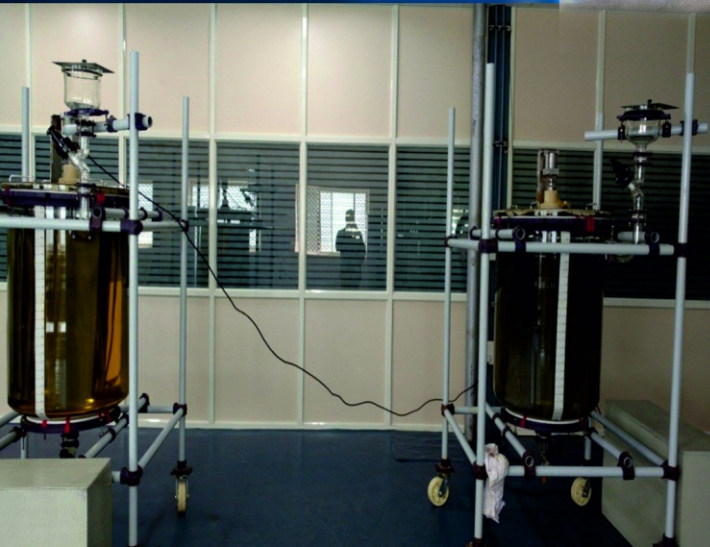
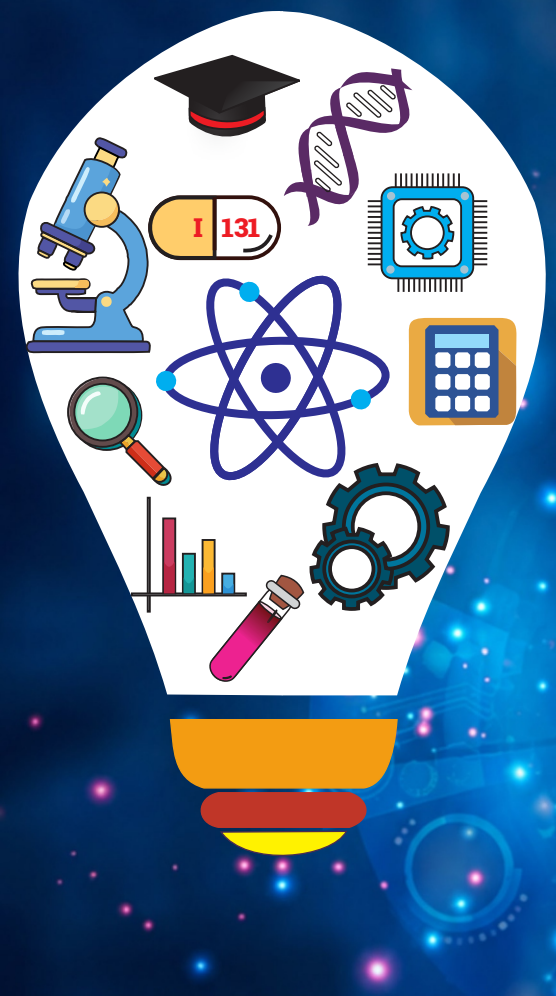




NUCLEAR R&D Tech Spin-offs

Bhabha Atomic Research Centre (BARC) continues to foster industry collaboration by transferring emerging nuclear spin-off technologies and associated know-how besides stimulating rural entrepreneurship. The Centre is also accelerating efforts to incubate deep-tech startups in high-priority domains critical to sustained economic growth.



प्रौद्योगिकी का सुव्यवस्थीकरण एवं हस्तांतरण Technology Streamlining & Transfer



BARC continued to streamline indigenous technologies for public and industrial applications in areas like agriculture, healthcare, metallurgy, quality assurance, and nutrition. During the review period (July-August 2026), three new technologies were placed in the public domain.

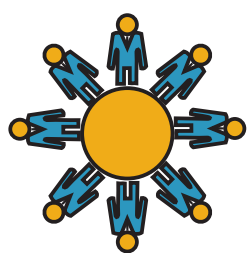


Autonomous Seal Cutting System (EG51DRHR): A compact, modular device for safely opening sealed containers with hazardous materials. It uses a rotary table, a torque-controlled gripper, and a protected cutting unit to ensure precision and prevent container damage. Its small size suits space-limited settings like pharmaceutical units, and it can be operated manually or via a GUI.

Passive Catalytic Recombiner Device (PCRD) (CH52ChD): A safety device that removes hydrogen in closed containments. It uses catalytic plates coated with platinum and palladium to convert hydrogen and air into steam, creating a passive flow that continuously draws in hydrogen-rich gas from the bottom. It is used in nuclear reactors during coolant loss conditions and in other hydrogen gas-using industries.

Gamma Radiation Process for Ready-to-Eat Onions: A combined processing and irradiation method that reduces post-harvest losses and extends the shelf life of fresh, ready-to-eat onions. This helps maintain onion quality for domestic and international markets, benefiting hotels, restaurants, retailers, and traders.

इनक्यूबेशन एवं नवोद्यम पारितंत्र Incubation & Startup Ecosystem



AIC BARC Anushakti Foundation, supported by the Atal Innovation Mission (AIM), kept building the deep tech start-up ecosystem through incubation, tech commercialization, and industry tie-ups. A national Techathon 2.0 cohort by the DAE Incubator Alliance to attract deep tech start-

ups saw 116 applicants. 18 teams were selected across General, Narishakti (women), and Junior categories. AIC Anushakti helped organize and served on screening juries of Techathon 2.0 cohort. M/s. 6C NanoCarb Pvt. Ltd. commercialized its carbon nanotube technology, with a launch event at IIT Bombay Research Park. Programs were held at the University of Mumbai's Nano Science department. The Head of AIC ANUSHAKTI spoke on DAE technology transfer at an event organised by AIC IGCAR FAST Foundation on 24 July 2026. AIC ANUSHAKTI also engaged with AIM, national innovation programs, and DAE leadership to strengthen tech translation and incubation. During the review period four technologies were transferred to industries and six technology transfer agreements were renewed for five more years.

ग्रामीण उद्यमिता Rural Entrepreneurship



AKRUTI Kendras promoted rural entrepreneurship through awareness campaigns, technology demonstrations, trainings, and forging partnerships. Tarapur Kendra hosted entrepreneurs and self-

help groups during the review period. An orientation camp during Ashadhi Wari showcased BARC technologies and development initiatives supported by NPCIL, BARC, and SVERI with Pandharpur as venue. MGU Kendra conducted workshops at four institutions in Kerala, including Caritas College of Pharmacy, Mar Athanasios College, MG University's DLLE, and Union Christian College, Aluva. The AKRUTI Kendra at Jai Hind College was formally opened by Dr. K. N. Vyas, former DAE Secretary and AEC Chairman, and an alumnus of the college. The Head of TT&CD, AKRUTI Group Leader, and students from various faculties attended.