



13th INTERNATIONAL SYMPOSIUM ON FUELS AND LUBRICANTS

MARCH 17-19, 2023

**Theme: Fuels & Lubricants as
Enablers for Net-Zero Goal**

Conference Schedule



March 17, 2023 (Friday)			March 18, 2023 (Saturday)			March 19, 2023 (Sunday)		
Registration (0800 hrs onwards) Tea (0800-1000 hrs)			<u>Plenary Session - II</u> (0900-1030 hrs)			Technical Session – V (0900-1015 hrs)		
<u>Inauguration</u> Symposium, Exhibition & Posters (1000-1115 hrs)						<u>TS V A</u> EV fluids	<u>TS V B</u> H2 as Future Fuel	<u>TS V C</u> Greases
Tea			Tea			Tea		
<u>Plenary Session - I</u> (1130-1300 hrs)			<u>Panel Discussion- II</u> (1045-1215 hrs)			<u>Plenary Session – IV</u> (1030-1200 hrs)		
Lunch			<u>Plenary Session - III</u> (1215-1345 hrs)			<u>Valedictory Session</u> (1215-1315 hrs)		
<u>Panel Discussion-I</u> (1345-1515 hrs)								
Tea			Lunch			Lunch		
Technical session – I (1545-1715 hrs)			Technical Session – III (1430-1600 hrs)					
<u>TS I A</u> AO-I	<u>TS I B</u> Oxygenated Fuels	<u>TS I C</u> Industrial Lubricants	<u>TS III A</u> NG & Lubricants	<u>TS III B</u> Bio-Technology	<u>TS III C</u> Metal Working Oils			
Tea			Tea					
Technical Session – II (1730-1900 hrs)			Technical Session – IV (1615-1745 hrs)					
<u>TS II A</u> AO-II	<u>TS II B</u> Fuel Testing & Additives	<u>TS II C</u> Circular Economy	<u>TS IV A</u> Base Oil & Additives	<u>TS IV B</u> Alternative Fuels	<u>TS IV C</u> Refining Technology	Hall	Technical Session (TS)	
<u>e-Poster Session – I</u> (1230 – 1600 hrs)			<u>e-Poster Session – III</u> (1230 – 1600 hrs)			Tango I	I-A, II-A, III-A, IV-A and V-A	
<u>e-Poster Session – II</u> (1600 – 1900 hrs)			<u>e-Poster Session – IV</u> (1600 – 1900 hrs)			Tango II	I-B, II-B, III-B, IV-B and V-B	
Networking Dinner (1900 – 2100 hrs)			Cultural Program & Conference Dinner (1930 – 2200 hrs)			Tango III	I-C, II-C, III-C, IV-C and V-C	
						Debate Hall	All e-Poster Sessions	

Hall:
Main Tango Hall

March 17, 2023 (Fri)
(1000-1130 hrs)

Inauguration

1000-1005 hrs	Invocation	
1005-1010 hrs	25 Years of ISFL Journey - Movie Clip	
1010-1020 hrs	Welcome Address and Introduction of ISFL 2023	Dr SSV Ramakumar Chairman, NSC, ISFL 2023 & Director(R&D), IndianOil
1020-1030 hrs	Keynote Address	Shri Mark Davies, Senior Director R&D – LZA Strategic Technology, Lubrizol UK
1030-1045 hrs	Theme Address	Shri Shrikant Madhav Vaidya Patron, NSC, ISFL 2023 & Chairman, IndianOil
1045-1110 hrs	Release of ISFL 2023 Souvenir and Abstract Book, Declaration of event as Carbon-Neutral & Inaugural Address by Chief Guest	Shri Pankaj Jain Secretary, MoP&NG, Govt. of India
1110-1115 hrs	Vote of Thanks	Shri Mukul Maheshwari Convener-cum-Organizing Secretary, ISFL 2023
1115-1120 hrs	Inauguration of Technical Exhibition	Shri Pankaj Jain Secretary, MoP&NG, Govt. of India
1120-1130 hrs	Inauguration of e-Poster Session	Shri Shrikant Madhav Vaidya Chairman, IndianOil



