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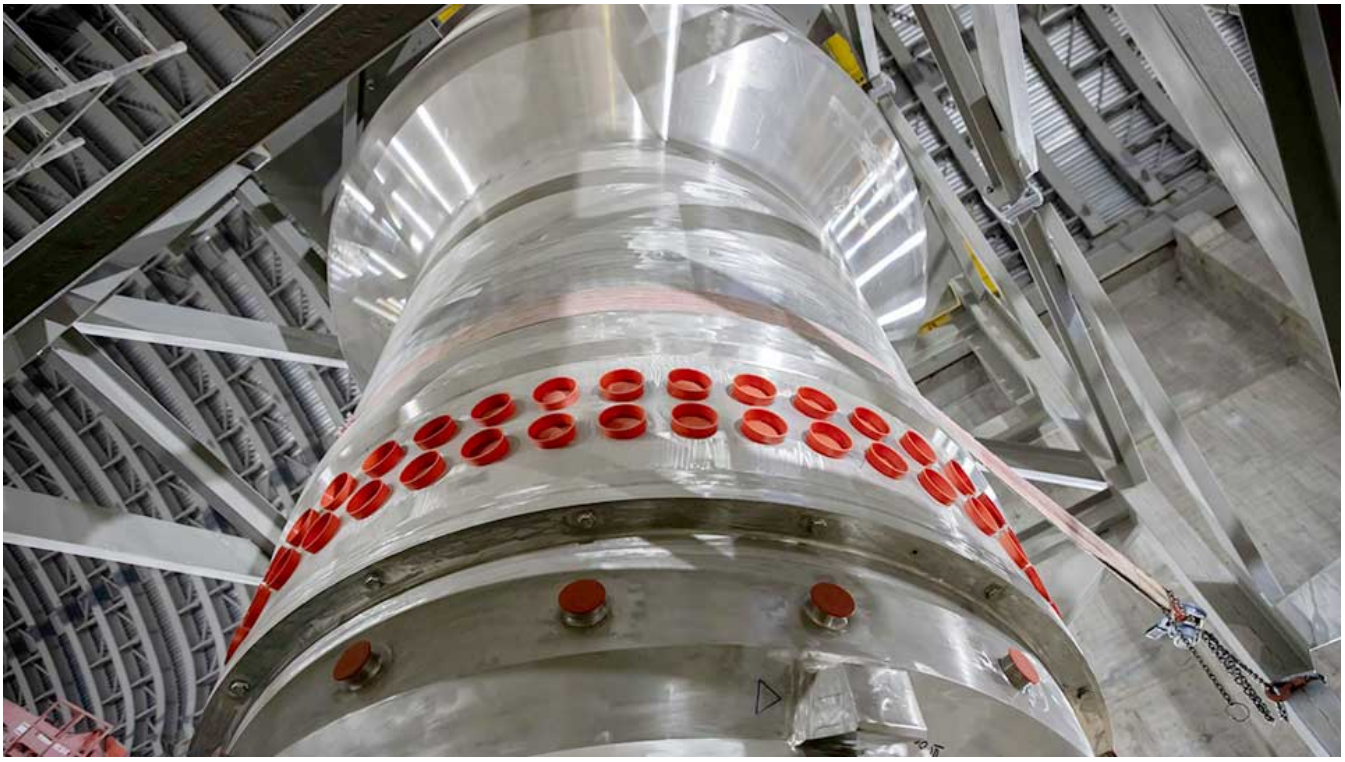
Rosatom starts constructing a multi-purpose 4th gen research reactor

- A Monitor Desk Report Date: 14 January, 2025



Russia's state atomic energy corporation Rosatom has begun constructing a multipurpose research reactor MBIR, which belongs to the fourth generation, at the Research Institute of Nuclear Reactors site in the country. The project is part of Russia's comprehensive program to advance nuclear science, engineering, and technology in Russia.

Mechanical equipment for the primary heat removal circuit and fuel handling systems for the research reactor is already being assembled. Two intermediate heat exchangers, weighing 38 tons and measuring 9 meters in height and 2.5 meters in diameter, were installed following the design specifications. The equipment was secured on support rings with a maximum deviation of 1 millimeter per meter from the horizontal. Additionally, drums for fresh and spent fuel, weighing 16 tons each, were positioned in their designated locations. Installation of the core catcher, an important component of the passive safety system is

currently underway.

The fresh fuel drum is designed to preheat fuel assemblies in an inert gas atmosphere before loading them into a reactor core. The spent fuel drum cools spent fuel assemblies unloaded from the reactor in a non-reactive environment.

The new reactor is expected to replace the existing BOR-60 research facility and provide the nuclear industry with state-of-the-art research infrastructure for the next half-century. Its innovative features will enhance the exploration of the technologies of two-component nuclear energy and the closed nuclear fuel cycle while also accelerating and justifying the development of safe fourth-generation nuclear power plants.

The MBIR International Research Center is being established based on the MBIR reactor. The scientific team will consist of Russian and foreign scientists and researchers. The center's activities will be carried out through the MIBR-based International Research Center consortium. This allows Russian and foreign partners to conduct experiments essential for their national programs aimed at developing nuclear energy for peaceful purposes without having to own the reactor facility.