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## Alternative hydrogen storage concepts based on cryopumps

*Monday 9 October 2023 18:25 (5 minutes)*

With regard to the growing need for suitable hydrogen storage systems in various application areas, this poster is about two alternative concepts for hydrogen storage based on cryogenic pumps such as GSI's SIS100 cryosorption pump.

First, the basic principles of condensation and adsorption in cryopumps are described. Furthermore the conventional hydrogen storage systems are explained. Following this, the paper discusses the concept of combining adsorption storage and liquid hydrogen storage, as well as introducing the concept of solid hydrogen storage. Finally, possible experiments and research approaches are given.

### Speed Talks

Normal

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