

EnggCoat2026

25-27 February | VMCC | IIT Bombay



Inaugural Session

08:00 – 09:00 REGISTRATION
 09:00 – 10:15 INAUGURATION
 10:15 – 10:55 INAUGURATION OF EXHIBITION & HIGH TEA

Day 1 (25.02.2026): Wednesday (Technical Sessions)

Time	Event Sessions	Details			
11:00-11:40	Plenary Lecture	<p>PL:01 Dr. Olivier Brun Advanced Zn–Al–Mg coated steels: Optimized solutions for modern construction Venue: Main Auditorium</p>			
11:40-13:30		<p>Parallel session 01 Functional coatings Venue: HALL A</p>	<p>Parallel session 02 Corrosion Venue: HALL B</p>	<p>Parallel session 03 Metal finishing Venue: HALL C</p>	<p>Parallel session 04 Thermal spray Venue: HALL D</p>
11:45-12:15	Keynote/Invited	<p>KL:01 Dr. Anup Kumar Keshri Processing of 2D materials by plasma spraying</p>	<p>KL:02 Prof. Normand Bernard Corrosion and cold spray coatings: Mechanisms and strategy of improvement</p>	<p>KL:03 Dr. Rajan Ambat Surface engineering of aluminium using anodizing: Insights on producing decorative surfaces</p>	<p>KL:11 Prof. Milan Kouřil Resistometric technique for corrosion monitoring and research</p>
12:20-12:40	Invited Lectures	<p>IN:01 Dr. Paragkumar Thanki Current priorities in coated steels research and development</p>	<p>IN:04 Dr. Atharva S Chikhalikar Understanding corrosion of CoNiCrAlY metallic coatings under thermal cycling with simultaneous deposit injection</p>	<p>IN:03 Dr. Nitin P Wasekar Electrodeposition of nanocrystalline CoFeNi equiatomic medium entropy alloy and its tribocorrosion behavior</p>	<p>OP T1-T6 Thermal spray (12:05-1:30)</p>
12:40-13:30	Oral Presentations	<p>OP F1-F4 Functional coatings</p>	<p>OP C2-C4 Corrosion</p>	<p>OP M1-M4 Metal finishing</p>	
13:30-14:30		LUNCH			

14:30-15:10	Plenary Lecture	<p style="text-align: center;">PL:02 Dr. Arjan Mol Advancing eco-friendly corrosion inhibitors and active protective coatings: Bridging discovery, mechanism and performance Venue: Main Auditorium</p>			
15:10-17:30	9:30-10:30	Parallel session 05 Functional coatings Venue: HALL A	Parallel session 06 Corrosion Venue: HALL B	Parallel session 07 Metal finishing Venue: HALL C	Parallel session 08 Thermal spray Venue: HALL D
15:10-15:30	Invited Lectures	IN:05 Prof. Jochen M. Schneider Leveraging quantum predictions to design the next generation of thermally, chemically, and mechanically stable protective coating materials	IN:15 Dr. Swati Sharma Enhancing the corrosion behaviour of TiO ² reinforced AlCoCrSiNi high entropy alloy fabricated via atmospheric plasma spray	IN:07 Dr. D. Satish Kumar Beyond galvanizing: The next generation of advanced zinc coatings for high-performance and sustainable applications	IN:08 Dr. Naveen Manhar Chavan Beneficial influence of coating defects in cold sprayed coatings: A case study on copper
15:30-16:00	Invited Lectures & Oral Presentations	OP F5-F6 Functional coatings	OP C5-C6 Corrosion	IN:09 Dr. Mahesh Gulab Walunj Advancements in hot dip galvanizing coating technologies through modulation of advanced processes for improved properties and corrosion performance: A new approach	OP T7-T8 Thermal spray
16:00-16:30	TEA				
16:30-18:00	Oral Presentations /Keynote lecture	OP F7-F14 Functional coatings	OP C7-C14 Corrosion	OP M5-M12 Metal finishing	OP T9-T10 and T13-T14 Thermal spray KL:04 Prof. Harpreet Singh Perspectives on cold spray: Introduction, evolution, applications and future

Note: PL: Plenary Lecture (40 min); KL: Keynote Lecture (30 min); Invited Talk (20 min) & OP: Oral Presentations (12 min)

