IPAC'25 - the 16th International Particle Accelerator Conferece



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Liquid lithium charge stripping technology: achievement and lessons learned

Monday 2 June 2025 12:00 (30 minutes)

Liquid metal technology is key to the next-generation high-power hadron facilities. Following early R&D collaboration between Argonne National Laboratory and Michigan State University, FRIB pioneered on the technology of thin-film liquid lithium and is the first in the world applying such technology in accelerator operations. FRIB used liquid-lithium film for the charge stripping of high-power heavy-ion beams, enabling FRIB to achieve world's highest power uranium beam on target.

Liquid lithium technology has been successfully developed and applied for FRIB operations, offering a superior choice for charge stripping of high-power heavy ion beams including uranium. Valuable experience has been gained in the performance and maintenance. This talk focuses on operational experience, lessons learned and future improvements.

Footnotes

Funding Agency

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Session Classification: Plenary after coffee