



### 1. AKM Kashyap appointed as Government Nominee Director of STC

• Official Appointment & Effective Date: ShriKashyap's appointment as an Additional Director (Government Nominee Director) was formally approved by the STC Board through a resolution by circulation on December 24, 2025, with his tenure effective retrospectively from December 15, 2025.



- Current Executive Role: He currently serves as the Deputy Director General (Quality Assurance) in the Department of Commerce, Ministry of Commerce & Industry. In this capacity, he oversees several critical portfolios, including the RTI Cell and the State & Mineral Wing.
- Extensive Government Service: With over three decades of experience, Kashyap began his career in 1994 as an Assistant Director (Quality Assurance). He has since held prominent positions, including a four-year tenure as Director (Clothing) at the National Cadet Corps (NCC) Headquarters.
- **Academic Background**: He holds a Master of Science (M.Sc.) in Chemistry, which has supported his long-standing technical expertise in quality assurance roles across major Indian industrial hubs like Kolkata, Bhilai, and Delhi.
- **Dual Directorship**: In addition to his role at STC, ShriKashyap was also recently appointed as a Government Nominee Director on the board of MMTC Limited (effective December 16, 2025), replacing Ms.Aishwarya Singh.



#### 2. Oman launches First Polymer One-Rial Banknote

• Official Launch and Circulation: The Central Bank of Oman (CBO) announced the issuance in December 2025, with the note officially entering public circulation on January 11, 2026.



- Enhanced Durability: Unlike traditional cotton-based paper notes, this banknote is made from polymer substrate. This material is water-resistant, more durable in Oman's hot and humid climate, and has a significantly longer lifespan.
- Advanced Security Features: The note incorporates sophisticated security elements, including a large transparent window (inspired by the Oman Botanic Garden) and a color-shifting foil featuring a frankincense tree that changes color when tilted.
- Cultural & EconomicDesign: The design celebrates Omani identity. The front features the Oman Botanic Garden, while the back highlights national milestones like the Sayyid Tariq bin Taimur Cultural Complex, the Duqm Port, and the Duqm Refinery.
- Legal Tender Status: The new polymer note will co-circulate alongside existing paper one-rial banknotes. Both versions remain legal tender and can be used for all daily transactions at their face value.

# 3. First Pollution Control Vessel 'SamudraPratap' Inducts By Indian Coast Guard

• **Indigenous Achievement**: It is the first Pollution Control Vessel (PCV) to be entirely indigenously designed and built in India. Developed by Goa Shipyard Limited (GSL), the vessel features over 60% to 75% indigenous content, supporting the Atmanirbhar Bharat initiative.



- **Specialized Pollution Response**: The ship is equipped with advanced technology for maritime environmental protection, including flush-type side sweeping arms for oil spill containment while in motion and a specialized radar system for detecting oil slicks at sea.
- Cutting-Edge Maneuverability: It is the first PCV in the Indian Coast Guard (ICG) fleet to feature a Dynamic Positioning System (DP-1) and retractable stern thrusters, allowing for precise positioning and stability during complex pollution-control operations.
- **Size and Capacity**: As the largest vessel in the Coast Guard's current fleet, it measures 114.5 meters in length and displaces 4,170 tonnes. It is capable of recovering oil at a rate of 300 tonnes per hour and storing it in dedicated onboard tanks.



Earth Orbit (LEO).

### 24<sup>™</sup>DECEMBER 2025

#### 4. SRO successfully launched a communication satellite "BlueBird Block-2"

• **Record-Breaking Payload**: At approximately 6,500 kg (6.5 tonnes), BlueBird Block-2 is the heaviest commercial payload ever launched by ISRO's "Bahubali" rocket, the LVM3-M6. It is also the largest commercial communications satellite ever deployed into Low



- **Direct-to-Mobile Connectivity**: Developed by the US-based firm AST SpaceMobile, the satellite is designed to provide high-speed 4G and 5G cellular broadband directly to standard, unmodified smartphones. This eliminates the need for specialized satellite phones or ground-based cell towers in remote
- Massive Phased Array Antenna: The satellite features one of the largest antennas ever sent to space, spanning nearly 2,400 square feet (\$223 \text{ m\^2\\$). This massive array allows it to provide ten times the data capacity of earlier models, reaching speeds up to 120 Mbps per coverage cell.
- Strategic Global Collaboration: The launch was facilitated by NewSpace India Limited (NSIL), ISRO's commercial arm. This mission marks the first dedicated commercial launch for a US-based customer using the LVM3, showcasing deepspace cooperation between India and the United States.

### 5. R Praggnanandhaa&AnishGiriclinch Global Chess League 2025 Title

• Championship Team: Alpine SG Pipers, captained by FabianoCaruana, emerged as the champions of Season 3 after defeating the two-time defending champions, Triveni Continental Kings, in the final on December 23, 2025.



- **Dominant Final Performance**: The Pipers won both matches of the final with commanding scores of 4–2 and 4.5–1.5, preventing the Continental Kings from achieving a "hat-trick" of titles.
- **Star Performers**: AnishGiri was named the Player of the Match in the final for his clinical 2-0 sweep against world rapid star Wei Yi. R Praggnanandhaa delivered a crucial victory in the second match by defeating fellow Indian GM ViditGujrathi.
- The "Prodigy" Factor: Young Indian talent Leon Luke Mendonca was a standout performer for the Pipers, winning both of his games in the final on the "prodigy board" against Marc'AndriaMaurizzi.