Day 2 (26.02.2026): Thursday (Technical Sessions & Industry Symposia)

Time	Event Sessions & Details	
9:30–10:50	Plenary Lecture PL:03 Prof. Shrikant Joshi Axial plasma spraying: Unlocking new horizons in thermal spray innovation Venue: Main Auditorium	
	Plenary Lecture PL:04 Prof. Günter Artur Schmitt Digitalization of electrochemical metal plating plants - Real-time monitoring in ZnNi plating lines Venue: Main Auditorium	
10:50-11:10	TEA	
INDUSTRY SYMPOSIA KEYNOTE LECTURES		
11:10-13:40	Parallel Session 01 Automotive and General Engineering Venue: VMCC Main Auditorium	Parallel Session 02 Asset Protection and Protective Coatings Venue: P C Saxena Auditorium
11:10-11:40	IS:01 Dr. J.N. Balaraju Electroless (Autocatalytic) nickel plating: A comprehensive overview for industrial applications	IS:13 Dr. Beirbal Singh Bhandari Harnessing covalent-bond epoxy-locking technology into a sustainable coating solution to extend asset-integrity of offshore & onshore installations
11:40-12:10	IS:02 Dr. Kalyan Dhakane ECOMET® Corundum: PFAS-free zinc-lamellar coating systems for sustainable corrosion protection – integrating material science, environmental compliance, and industrial performance	IS:14 Dr. Neil Wilds Introduction to CUI and the history of testing and prequalification
12:10-12:40	IS:03 Dr. Phil Norton Status of trivalent chrome plating for decorative and technical surfaces APEXCHROMETM – hard chrome from a trivalent electrolyte with new characteristics	IS:15 Dr. Neil Wickham Fire engineering and its applications in designing passive fire protection systems for hydrocarbon fire protection
12:40-13:10	IS:04 Dr. Johannes Klos Acid zinc-nickel-electrolytes: A solution to reduce power consumption and environmental problematic complexing agents	IS:16 Dr. Ozge Yucel Superhydrophobic coatings technology development and testing
13:10-13:40	IS:05 Dr. Stefan Beirle Empowering next - gen manufacturing in India: The BMG Inline Coating Machine for Unmatched Efficiency and Quality	IS:17 Mr. Dinesh Arve Coatings and surface engineering for energy systems: Bridging durability, sustainability and performance
13:40-14:40	LUNCH	

<p>14:40-15:10</p>	<p>IS:06 Mr. Dharmendra Rao Gayakwada Advanced manufacturing at Bosch Nashik: Building practical excellence in PVD and PACVD coatings</p>	<p>IS:18 Dr. Arunchandran Chenan Smart coatings: Conquering corrosion now and beyond</p>
<p>15:10-15:40</p>	<p>IS:07 Mr. Lalit Handa An innovative sustainable solution for 100% clean water recovery from highly polluted industrial effluents using patented MVR based Low Temperature Evaporation (LTE®) technology for thermal waste heat recycling system</p>	<p>IS:19 Mr. Michael Kuehn Practical approach to coatings for offshore maintenance</p>
<p>15:40-16:10</p>	<p>IS:08 Dr. R. Subasri A stitch in time saves nine": Smart coatings with early corrosion sensing and inhibition for effective corrosion management</p>	<p>IS:20 Dr. Michael Harrison Delivering the next level in performance for tank linings to meet the latest demands</p>
<p>16:10-16:30</p>	<p>TEA</p>	
<p>16:30-17:00</p>	<p>IS:09 Dr. Jaideep Kulkarni An overview of instrumental techniques for developing and analysing engineering coatings</p>	<p>IS:21 Mr. Abhay Varma Next generation cellulosic passive fire protection</p>
<p>17:00-17:30</p>	<p>IS:10 Dr. Tapan Rout Green surface revolution: Sustainable pretreatment for next-gen automotive painting</p>	<p>IS:22 Mr. Rajes Bardia Corrosion under insulation- A practical approach</p>
<p>17:30-18:00</p>	<p>IS:11 Mr. Varit Gupta A versatile microwave plasma platform for high-performance industrial coatings: from high-rate DLC to low-temperature hard coatings</p>	<p>IS:23 Mr. Densil Dcosta Solutions for new generation paint applications</p>
<p>18:00-18:30</p>	<p>IS:12 Mr. Suraj Dhanraj Jadhav Laser photo-thermal radiometry as an enabling tool for advanced engineering coating characterization</p>	<p>IS:24 Dr. Koustav Chatterjee Automation in protective coatings applications</p>
<p>18:30-18:50</p>	<p>REFLECTIONS & CLOSING THOUGHTS</p>	
<p>19:00-22:00</p>	<p>GALA DINNER</p>	

