TASCA 04

3rd Workshop on
Recoil Separator for Superheavy Element Chemistry

August 27, 2004, GSI, Darmstadt, Germany

Scope

The main focus of this workshop will be:

- To discuss design options, concepts and schedules for setting up and testing a gas-filled recoil separator for superheavy element chemistry and for nuclear studies @ GSI (provisionally named TASCA*) by using components from the former NASE** separator.
- To establish an international community to design, build, test, and operate
  - the recoil separator TASCA, and
  - SHE chemistry experiments @ TASCA.
- To define groups (scientists) responsible for specific work packages (see Topics below).
- To discuss first experiments at TASCA

* TASCA: **T**rans**A**ctinide **S**eparator and **C**hemistry **A**pparatus
Everybody is invited to send criticism about the acronym TASCA and to suggest new names and acronyms.

** NASE: Nucl. Instrum. Meth. A 357 (1995) 486.

Topics

The following topics shall be discussed and we ask for submission of contributions to these topics:

- Separation in vacuum (velocity filter, energy filter, ...)
- Separation in gas-filled separators
- Magnet designs and combinations

- Ion source and accelerator developments
- Window and target designs for high intensity heavy-ion beams

- Alternative separator concepts (velocity filter, mass spectrometer (FMA)-type,…)

- 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

Organizers & Chair-person

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