Hall:
Main Tango Hall

March 19, 2023 (Sun)
(1215- 1315 hrs)

Valedictory Function

1215 – 1225 hrs	Welcome Address	Dr SSV Ramakumar Chairman, NSC, ISFL 2023 & Director(R&D), IndianOil
1225 – 1245 hrs	Conference Summary	Shri Mukul Maheshwari Convener-cum-Organizing Secretary, ISFL 2023 CGM I/c (LT), IndianOil R&D
1245 – 1305 hrs	Valedictory Address by Chief Guest	Dr Anjan Ray Director, CSIR – Indian Institute of Petroleum (IIP)
1305-1315 hrs	Vote of Thanks	



Hall:
Main Tango Hall

March 17, 2023 (Fri)
(1130-1300 hrs)

Plenary Session - I

Lubricants as Enablers for Net Zero

Session Chair: Mr Subimal Mondal, ED, IOCL

Mr Bruce Royan

Operational Marketing Director
Infineum

Lubricants value chain – Transforming to grow sustainably

Mr. Mark Davies

Senior Director R&D – LZA Strategic Technology
Lubrizol UK

Lubricants as enablers on the journey to net zero

Dr Rhishikesh V. Gokhale

Global Technical Director (Additives)
Evonik Oil Additives

Supporting India's drive for efficiency : e-drive fluid design for maximum efficiency and durability

Mr Anand Bhargav

Global Segment Manager
Chevron Oronite, Singapore

Hybrid trends and solutions



Hall:
Main Tango Hall

March 18, 2023 (Sat)
(0900- 1030 hrs)

Plenary Session – II

Fuels as Enablers for Net Zero

Session Chair: Dr R K Malhotra, Former Chairman, IOCL

Mr Krishnan Sadagopan
Sr. Vice President
Ashok Leyland

Hydrogen IC Engines

Dr Thomas Featherstone
Team Leader (H2 Project)
Infineum

Hydrogen as future fuel

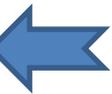
Dr Rob Allan
Senior Customer Technical Service Manager
AFTON

Use of diesel performance additives to restore fuel economy and performance in a modern Euro V tractor

Ms Vicky Villena-Denton
Editor
F+L Asia



Achieving net zero carbon through industry advocacy



Hall:
Main Tango Hall

March 18, 2023 (Sat)
(1215- 1345 hrs)

Plenary Session - III

Oxygenated and New Generation Fuels for Mobility

Dr SSV Ramakumar (Speaker & Chair)
Director (R&D)
IndianOil

Future fuels and lubricants

Mr Rajendra Petkar
Chief Technology Officer
Tata Motors

Hydrogen fuel cells for mobility

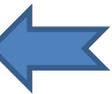
Mr Jorge Manes
Industry Liaison Advisor
Infineum Brasil Ltd



An overview of the Brazilian flex engine evolution and its upcoming sustainability pursuit

Prof K A Subramanian
Dept of Energy Science & Engg.
IIT Delhi

Oxygenated fuels enabling the decarbonisation of mobility



Hall:
Main Tango Hall

March 19, 2023 (Sun)
(1030- 1200 hrs)

Plenary Session – IV

E-mobility

Mr. Saurabh Dalela (Speaker & Chair)
Director
International Centre for Automotive Technology (iCAT)

Government initiatives & standards for e-mobility

Dr Tapan Sahoo
Executive Director (Engineering)
Maruti Suzuki

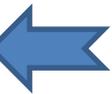
Electric Mobility in Passenger Vehicle Segment

Mr. Prakash Rao
Principal Chief Engineer, Power Train ICE & EV
Mahindra & Mahindra