Day 3 (27.02.2026): Friday (Technical Sessions)

Time	Event sessions	Details		
09:30-13:00		Parallel Session 03 Metal finishing & Corrosion Venue: Hall A	Parallel Session 04 Thermal spray & Functional coatings Venue: Hall B	Parallel Session 05 PVD/CVD Venue: Hall C
09:30-10:00	Keynote	KL:05 Dr. Dominique Thierry Influence of microstructure on the corrosion of zinc aluminium magnesium coated steel	KL:06 Prof. D. S. Patil Plasma technology for functional coatings	KL:07 Dr. L Rama Krishna Translating heterogeneity into opportunities through surface engineering
10:00-10:30	Keynote	KL:08 Prof. N. Rajagopalan Lignin for next-generation anticorrosive coatings	KL:09 Dr. G. Sivakumar HVOF-enabled high-performance coatings: From thin to thick layers to deliver engineering solutions	OP P1-P2 PVD/CVD
10:30-11:00	TEA			
11:00-13:30		KL:10 Prof. Chandan Srivastava Corrosion behavior of metallic coatings with carbonaceous additives (11:00-11:30)	IN:12 Dr. Rakesh C Barik Nanomaterials and smart coatings for corrosion control: mechanisms, industrial applications, and future trends (11:00- 11:20)	OP P3-P9 (PVD/CVD) OP T11,T12, T15 and T16 (Thermal Spray)
		OP M13-M19 Metal Finishing (11:30-13:30)	OP F15-F20 Functional coatings (12:00-13:30)	
13:30-14:30	LUNCH			

Day 3 (27.02.2026): Friday (Technical Sessions)

	Parallel session 03 Metal finishing & Corrosion Venue: Hall A	Parallel session 04 Thermal spray & Functional coatings Venue: Hall B
14:30-15:45	IN:11 Dr. Arjun Dey Thermal properties of anodic coating on additively manufactured Al-10Si-Mg alloy for spacecraft applications (14:30-14:50)	IN:14 Dr. Mamata Pradhan Nano-red iron oxide from acid regeneration plant as a pigment for paint industry
	IN:13 Dr. K. S Ghosh Pulse electroplating of nanocrystalline (nc) Ni coating on micro-alloyed and EIS, polarisation and SSRT corrosion assessment of nc-Ni coating and substrate	OP F21-F24 Functional coatings
	OP C15-C17 Corrosion	
15:45-16:15	High Tea	
16:15-17:15	Valedictory	

ORAL PRESENTATIONS

Functional coatings

Sl.No	Title of the paper	Authors	Affiliation
F1	Robust hydrophobic coatings for enhanced marine protection	Rakesh Choubey	IIT Gandhinagar
F2	Flame-treated fluorine-free super-slippery PDMS surfaces for anti-icing and drag reduction	Sachin Kumar Sharma	Shiv Nadar institution of Eminence
F3	Perimeter-guided superhydrophobic lattices for enhanced buoyancy, drag reduction, and ice resistance	Manvendra Singh	Shiv Nadar Institution of Eminence Deemed to be University, Noida

