TASCA 07

6th Workshop on Recoil Separator for Superheavy Element Chemistry

September 28, 2007, Davos, Switzerland

Scope

The main focus of the TASCA 07 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 first commissioning experiments, the theoretical modeling of its performance – especially as compared with experimental results -, and upcoming experiments within and beyond the commissioning program.
- To discuss the progress, the status and the future of the "TASCA@GSI Task Groups" within the community, and to harmonize and reshape the work of the TASCA Task Groups.
- To discuss plans for first specific scientific experiments at and with TASCA and to determine their requirements.
- 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
- Results from the TASCA commissioning program and future plans

Organizers & Chair-person

Matthias Schädel, Dieter Ackermann & Christoph E. Düllmann , Gesellschaft für Schwerionenforschung mbH (GSI), Darmstadt, Germany

Alexander Yakushev & Andreas Türler, Institut für Radiochemie, Technische Universität München, München, Germany

Robert Eichler, Lab. for Radiochemistry & Environmental Chemistry, Paul Scherrer Institute (PSI), Villigen, Switzerland

List of Participants

Name	First name	Organisation
Ackermann	Dieter	GSI, Darmstadt, Germany
Armbruster	Peter	GSI, Darmstadt, Germany
Asai	Masato	Japan Atomic Energy Agency, Tokai, Ibaraki, Japan
Block	Michael	GSI, Darmstadt, Germany
Dragojevic	Irena	Lawrence Berkeley National Laboratory, Berkeley, USA
Dressler	Rugard	Lab. für Radio- & Umweltchemie, PSI, Villigen, Switzerland
Düllmann	Christoph E.	GSI, Darmstadt, Germany
Dvorak	Jan	TU München, Inst. für Radiochemie, Garching, Germany
Eberhardt	Klaus	Univ. Mainz, Inst. für Radiochemie, Mainz, Germany
Eichler	Robert	Lab. für Radio- & Umweltchemie, PSI, Villigen, Switzerland
Gaeggeler	Heinz	Univ. of Bern, Dept. Chemistry & Biochemistry, Bern, Switzerland
Gates	Jacklyn	Lawrence Berkeley National Laboratory, Berkeley, USA
Gorshkov	Alexander	TU München, Inst. für Radiochemie, Garching, Germany
Graeger	Reimar	TU München, Inst. für Radiochemie, Garching, Germany
Gregorich	Ken	Lawrence Berkeley National Laboratory, Berkeley, USA
Haba	Hiromitsu	Nishina Center, RIKEN, Wako, Saitama, Japan
Haile	Beyene Girma	Univ. of Oslo, Oslo, Norway
Heßberger	Fritz Peter	GSI, Darmstadt, Germany
Hofmann	Sigurd	GSI, Darmstadt, Germany
Jadambaa	Khuyagbaatar	GSI, Darmstadt, Germany / St. Petersburg State Univ., Russia
Kaji	Daiya	Nishina Center, RIKEN, Wako, Saitama, Japan
Kasamatsu	Yoshitaka	Japan Atomic Energy Agency, Tokai, Ibaraki, Japan
Khoo	Teng Lek	ANL, Argonne, USA
Koura	Hiroyuki	Japan Atomic Energy Agency, Tokai, Ibaraki, Japan
Kratz	Jens Volker	Univ. Mainz, Inst. für Radiochemie, Mainz, Germany
Kudo	Hisaaki	Niigata University, Dept.of Chemistry, Niigata, Japan
Leino	Matti	Univ. of Jyväskylä, Dept. of Physics, Jyväskylä, Finland
Morita	Kosuke	Nishina Center, RIKEN, Wako, Saitama, Japan
Nagame	Yuichiro	Japan Atomic Energy Agency, Tokai, Ibaraki, Japan
Nelson	Sarah	Lawrence Berkeley National Laboratory & Univ. of California, Berkeley, USA
Nishio	Katsuhisa	Japan Atomic Energy Agency, Tokai, Ibaraki, Japan
Nitsche	Heino	Lawrence Berkeley National Laboratory & Univ. of California, Berkeley, USA
Omtvedt	Jon Petter	Univ. of Oslo, Dept. of Chemistry, Oslo, Norway
Opel	Karsten	Univ. of Oslo, Dept. of Chemistry, Oslo, Norway
Qin	Zhi	IMP, Lanzhou, China
Rudolph	Dirk	Univ. of Lund, Dept. of Physics, Lund, Sweden
Sabelnikov	Alexey	Univ. of Oslo, Dept. of Chemistry, Oslo, Norway
Samadani	Fereshteh	Univ. of Oslo, Dept. of Chemistry, Oslo, Norway
Schädel	Matthias	GSI, Darmstadt, Germany
Semchenkov	Andrey	GSI, Darmstadt, Germany / TU München, Garching, Germany
Serov	Alexey	Lab. für Radio- & Umweltchemie, PSI, Villigen, Switzerland
Sewtz	Michael	LMU, Munich, Germany
Sudowe	Ralf	Univ. of Nevada, Dept. of Health Physics, Las Vegas, USA
Thiep	Tran Duc	Vietnamese Academy of Science & Technology
Toyoshima	Atsushi	Japan Atomic Energy Agency, Tokai, Ibaraki, Japan
Tsukada	Kazuaki	Japan Atomic Energy Agency, Tokai, Ibaraki, Japan
Türler	Andreas	TU München, Inst. für Radiochemie, Garching, Germany
Uusitalo	Juha	Univ. of Jyväskylä, Dept. of Physics, Jyväskylä, Finland
Yakushev	Alexander	TU München, Inst. für Radiochemie, Garching, Germany
Yeremin	Alexander	Flerov Lab. of Nuclear Reactions, JINR, Dubna, Russia
Zvara	Ivo	Flerov Lab. of Nuclear Reactions, JINR, Dubna, Russia