EV application, challenges and possible solutions – India Perspective

Mr Sanjeev Gupta
Chairman (IOP) and ED (Corporate Strategy)
IndianOil

Alternate battery chemistries for electric mobility



Hall:
Main Tango Hall

March 17, 2023 (Fri)
(1345- 1515 hrs)

<u>Panel Discussion I</u>	
Clean Environment Imperatives	
Mr P K Banerjee (Speaker & Moderator) Chief Executive Director SIAM	Auto Industry roadmap on cleaner mobility
Mr Sachin Agarwal Senior Vice President VECV	Clean energy options for Commercial Vehicles – Opportunities & Challenges
Mr Ramaprabhu Head, Fluid Technology Mahindra & Mahindra	Clean energy mix & new technologies in passenger car & HD segment
Mr Sanjay Kumar ED(Lubes) HPCL	Contemporary trends in automotive lubricants
Mr Alok Trigunayat Executive Director Ecocat India Pvt. Ltd.	Exhaust after-treatment technologies for cleaner mobility



Hall:
Main Tango Hall

March 18, 2023 (Sat)
(1045- 1215 hrs)

Panel Discussion II

Customer Perspective on Emerging Fuel & Lubricant Trends

Dr. Reji Mathai (Speaker & Moderator) Director Automotive Research Association of India (ARAI)	Auto Industry perspectives
Mr V. Satish Kumar Director (Marketing) IndianOil	OMCs perspective on fuels and lubricant solutions
Mr C V Raman Chief Technology Officer Maruti Suzuki	Hybrid engine technology for passenger car segment
Mr R Venkatesh Managing Director Wartsila India	Hydrogen as future fuel for stationary energy / renewable grid scale



Hall:
Tango - I

March 17, 2023 (Fri)
(1545- 1715 hrs)

TS I A : Automotive Oils-I

Session Chair: **Mr R Udaya Kumar, ED(Lubes), IOCL**

257	Supporting India's drive for fuel economy: Comb polymer technology for engine oils Dr Rhishikesh V. Gokhale Evonik Oil Additives
277	Balancing durability and catalyst compatibility for future motorcycle engine oil applications Mr Sandeep Pawar Lubrizol India Pvt. Ltd.
332	Fuel Economy improvement in HDD Lubricants Mr Lalit Madan Infineum India Additives Pvt. Ltd.
330	Fuel-Efficient Axle Lubricants Mr Satya Pathak Afton Chemical Ltd
502	Development of green combo lubricant solution for heavy duty commercial vehicles: A step towards reducing carbon footprints from the existing vehicle fleet Dr Sarita Seth Indian Oil Corporation Ltd. R&D Centre.



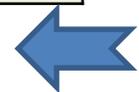
Hall:
Tango - I

March 17, 2023 (Fri)
(1730- 1900 hrs)

TS II A: Automotive Oils - II

Session Chair: **Dr Deepak Saxena, Former ED, IOC R&D**

215	Sustainable source based ester amide additives for lubricants Dr D. Boudreau Vanderbilt Chemicals, LLC,
251	The performance of low viscosity engine oils with MoDTC under hybrid electric vehicles Mr Shinji Iino ADEKA Corporation
236	Fuel efficient additive package technology for new generation motorcycle engine oils. Dr Udayashankar Bhat Infineum India Additives Pvt. Ltd.
205	Evaluation of long term energy efficiency in automotive gear oils using friction modifiers and viscosity modifiers Mr Botta Sudhakar Gulf Oil International, Global R&D Centre,
221	Effect of compatibiliser chemistry on performance of synthetic industrial and automotive gear oils Dr Amitabh Kumar Jain Hindustan Petroleum Corporation Ltd.