F4	Durable water-based acrylic coatings with surface-engineered graphene nanosheets for enhanced barrier and biocidal performance	Jayesh Shankar Waghmare	CSIR-Indian Institute of Chemical Technology, Hyderabad
F5	Cathodic plasma electrolytic nitriding of titanium for application in PEMFC environment	Badrinath Ramesh	Indian Institute of Technology Madras
F6	Fabrication of smart multifunctional corrosion protective coatings	Jitendra Chavhan	Indian Institute of Technology Madras
F7	Development of Ni-Co alloy coating on mild steel for improved corrosion resistance: Taguchi method approach	Visruth Prakash O C	Manipal Academy of Higher Education
F8	Benchmarking PSA anodizing: A sustainable alternative to chromic acid anodization	Sai Pramod Pemmasani	CSIR-National Aerospace Laboratories
F9	Electroplated IrPt based porous transport electrodes for PEM water electrolysis	Abhay Gupta	IIT Jodhpur
F10	In-depth characterization of coating architecture and interfacial chemistry in surface-modified aluminium trihydrate (ATH)	Ganesh Basak	Hindalco Industries Limited Belgaum
F11	Alumina based hydrophobic self-cleaning coating for optical surfaces and outdoor applications	Gulnaaz	Indian Institute of Technology Bombay
F12	Fabrication of transparent superhydrophobic coating via upcycled silicone grease for self-cleaning and anti-corrosion application	Irfan Mohammad	Indian Institute of Technology Tirupati
F13	Fabrication of multifunctional HAP-graphene-MoS ₂ coatings via powder-mixed EDM for biomedical and tribological applications	Smita Hasini Pradhan	Indian Institute of Technology Bhubaneswar
F14	Next-generation fluorine-free nanocomposite-based superhydrophobic coatings for the protection of concrete materials	Sahita Karmakar	SRM University AP
F15	Screen printed functional oxide coatings for negative temperature coefficient (NTC) thermistors	Sree Harsha Prada Peesapaty	COEP Technological University, CSIR-NAL
F16	Synthesis, Characterization, and anti-corrosive properties of AlB ₂ -derived nanostructures-based functional coatings	Parth Shah	Indian Institute of Technology Gandhinagar
F17	Synthesis and characterization of Ni MOF@MXene hybrid nanofillers reinforced conducting polymers ternary nanocomposite for application in supercapacitors	Annada Mishra	Veer Surendra Sai University Of Technology

F18	MXene quantum dots/NFS carbon quantum dots hybrid nanofillers based conducting polymer ternary nanocomposites for sensing and supercapacitor applications	Saleja Sahoo	Veer Surendra Sai University of Technology
F19	Superhydrophobic surface engineering for scalable marine antibiofouling coatings	Shrushti Thakkar	Indian Institute of Technology Gandhinagar
F20	Development of in-organic paints for high-temperature protection of steel surfaces	Sai Sriram BVLN	ARCI
F21	Study of structural, thermal & electrical properties of metal doped polyaniline (PANI) and its application as coating development	M Priyanka	Veer Surendra Sai University of Technology
F22	Design of experiments and field evaluation of coating solutions for high-durability excavator buckets	Yogesh Khedkar	D Y Patil College of Engineering, Pune
F23	Design and performance evaluation of a brush-applied ablative ceramic-filled coating for thermal spike protection	Darshak Surti	Matsolvion
F24	An empirical study on ceramic coatings for reducing thermal radiation losses and enhancing energy efficiency in indian industries	Thirumani Muniswami Iyer Venkatesan	Hyderabad

Corrosion Protection

C2	Influence of conventional shot peening on adhesion microstructure and corrosion resistance of electrodeposited nickel coatings on copper	Sivasubramanian Jayaraman	National Institute of Technology-Rourkela
C3	Phosphate-functional waterborne acrylic coatings for superior corrosion protection and surface durability	Shivam Shailesh kumar Joshi	CSIR-Indian Institute of Chemical Technology
C4	Functional monomers, resins and hybrid coatings for metal protection	S N Raju Kutcherlapati	CSIR-Indian Institute of Chemical Technology
C5	Enhanced corrosion resistance and self-healing behavior of Al 2024 via cerium-vanadium based conversion coatings	Shishir Radhakrishna Pillai	Indian Institute of Technology Roorkee
C6	MXene-polyimide composite: A potential coating material for the protection of steel substrate	Sukanta Badaik	NIT Jamshedpur

