TASCA 08

7th Workshop on Recoil Separator for Superheavy Element Chemistry

October 31, 2008, GSI, Darmstadt, Germany

Scope

The main focus of the TASCA 08 workshop will be:

- To discuss within the international community the status of the gas-filled separator TASCA at GSI: the experimental set up, results of the commissioning experiments, the theoretical modeling of its performance – especially as compared with experimental results -, and upcoming experiments.
- To discuss the progress, the status and the future of the "TASCA@GSI Task Groups" within the community, and to revisit and reshape the work of the TASCA Task Groups after completion of the commissioning experiments.
- To discuss plans and proposals for first scientific experiments at and with TASCA, to determine their requirements and to develop a possible schedule up to the year 2010.
- To discuss the envisioned scientific program at and with TASCA – chemical and physical experiments - in the context of the heavy and superheavy element program at other separators and with "pure" chemical methods.

Topics

All topics in the Scope of this workshop shall be discussed and we ask for submission of contributions. Especially welcome are the following topics:

- Heavy element separation in gas-filled separators
- Theoretical modeling of gas-filled separator performance
- Window and target designs for high intensity heavy-ion beams
- Coupling of chemistry devices to gas-filled separators
- Detectors and data acquisition
  - α-, γ-, and conversion electron spectroscopy in the focal plane
  - in combination with chemistry experiments
- Nuclear structure and stability (half lives, decay modes)
- Nuclear reactions (fusion reactions, target-projectile combinations, cross sections, multi-nucleon transfer products)
- Achievements and perspectives in superheavy element chemistry
- Results from the TASCA commissioning program
- Plans and proposals for superheavy element experiments – physics and chemistry

Organizers & Chair-person

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