Hall:
Tango - I

March 18, 2023 (Sat)
(1430- 1600 hrs)

TS III A : Natural Gas & Lubricants

Session Chair: Mr Mukul Maheshwari, CGM I/c (LT), IOC R&D

238	Lubricant development for natural gas (NG) engines Dr Amol Nilpawar Infineum India Additives Pvt. Ltd.
281	Dedicated mobile gas engine oil chemistries enabling long drain for CNG commercial vehicles Mr Sreehari Kumar Lubrizol India Pvt. Ltd.
506	Liquefied natural gas: Solution towards decarbonising long haul fleets in India Dr Sauhard Singh Indian Oil Corporation Ltd. R&D Centre.
232	Promoting clean cooking fuels in India one step towards net zero Mr Aniruddha Kulkarni BPCL R&D



Hall:
Tango - I

March 18, 2023 (Sat)
(1615- 1745 hrs)

TS IV A: Base Oil & Additives

Session Chair: Mr Debashis Ganguli, CGM (Lubes), BPCL

204

Active behaviour of synthetic esters as anti-oxidant boosters

Ms Ambika Satish
AVI-OIL India Pvt. Ltd.

292

Low viscosity low volatility synthetic basestocks “doing more with less targeting high performance european specifications”

Dr Manish Patel
ExxonMobil Product Solutions

510

Coolants for modern engines as well new energy vehicles

Mr Neville Colaco
BASF India Limited

235

Creating a sustainable future through innovative chemistry

Mr Mohnish Shukla
Infineum India Additives Pvt. Ltd.



Hall:
Tango - I

March 19, 2023 (Sun)
(0900- 1015 hrs)

TS V A : Operating Fluids for EVs

Session Chair: Mr Prakash Rao, Principal Chief Engineer (PT- ICE & EV), Mahindra & Mahindra

315	Nano fluid coolant for automotive cooling applications Mr Kiran N Ashok Leyland Ltd
216	Managing the challenges of cooling electrical vehicles and their systems Mr Amol Chore Arteco Coolants India Pvt Ltd
279	e-fluid technology for electrified drivetrains Mr Nilesh Kadu Lubrizol India Pvt. Ltd.
321	Development of dedicated transmission lubricants for electric vehicles Dr Lakshmi Katta Indian Oil Corporation Ltd. R&D Centre.



Hall:
Tango - II

March 17, 2023 (Fri)
(1545- 1715 hrs)

TS I B - Oxygenated Fuels

Session Chair: Mr M Satyanandan, VP, Ashok Leyland

313	Performance and emissions evaluation of a di engine using methanol-diesel blends for heavy commercial vehicle engine Mr Senthil Kumar G Ashok Leyland Ltd
352	Ethanol diesel blends – review, experience and way forward for India Dr. Robert Paulmer MIWrk Pte Ltd.
231	Effect of diesel-ethanol blends on the performance and emissions of a CI diesel engine suitable for stationary application Mr Rahul Garg Bharat Petroleum Corporation Ltd.
339	Effect of microbial growth on fuel characteristics of biodiesel-diesel blend Dr Manoj Kumar Upreti Indian Oil Corporation Ltd. R&D Centre.
309	Performance of a diesel engine using ED fuel Mr Senthil Kumar G Ashok Leyland Ltd



Hall:
Tango - II

March 17, 2023 (Fri)
(1730- 1900 hrs)

TS II B : Fuel Testing & Additives

Session Chair: **Dr Ajay Arora, GM(F&A), IOC R&D**

256	Dorf Ketal performance fuel additives - novel fuel additives technology for sustainability Mr Bharat Joisar Dorf Ketal Pvt. Ltd.
305	Fuel oil emulsion - transition fuel - low investment high performance Mr Hemant Sondhi Fowe Eco Solutions Ltd
217	Going green thanks to hydrogen fuel. Generation of trace level calibration gases that are essential for the calibration and certification of the H2 purity analysers Mr Laurent Courthaudon AlyTech , France
261	Nitrogen Interference in sulphur analysis of fuel and solution for true sulphur analysis in fuel Mr Rahul Iyer Skytech Systems (India) Pvt. Ltd.
210	State-of-the-art methodology for determination of trace level of elemental sulfur in aviation fuel by polarograph Dr Y S Jhala Indian Oil Corporation Ltd.
267	Development of differentiated fuels: Role of analytical techniques for quick and simultaneous measurement of multiple qualitative and quantitative parameters Dr Sujit Mondal Indian Oil Corporation Ltd.



