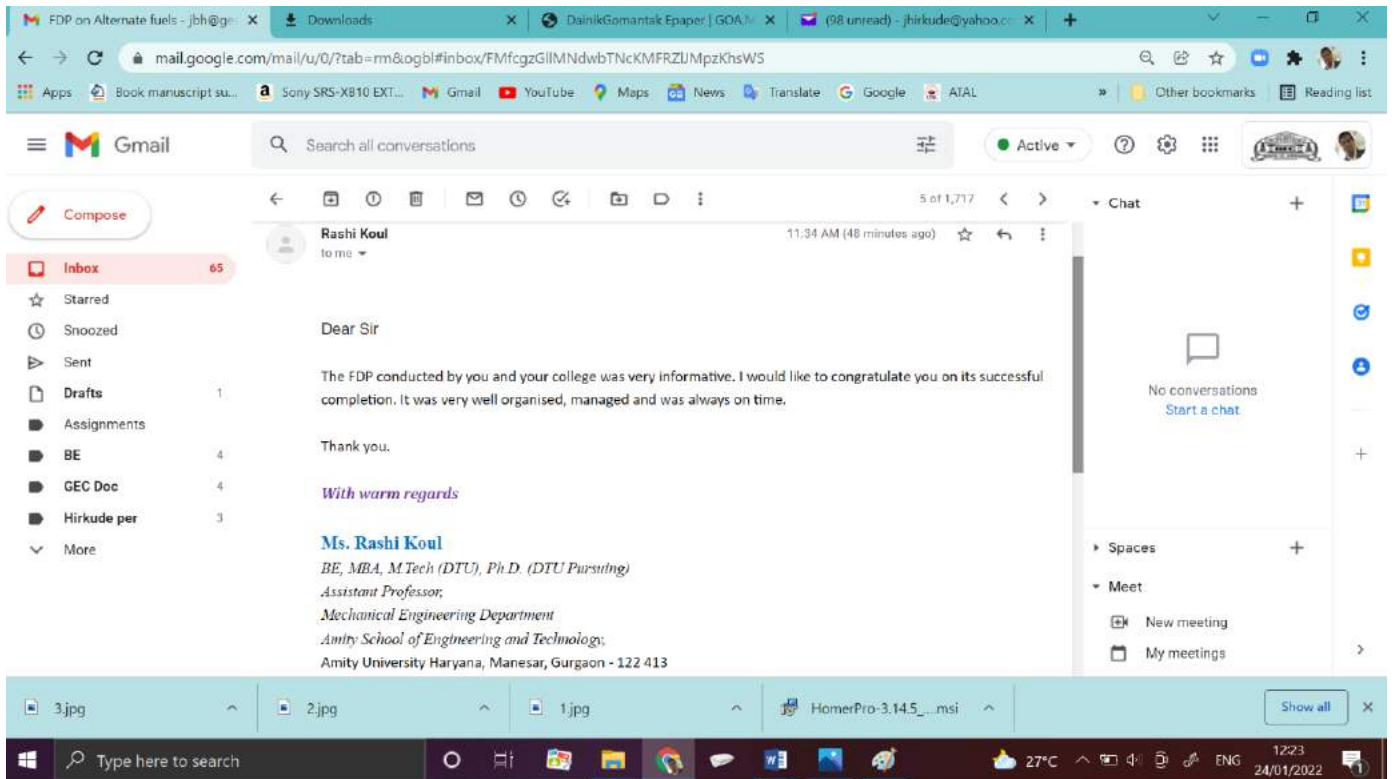
		AND RESEARCH CENTRE NASHIK		
33	Suresh Kumar Mohanty	NIST, Berhampur	Assistant Professor	Mechanical
34	ALOK PATRA	NIST (Autonomous) Berhampur	Assistant Professor	Mechanical
35	kumar	SRMIST-VDP	Assistant Professor	Thermal Engineering
36	A SENGOLE RAYAN	SRM Institute of Science and Technology, Vadapalani Campus	Assistant Professor	Mechanical
37	Rashi Koul	Amity University Haryana	Assistant Professor	Thermal Engineering
38	Manjunatha Swamy KM	Siddaganga Institute of Technology, Bellary	Assistant Professor	Mechanical
39	Umaiymbika N	Saveetha Engineering College, Chennai	Assistant Professor	Chemical Engineering
40	Bala Dutt	A D Patel Institute of Technology, Anand	Assistant Professor	Thermal Engineering
41	PAWAN KISHORE JHA	School of Engineering and Technology (A unit of Ganga Technical Campus), Delhi	Assistant Professor	Mechanical engineering
42	R MANOHAR BABU	NBKRI (Autonomous), Vidyanagar, Nellore	Assistant Professor	Refrigeration and Air-conditioning
43	Simit Prajapati	A D Patel Institute of Technology Vadodara	Assistant Professor	Automobile Engineering
44	SACHIN VISHWANATH SHINDE	GURU GOBIND SINGH COLLEGE OF ENGINEERING AND RESEARCH CENTRE NASHIK	Assistant Professor	Heat and Power
45	SHUBHANGI SANJAY KADU	SIES Graduate School of Technology, Thane	Assistant Professor	Chemical Engineering
46	Saqib Parvaze Allaie	Agricultural Engineering, Shrinagar	Assistant Professor	Agricultural Engineering
47	Rajendran P	K.S.R.COLLEGE OF ENGINEERING, Namakkal	Associate Professor	Mechanical Design Engg
48	Dr. Milind Sakhardande	Goa College of Engineering, Goa	Associate Professor	Mechanical Engineering
49	Dr. S. Naga Chandrudu	Royalaseema university college of	Professor	Chemistry

