

TASCA 16

GSI, Darmstadt, August 26, 2016

15th Workshop on

Recoil Separator for Superheavy Element Chemistry



supported by the Helmholtz Institute Mainz (HIM)

Program

last update: 12 July 2018

| TIME | TOPIC | Speaker |
|--------------|--|---|
| 09:00 | Welcome | Ch. Düllmann (Univ. Mainz / GSI / HIM) |
| | Hot topics in SHE research and scientific highlights from gas-filled (and other) separators * | Chair: M. Block (GSI / HIM / Univ. Mainz) |
| 09:10 | The first ionization potential of nobelium | M. Laatiaoui (HIM) |
| 09:35 | Measurements of the first ionization potential of the heaviest actinides | T. Sato (JAEA Tokai) |
| 10:00 | The new isotopes ^{240}Es and ^{236}Bk | J. Konki (JYFL) |
| 10:25 | Statistical analysis of decay chains of the heaviest elements | U. Forsberg (Lund Univ.) |
| 10:50 | Coffee | |
| | Special session on SHE Chemistry (I) ** | Chair: M. Schädel (GSI Darmstadt) |
| 11:10 | Half a century gas phase chemistry in transactinide research | H.W. Gäggeler (PSI / Univ. Bern) |
| 11:30 | Theoretical chemistry of elements 112-114 | V. Pershina (GSI) |
| 11:50 | Chemical study of element 113 (nihonium) at GSI | A. Yakushev (GSI) |
| 12:10 | Development of Designer Molecules for Use in Future Superheavy Element Chemistry Experiments | C.M. Folden III (TAMU) |
| 12:30 | Lunch | |
| 13:30 | Workshop Photo | |
| | Special session on SHE Chemistry (I), continued ** | Chair: R.-D. Herzberg (Univ. Liverpool) |
| 13:45 | Chemistry of FI - current status | L. Lens (Univ. Mainz) |
| 14:05 | Speeding up gas-phase chemistry to access elements beyond FI | S. Götz (HIM) |
| | Physics / Detectors ** | |
| 14:25 | Measurements with the SHIP focal plane detector system 2016 | A. Mistry (HIM) |
| 14:45 | Identification of multi-nucleon transfer reaction products in $^{50}\text{Ti} + ^{249}\text{Cf}$ | A. Di Nitto (Univ. Mainz) |
| 15:05 | Pile-up pulse analysis with fast sampling ADC techniques | A. Roth (Lund Univ.) |
| 15:25 | Nuclear Spectroscopy with GEANT4: The Superheavy Challenge | L.G. Sarmiento (Lund Univ.) |
| 15:45 | Coffee | |
| | Special session on SHE Chemistry (II) ** | Chair: C. Folden III (TAMU) |
| 16:05 | Theoretical Study of Molecular Properties of Group-VI, VII and VIII Heavy and Superheavy Metal Carbonyls | M. Ilias (GSI / HIM) |
| 16:25 | Studies of the thermal stability of $\text{Sg}(\text{CO})_6$ | R. Eichler (PSI Villigen) |
| 16:45 | In-situ synthesis of carbonyl complexes with short-lived isotopes of group VI, VII and VIII elements | M. Götz (HIM) |
| 17:05 | ./. | D. Krupp (FH Aachen) |
| 17:25 | Closing remarks | |
| 17:30 | End of TASCA 16 workshop | |

*15 minutes presentation plus 10 minutes discussion time

**15 minutes presentation plus 5 minutes discussion time