Hall:
Tango - II

March 18, 2023 (Sat)
(1430- 1600 hrs)

TS III B : Bio-Technology

Session Chair: **Dr S K Puri, Former CGM, IOC R&D**

245	All Roads leading to biorefinery – A step further towards sustainable mobility and future Mr Harshit Agarwal Axens group	
260	Carbon recycling: An innovative path towards aviation decarbonization Dr Preeti Jain LanzaTech, USA	
268	Bioconversion of CO2 to transportation fuels Dr Prakash C. Sahoo Indian Oil Corporation Ltd. R&D Centre.	
501	Integrated biorefineries for sustainable fuels and chemicals Dr S Venkata Mohan CSIR-IICT, Hyderabad	
507	Pilot-scale production of biodegradable plastics through fermentation technology Dr M. Venkateswar Reddy Colorado State University, USA	



Hall:
Tango - II

March 18, 2023 (Sat)
(1615- 1745 hrs)

TS IV B : Alternative Fuels

Session Chair: **Dr Umish Srivastava, ED, IOC R&D**

516	Alternate fuels development for marine / decarbonisation and sustainable fuels Mr Pankaj Misra Wartsila India	
280	Alternative Fuels – Preparing for the impact on marine lubricants Mr Ian Bown Lubrizol	
244	Kinetic study of thermal decomposition of monopropellant (ammonium perchlorate) Dr Harish Kumar DMSRDE-DRDO	
286	Managing the transition from fossil fuels to renewables - challenges, opportunities & implications Mr Ashok Jambur Human Development Society	



Hall:
Tango - II

March 19, 2023 (Sun)
(0900- 1015 hrs)

TS V B : H2 as future fuel

Session Chair: **Mr Rajesh Badhe, CGM, IOC R&D**

517	Optimal exhaust after treatment solutions for H2-ICE Dr Shravan Srisailam BASF Catalysts India Pvt Ltd
504	Decoding hydrogen ecosystem for India Mr Sachin Chugh Indian Oil Corporation Ltd. R&D Centre.
351	Hydrogen ICEs for commercial on-road and off-road applications: realization of robust and cost-effective carbon free combustion engines Dr -Ing. Om P Bhardwaj FEV Europe GmbH
302	Effect of low temperature and low humidity on Nafion based membrane electrode assembly for PEM fuel cell Ms S. Meenakshi Indian Oil Corporation Ltd. R&D Centre.



Hall:
Tango - III

March 17, 2023 (Fri)
(1545- 1715 hrs)

TS I C : Industrial Lubricants

Session Chair: Mr Ajay Kr Harinarain, CGM, IOC R&D

- | | |
|------------|---|
| 276 | Enabling industrial gear oil towards “net zero goal”
Mr Thierry Douchy
Lubrizol |
| 259 | Energy savings are just an oil change away
Mr Thilo Krapfl
Evonik Oil Additives |
| 220 | Power plant lubrication reliability
Mr Anshuman Agrawal
Minimac Systems Pvt Ltd |
| 329 | Troubleshooting compressor lubrication issue at GNFC WNA-II plant Bharuch: A case study
Mr Rajin R Khandpur
GNFC Ltd |
| 326 | Energy efficient refrigeration compressor oils: Enablers for net zero
Mr Saagar Kondaguli
Indian Oil Corporation Ltd. |



Hall:
Tango - III

March 17, 2023 (Fri)
(1730- 1900 hrs)

