

14. Industry–Academia Collaboration Laboratory

The Industry-Academia Collaboration Laboratory is an innovation research center focused on fusion energy, where industry, academia, and government collaborate to advance the practical application of fusion energy — widely regarded as the world’s next-generation energy source. The center also aims to create new social value through partnerships with external organizations.

The National Institute for Fusion Science has long fostered cooperative relationships with private companies and industries to promote the social implementation of fusion energy, anticipated to become a sustainable and environmentally friendly energy source. To further strengthen these initiatives, the Fusion Energy Industry-Academia Collaboration Laboratory was established in 2023.

In addition, we are actively collaborating with emerging fusion start-up companies, which have gained significant momentum in recent years. To support these efforts, we have formed an internal “HF Collaborative Research Group” to conduct joint research with Helical Fusion, Inc (Fig. 1). This group is doing joint research on superconducting magnets, etc., with the aim of commercializing helical fusion reactors.



Fig. 1 Simplified schematic diagram HF Collaborative Research Group

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