C7	Evaluation of the synergistic effect of g-carbon nitride and ZDMA for high-performance anticorrosion coatings	Harsha Haridas	Indian Institute of Space Science and Technology
C8	Corrosion protection of copper using h-BN tailored hybrid material in chloride media	Arunmuthukumar Pugalendhi	CSIR-Central Electrochemical Research Center
C10	Application of wet abrasive blasting for safe and effective surface preparation in oxygen plants: a comparative study	Rishabh Srivastava	Jindal Steel Limited
C11	Lithium carbonate-based self-healing coating for magnesium AZ31 Alloy: Laboratory and atmospheric exposure study	John Tizzile JS	CSIR-CECRI
C12	Magsure Zn-Al-Mg coating: Superior corrosion resistance and formability	Hitesh Kumar	JSW Steel Ltd
C13	Thicker the better or thinner: Addressing the dichotomy in the case of MAO-coated AZ91 Mg alloy for corrosion protection	Phani Chalapaka	ARCI-HYDERABAD
C14	Development of corrosion-resistant epoxy-reclaimed waste foundry sand fines composite coating	Kunal Borse	Malaviya National Institute of Technology Jaipur
C15	Recovery of lanthanum oxycarbonate from spent molten salt electrolyte slag and sustainable utilization in zinc-based metal matrix composite coatings for corrosion protection	Palaniappan Nagarajan	CSIR-CECRI
C17	Atmospheric corrosion of aluminium based alloys containing Zn, Fe, Sn and Bi for the sacrificial protection of steel	Salil Sainis	RISE Research Institutes of Sweden

Metal Finishing

M1	Eco-friendly replacement for CAA: Nanohardness and corrosion behavior of AA2024 oxides formed in mixed oxalic-tartaric electrolytes	Noman Bader	Indian Institute of Technology Roorkee
M2	Advanced dual-layer electrodeposited coatings for hydrogen embrittlement mitigation in electrolyzer components	Sourav Kumar Saha	CSIR-CECRI
M3	A comparative study of processing and characterization of anodization on AA2014 and AA6351 aluminum alloys for spacecraft applications	Rahul Ghosh	U R Rao Satellite Centre (ISRO)
M4	Impact of novel pre-treatment on the tribology of RoHS compliant electroless nickel coated cast iron	Manikandanath N T/ Sai Vineeth K	CSIR-National Aerospace Laboratories

M5	Improvement in corrosion resistance, mechanical and tribological properties of DMR249A Naval Steel electroless NiP (ENP) coatings	Manoj kulkarni	Defence Institute of Advanced Technology
M6	Optimizing corrosion and hydrogen barrier performance in electrodeposited Zn-W coatings on steel through controlled tungsten incorporation and lattice strain regulation	Sahibzada Roohan Farooq Lala	NIT Warangal
M7	Development of next generation galvanised (GI) coated steel	Vineet Patel	JSW Steel Ltd
M8	Driving the future of electric vehicles and green H2 electrolyzer components through electroplating excellence	Kartik Jain	Precious Electrochem (I) Pvt. Ltd
M9	Processing of waste electroplating effluent to recover zinc(Zn) and chromium(Cr) using adsorption technique	Shushant Shekher Rakshit	CSIR-National Metallurgical Laboratory
M10	Selective recovery of metals from coating industry effluent using plant adsorbent	Shilpa Kalamani Bawkara	CSIR-National Metallurgical Laboratory
M11	Recovery of Cu and Ni from waste effluent of hydrometallurgical plant	Subrat Shekhar	CSIR-National Metallurgical Laboratory
M12	Electrochemical behaviour of nickel (II)-rhenium (VII) and electrodeposition of nickel-rhenium alloy from choline chloride - urea deep eutectic solvent	Karthikeyan Masilamnai	CSIR-CECRI
M13	Modelling the anodizing process using machine learning approaches	Rahul Mukherjee	SRM Institute
M14	Electrodeposition of graphene oxide on Al-6061 alloy for enhanced pitting resistance in presence of chloride ions	Ankita	School of Engineering sciences and technology University of Hyderabad
M15	Multifold enhancement of tribological and corrosion resistance of 5083 Al alloy through micro arc oxidation	Kavya Bura	ARCI
M16	Effect of temperature on particle erosion behaviour of electroplated chromium Cr coating	Vivek Kumar Mishra	DMRL
M17	Influence of polymeric, zwitterionic and mixed surfactant system in ENi-P-nanoTiO2 composites for defence applications	Comdt(JG)R Anthoni Sagaya Selvan	Indian Coast Guard