TS II C : Circular Economy

Session Chair: Dr Pankaj Bhatnagar, CGM, IOC R&D

297	Condition monitoring of regenerated lubricating oil of critical plant equipment Mr N Mondal RDCIS, SAIL, Ranchi
247	A unique approach for quality monitoring of petroleum products at customer's doorstep through quality on wheels-mobile lab Mr R. Subramanian Bharat Petroleum Corporation Ltd.
278	Additive company's contribution towards circular economy achieving Net Zero Mr Kailash Sawant Lubrizol India Pvt. Ltd.
246	Circular economy in used oil waste Mr Anuj Seth Axens group
317	Circular economy in lubricating oils Mr Peeyush Dubey Indian Oil Corporation Ltd.



Hall:
Tango - III

March 18, 2023 (Sat)
(1430- 1600 hrs)

TS III C: Metal Working Oils

Session Chair: **Mr Rajesh Nambiar, CGM (TS), IOCL**

212	Advantages of using sulfur based EP additives in metalworking fluids Mr Wilhelm Rehbein Lanxess Deutschland GmbH
206	Experimental studies on stability and tribological performance of renewable resource based water-extendable metalworking fluids Mr Duddu Vinod Kumar Gulf Oil International, Global R&D Centre
203	Rapid screening of rust preventive performance of lubricant Mr Prashant Parihar Bharat Petroleum Corporation Ltd.
318	Sustainable, biobased metal working fluids (MWFs) Dr Jyoti Porwal CSIR-Indian Institute of Petroleum
328	Field validation of innovative water based synthetic cutting fluid for auto ancillary industries Dr Simmi Datta Indian Oil Corporation Ltd. R&D Centre.



Hall:
Tango - III

March 18, 2023 (Sat)
(1615- 1745 hrs)

TS IV C: Refining Technology

Session Chair: **Mr Sarvesh Kumar, CGM, IOC R&D**

201

HP-TRIJET: A tandem catalyst based technology for production of sustainable aviation fuel/green diesel from used cooking oil

Dr Narasimharao Kanna

Hindustan Petroleum Corporation Ltd.

250

Steps towards net zero commitment

Mr Ratheesh S

Bharat Petroleum Corporation Ltd.

255

Reducing carbon footprint of transportation fuels by processing waste plastic pyrolysis oil in refinery: sustainable approach to net zero goal

Mr Shahil Siddiqui

Indian Oil Corporation Ltd. R&D Centre.

299

Dual functional surfactant/waxy containing biodegradable warm mix additive for asphalt mixtures

Mr Kottari Naresh

Hindustan Petroleum Corporation Ltd.



Hall:
Tango - III

March 19, 2023 (Sun)
(0900- 1015 hrs)

TS V C : Greases

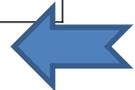
Session Chair: **Dr T Singh, DGM, BPCL R&D**

319	Developing & validating an automotive grease : beyond field trials Mr Pallav Chatterjee Tata Motors
290	New approaches to understanding critical grease properties with novel investigative equipment Prof. Krishnaswamy N. Ponnani Labcon Scientific Instruments
225	Evaluation of CNTs in lubricating greases Dr Sayantan Das Indian Oil Corporation Ltd. R&D Centre.
230	Study on the application of novel rosin ester as potential eco-friendly multifunctional additive in polyol based grease Mr Ripudaman Singh Negi CSIR-Indian Institute of Petroleum