### 6. IIT Delhi develops AI agent for lab experiments

From "Writing" to "Doing" Science: Unlike traditional AI like ChatGPT, which can only process text and data, AILA is designed to physically operate laboratory instruments. It can





plan experiments, translate goals into code, control equipment, and analyze results from start to finish.

- Mastering the Atomic Force Microscope (AFM): The AI was specifically trained to operate the AFM—one of the most sensitive and complex instruments in materials science. While human researchers typically take years to master this device, AILA can manage its intricate nanoscale physics and real-time feedback control autonomously.
- Massive Efficiency Gains: AILA has reduced the time for complex tasks, such as optimizing microscope parameters for high-resolution imaging, from 24 hours down to just 7–10 minutes. This allows scientists to focus on higher-level innovation rather than repetitive manual calibrations.
- **Real-World Adaptability**: The study, published in Nature Communications, highlights that AILA differs from fixed automation by adapting to dynamic laboratory conditions. It can make real-time decisions when things go wrong, similar to how a human scientist navigates "busy traffic" rather than just following a "textbook."

#### 7. Saleem Ahmad appointed as CMD of Rail Vikas Nigam Limited

• Vast Industry Experience: Ahmad is a seasoned Civil Engineer (1990 batch, JamiaMilliaIslamia) with over 35 years of experience in the construction and infrastructure sectors, specifically in executing large-scale bridges, tunnels, and residential/commercial projects.



- **Previous Leadership Roles:** Prior to joining RVNL, he served as the Director (Projects) at NBCC (India) Limited. He also spent over two decades at the Delhi Metro Rail Corporation (DMRC) as Executive Director (Civil), where he was a key figure in urban transit transformation.
- **Tenure and Succession**: He succeeds Pradeep Gaur, who retired in August 2025. Ahmad took over from Sukhmal Chand Jain, who had been holding the additional charge of the CMD post during the interim period. His appointment is effective until his superannuation on April 30, 2029.
- **Selection Process**: Ahmad was selected by the Public Enterprises Selection Board (PESB) from a competitive pool of 10 candidates across major PSUs like CONCOR, IRCON, and RailTel, highlighting his distinguished administrative and technical acumen.

### 8. President confers RashtriyaVigyanPuraskar 2025 in New Delhi

• **Highest Honor (VigyanRatna):** The prestigious VigyanRatna for lifetime achievement was awarded posthumously to the eminent astrophysicist Prof. Jayant Vishnu Narlikar. He was recognized for his seminal contributions to cosmology,





gravitational theory, and science communication.

- **Diverse Award Categories**: A total of 24 awards were presented across four categories: VigyanRatna (1), VigyanShri (8) for distinguished contributions, VigyanYuva–Shanti SwarupBhatnagar (14) for young scientists under age 45, and Vigyan Team (1).
- Team Excellence (Purple Revolution): The Vigyan Team Award was conferred on the CSIR-Aroma Mission team. This group was instrumental in driving India's "Purple Revolution" by promoting lavender cultivation and agrientrepreneurship in Jammu & Kashmir and other regions.
- **Key Individual Winners (VigyanShri)**: Notable awardees included Dr.GyanendraPratap Singh (Agricultural Science, known as the "Wheat Breeder"), Dr. Yusuf Mohammad Sheikh (Atomic Energy), Dr. K. Thangaraj (Biological Sciences), and Prof. ThalappilPradeep (Chemistry).

#### 9. National Consumer Day 2025 is observed on 24th December

 Official Theme for 2025: The theme for this year is "Efficient and Speedy Disposal through Digital Justice." It emphasizes India's shift toward technology-driven grievance redressal to ensure faster and more accessible outcomes for citizens.



- Launch of e-Jagriti: A major highlight of 2025 is the full-scale implementation of the e-Jagriti portal. This unified digital platform allows consumers to file complaints, pay fees, and even attend virtual hearings from their homes, significantly reducing the case backlog in consumer courts.
- AI-Enabled Helpline (NCH 2.0): The government has upgraded the National Consumer Helpline to NCH 2.0, which uses Artificial Intelligence to support consumers in 17 different languages. In 2025 alone, this system helped recover over ₹ 27 crore in refunds for consumers.
- Focus on Digital "Dark Patterns": This year, the Central Consumer Protection Authority (CCPA) intensified its crackdown on dark patterns—deceptive design practices used by e-commerce websites to trick users into making unintended purchases or sharing private data.
- **Six Fundamental Rights**: The day serves as a reminder of the six core rights guaranteed to every Indian consumer: the Right to Safety, Right to be Informed, Right to Choose, Right to be Heard, Right to Redressal, and Right to Consumer Education.

#### 10. India Loses a Literary Giant, Vinod Kumar Shukla passed away

• **First Jnanpith Laureate from Chhattisgarh**: Shukla made history by becoming the first writer from Chhattisgarh to be honored with the 59th Jnanpith Award (the highest literary





honor in India) in late 2024. The award was presented to him at a special ceremony at his residence just weeks before his passing.

- The Poet of "Radical Simplicity": He was world-renowned for his unique, minimalist style. Often described as a "magic realist," he had a rare ability to find the extraordinary and the philosophical within the most mundane aspects of ordinary, small-town life.
- **Major Literary Works**: His most celebrated works include the novels Naukar Ki Kameez (The Servant's Shirt), which was adapted into an acclaimed film by Mani Kaul, and Deewar Mein EkKhidkiRehtiThi, for which he won the SahityaAkademi Award in 1999.
- **Global Recognition:** Beyond India, he gained international stature with the PEN/Nabokov Award for Achievement in International Literature in 2023. His works have been translated into several languages, including English, German, and French.