M18	Investigation of hydrogen embrittlement susceptibility in metallic materials and its mitigation through electrodeposited alloy coating	Al Amin	CSIR-Central Electrochemical Research Institute
M19	Impact of Organic Additives on Electrodeposition of Zinc-Nickel Alloy for Alkaline Water Electrolysis	Subramani E	CSIR-CECRI

Thermal Spray Coatings

T1	Quantitative correlation between OES-measured plasma parameters and performance of plasma sprayed Al ₂ O ₃ -TiO ₂ Coatings	V. Chaturvedi Misra	BARC
T2	Atmospheric plasma sprayed high-entropy xenotime phosphate as a next-generation environmental barrier coating	Aditya Sanjiv Lochan	CSIR- NAL and BITS Pilani
T3	Performance evaluation of flame spray and arc spray zinc coatings on mild steel	Dipali Pandey	Navrachana University
T4	Anti-corrosion composite coating for gas turbines	Karthiga Parthiban	CSIR-CGCRI
T5	Laser assisted post-processing treatment of thermally sprayed Co-Mo-Cr coating on different steel substrates.	S Mohammed Yaseen	NIT Warangal
T6	Single-step combustion-synthesized SiC-YAG for plasma-sprayed space mirror coatings	Vijay Darman	CSIR-National Aerospace Laboratorios
T7	Influence of deposition spray techniques on the microstructure and properties of Fe-based amorphous coatings	Sulthan Rakesh	ARCI
T8	Influence of matrix composition on the wear and corrosion performance of HVOF-sprayed WC-Co thin Coatings	Mukesh Sai Ram Uddagiri	ARCI
T9	Inter-splat bonding strength of various cold spray coated steels (316L, 420, 430 and 17-4 PH) on mild steel substrate: A numerical and experimental approach	Nagendra Manohar Movva	ARCI
T10	Tailoring microstructure and Electrochemical performance of HVOF-sprayed NiCrBSiFeC and CoCrMoSi Coatings via Infrared radiation Post-Heat Treatment	Swarna Madugula	ARCI
T11	Multilayer laser-cladded coatings on grey cast iron for wear mitigation and Euro 7-compliant brake disc applications	Sheshendra Kulkarni	National Institute of Technology Calicut
T12	Microstructural evolution of plasma-sprayed YPO ₄ coatings as a function of plasma arc current	Jagruti Goud	Bhabha Atomic Research Centre Mumbai

T13	Effect of HVAF spray conditions on microstructure and mechanical performance of thin and thick WC-Co-Cr Coatings	Vijaya Lakshmi Devara	ARCI
T14	Finite element analysis of thermal barrier coatings subjected to thermal cycling and growth stresses	Mansingh Yadav	Shiv Nadar Institution of Eminence Deemed to be University
T15	Applications of laser cladding for surface modifications	Kranthi Kumar Balina	Motilal National Institute of Technology
T16	Laser sheet material spray (L-SMS): A novel sheet-based metallic coating technique	Eqbal Ahmed	IIT Ropar

PVD / CVD Coatings

P1	Thin film coatings for long life surgical instruments	Hriday Jasani	IIT Bombay
P2	Development of corrosion resistant tantalum oxide/oxynitride-based coatings on SS 316L for semiconductor manufacturing industry	Swinkle Rose	IIT Gandhinagar
P3	Engineered metallic copper thin film deposited on glass substrate by PVD Sputtering	Yash A. Wakode	C-MET
P5	Laser surface re-engineering of dual-phase steel	P S Sankar Ganesh	ARCI
P6	Nitrogen flow controlled microstructural evolution and mechanical performance of submicron (MoNbTaW)N films	Venkata Girish Kotnur	University of Hyderabad
P7	Pyrolytic graphite coatings for molten salt reactors: FLiNaK compatibility at 800 °C	Santhosh Manoharan	Indira Gandhi Centre for Atomic Research
P8	Microstructural, mechanical, and corrosion behavior of nickel thin films deposited using HiPIMS	Navya Boda	ARCI
P9	Correlation between corrosion resistance and tool life of cathodic arc PVD-coated cutting tools	Agula Jagapathi Reddy	ARCI