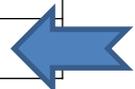


Paper ID	Title of the Abstract	Author
211	Effect of fuel-efficient engine oil on the durability of heavy-duty diesel engines	Anand Prakash Gupta
213	1,1,3,3-Tetramethylguanidine based dicarboxylate ionic liquids as efficient additives for lubricants	Praveen K. Khatri
214	Mitigation study of foaming in high TBN marine oils -Role of defoamants in individual as well as in combined forms in controlling foaming tendency of highly polar marine lubricants	Ramanathan R
219	Circular economy & ESG in used lubricants & sectors	Bhavti Patadia
269	Next-Gen Mobile Gas Engine Oil for Indian Heavy Duty CNG Fleet Applications	Bijan Roy
228	Establishing shear stability index as per thickening efficiency model for Olefin copolymers	K. Naresh Kumar
234	Study of effect of additives on hydrolytic stability of rapeseed oil and trimethylolpropane trioleate	Shruthi K. S.
239	Effect of amine phosphates on the oxidation stability characteristics in synthetic compressor oil	Umashankar Male
240	Study on oxidation stability of lubricant base stocks by rotary bomb oxidation test and pressurised differential scanning calorimetry	Kashinath Sutar
252	Development of indigenous pour point depressants (PPDs) additive to formulate both automotive and industrial lubricants	Santosh K. Sahoo
253	Development of cost-effective heavy duty diesel engine crank-case lubricants through in-house developed soot dispersancy engine test method	Ashish Kachhawa
262	Fuel and engine oil auxiliaries: functionally modified polyisobutylenes as ash-less dispersants	Tota Rajsekhar
265	Studies on lead and copper corrosiveness of heavy duty diesel engine oils	Rajesh Nimmakauri
270	Study on ashless & zinc based bearing oils for no twist rod mills (NTM)	M. N. K. Prasad Bolisetty
272	Study on antioxidant and antiwear interaction in industrial oils	Sumit Bhaskaran
248	Reduced tendency to form sludge in oil – An effect of alkylation on phenyl and diphenyl amines antioxidants	Ashish Mishra
293	Hot Rolling oil for stainless steel	Vilas Ramtenki
304	Evaluation of long drain capability of diesel engine oils by laboratory and in-house engine testing studies	Sathyam Reddy Yasa
306	Studies on oxidation & deposit forming properties of API CI4 plus diesel engine oil with addition of biodiesel	Sandeep Kumar
349	Lifecycle enhancement of turbine oils	Arjun G Singh Tuteja





Paper ID	Title of the Abstract	Author
226	Optimization of industrial alkaline electrolyser plant using a simulation-based approach	Rahul Garg
229	Performance evaluation of high octane fuels on BS VI motorcycle	Shyamsher Saroj
243	Synthesis of high energy-density polycyclic hydrocarbon fuel on mesoporous supported nanocatalyst	Nizamuddin Khan
263	Material compatibility studies with high octane fuels (XP100 and XP95)	Fariha Saleem
271	Combustion behaviour of octane boosters in gasoline streams on a fuel injection based single cylinder engine	Navarun Saikia
273	Value addition of LVFO as green fuel LSHS (Premium)	Manisha Saraswat
274	Study on potential FSII for application in high flash ATF Fuel (JP-5)	Kiran K. Chakrahari
282	Study of real driving emission of ethanol blended gasoline fuel with portable emission measurement equipment on rde compliant route	Chander Kant
283	Effect of Iso-Propanol as a co solvent on phase stability and volatility behavior of ethanol blended motor gasoline	Nihar Dash
285	Performance and emission characteristics of GEM fuel in a constant speed S.I. engine	M.K.Shukla
289	Green hydrogen as enabler to achieve the net zero goal	Mukul Gupta
298	A novel cost effective multi-functional corrosion inhibitor for LPG pipelines	Kottari Naresh
301	Performance evaluation of 5kW hydrogen fuel cell for heavy duty mobility	Tarun Jindal
303	Single step electrochemical production of green hydrogen blended compressed biogas	Chinmay Chaudhari
307	Investigation of combustion catalyst efficacy for heavy fuels	M Rajendran
310	Experimental investigation on performance of BS VI complaint EFI motorbike with oxygenated fuel blends (E0, E10, E20 & M15)	Yaman Sahu
312	Performance of a diesel engine using biodiesel	Senthil Kumar G
316	COx free hydrogen production through multi-walled carbon nanotubes (MWCNT) process	Bhanumurthy Samala
320	Post-Flame oxidation of unburned hydrocarbon: A review on timeline of formation of soot particle into different engine deposits	Dinesh Deva
322	A novel approach towards hydrogen generation by aqueous reforming of methanol over hydrotalcite catalysts	Meeta Sharma