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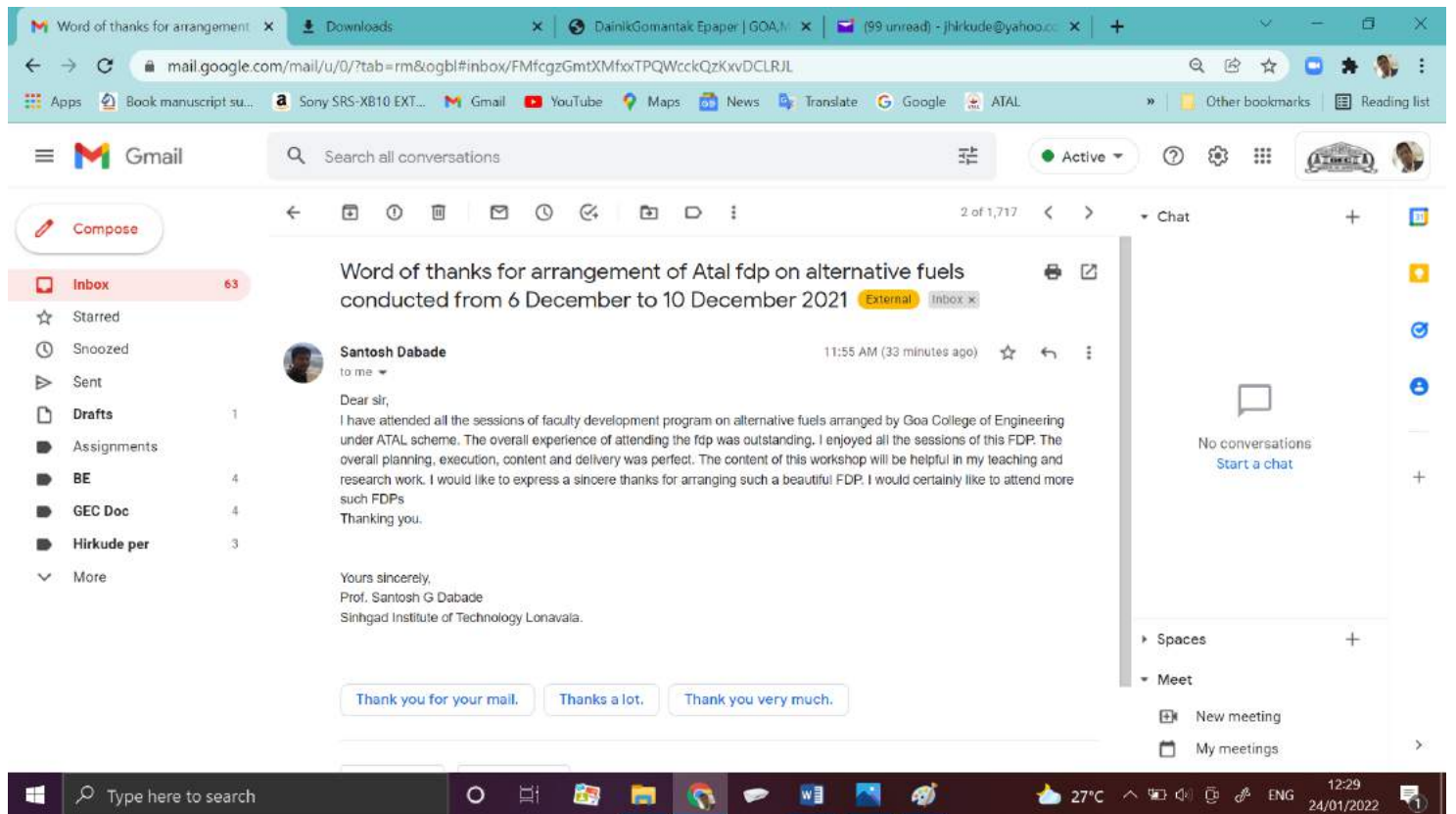
		engineering, Kurnool		
50	SUDIPTA NATH	SWAMI VIVEKANANDA INSTITUTE OF SCIENCE & TECHNOLOGY, WB	Assistant Professor	Mechanical Engineering
51	NADANAKUMAR V	HINDUSTAN INSTITUTE OF TECHNOLOGY AND SCIENCE, Tindivanam	Assistant Professor	Thermal Engineering
52	Navaneetha Krishnan Balakrishnan	Universiti Sains Malaysia	Research Scholar	Automobile Engineering
53	Vijayakumar S.Totad	AtriaIT, Karnataka Bagalkot	Associate Professor	Thermal Engineering
54	GVSR PAVAN KUMAR	Maharaj Vijayaram Gajapathiraj College of Engineering, Vizianagaram	Assistant Professor	CHEMISTRY
55	VENKATA SETHA PRAVEEN BULUSU	BV RAJU INSTITUTE OF TECHNOLOGY, Medak	Assistant Professor	CHEMICAL ENGINEERING
56	SHANTHARAMA	Government polytechnic Siddapur	Selection Grade lecturer	Mechanical Engineering
57	Mahesh Caisurcar	Goa College of Engineering, Goa	Assistant Professor	Mechanical Engineering
58	DINESH M H	GEC CHAMARAJANAGARA	Assistant Professor	Mechanical Engineering
59	ABHISHEK PRIYAM	Mpstm, Mumbai	Assistant Professor	Solar thermal Energy
60	TAPAS KUMAR MANNA	HALDIA INSTITUTE OF TECHNOLOGY, WB	Professor	Chemical Engineering
61	Sateesh Ningappa Hosamane	KLE DR M.S.Sheshgiri College of engineering and Technology, Belgium	Associate Professor	Chemical Engineering
62	Satyanarayana Prasad R	SRI SRI Academy, Hyderabad	PGT	Chemistry
63	CHRISTU PAUL R	INDUSTAN INSTITUTE OF TECHNOLOGY AND SCIENCE, CHENNAI	Professor	Automobile Engineering

ATAL workshop on Alternate Fuels

Some of the feedback received for the workshop are as below



ATAL workshop on Alternate Fuels



It was a great Initiative by ATAL Academy. I am thankful to AICTE for giving me this opportunity to conduct online FDP for faculty members of technical institute of India free of cost. I got huge response for registration as well as lots of compliment of arranging the online workshop, content and hands on.