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The CISe project

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Gas-catchers are widely used in experimental nuclear physics to slow down for precision measurements. Chemical reactions of the ions with impurities in the gas can affect the extraction efficiency. Thus, there is lots of effort to keep the gas inside the catcher as clean as possible.

Our aim is to explore the potential of chemical reactions for Chemical Isobaric Separation (CISe). We are currently building a new setup consisting of a gas-catcher and a commercial quadrupole Time-of-Flight mass-spectrometer. First studies in a hexapole collision cell have been performed to investigate the ion chemistry of tin, indium, cadmium and silver.

In this contribution, an overview of the project will be presented.

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