Paper ID	Title of the Abstract	Author
334	Effect of absorbing low sulphur aviation fuel as interface plug on quality of ethanol blended gasoline	Manoj Kumar Shukla
335	Physicochemical studies on aviation turbine fuel & biodiesel blends	Ravi Gajera
336	Catalytic conversion of bio-oil for the production of green transportation fuel	Sandeep K Saxena
338	Fuel storage issues in ethanol blended fuels (EBMS): A case study	Rajiv Srivastava
208	SAF - viable production process for SBCS in Indian perspective	Manish Malhan
233	Bio-based surfactant from alternative fuels: production and optimization using response surface methodology	Neha
287	Vertigo testing model for ensuring working at height to prevent fall from height of persons due to acrophobia	Ananta Bhende
323	Biohydrogen (BioH₂) production from Biomass	Srikanth Sandipam
324	Evaluation of piston deposits, fuel economy, oil consumption and wear characteristics for developing eco-friendly new generation engine oil for light duty vehicles	Sanjeev Kumar Singh
325	Synthesis of copper nanofluids for heat transfer applications	Om Parkash
291	EV fluids -an exciting opportunity for development of novel testing units and standard protocols	Krishnaswamy N. Ponnani
333	Lignin depolymerization to produce high value chemicals	Prakram Singh Chauhan
340	Cotton seed oil-derived biolubricants for industrial applications: synthesis, physicochemical characterisation, and tribological studies	Ponnekanti Nagendramma
311	Effect of MWCNT in Lithium-ion Battery electrochemical activity	Senthilkumar Krishnan
275	New generation antifreeze coolant for electric vehicles	Naresh Gutta
314	Battery technologies for E-Mobility	Veena Yadav
337	Performance aspects of 2,5- dimethylfuran blends stratified charge gasoline direct injection (GDI) engine on lean limit operation	P.Rajkumar
224	Organosilicon-based polyisobutylene succinimide/esters as multifunctional lubricant additives	Sameeksha Raizada



Session-4 on Refining Technology & Analytical Techniques

Paper ID	Title of the Abstract	Author
209	State-of-the-art methodology for determination Total Aromatics in VGO samples By FTIR	Mamta Kumari
227	Detection of adulteration in biodiesel and its blends with virgin vegetable or used cooking oil from FTIR spectral analysis	Pankaj Kumar Mondal
249	Unified laboratory intelligence system (ULIS): A sustainable approach for fuels and lubricants analysis with case studies	Ravindra Kumar
264	Identification and quantification of recalcitrant molecules in industrial wastewater using GC-MS technique	Dheer Singh
294	Automated determination of relative density of methanol/water mixtures (MWM) used in aviation industry	Sreekumar N V
300	Multi-dimensional chromatographic analysis for molecular level characterization of bio-oil.	Kottari Naresh
202	HP-Bottoms cracking additive for FCCU	Somanath Kukade
223	Comparative performance evaluation of commercial and inhouse synthesized wax dispersant on wax deposition behavior of Upper Assam Basin crude Oil	Manisha Sahay
242	Waste to BS-VI fuels as enabler for net zero	P. Naresh
254	Thermal co-carbonization study of petroleum residues and coal tar pitch for production of electrode material for aluminium industry	Mr Prantik Mondal
295	Evaluation of heavy metals in north Gujarat crude & their toxic effect in treated industrial effluent water	Bhawana Srivastav
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241	Experimental study of in-cylinder flame characteristics of butanol-gasoline blends in SI engine using endoscopic visualization system	S.Kumaravel





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