

International Symposium Super Heavy Nuclei 2015
Texas A&M University, College Station, Texas, USA March 31 - April 02, 2015

March 31, 2015

8:45 9:00 0:15

Opening

Introduction

Chair: Robert Tribble BNL, USA

9:00 9:40 0:40

Witold Nazarewicz
FRIB/NSCL MSU, USA

Superheavy Nuclei: Theoretical Challenges

9:40 10:20 0:40

Yuri Oganessian
FLNR-JINR, Dubna/TAMU Russia/USA

Symposium on Super Heavy Nuclei: Our Expectations

10:20 10:30 0:10

Discussion

10:30 10:50 0:20

Coffee Beak

At the Border of the Island of the Super Heavy Nuclei

10:50 11:20 0:30

Sigurd Hofmann
GSI Helmholtzzentrum, Germany

Super-Heavy Nuclei: Current Status And Future Developments

11:20 11:40 0:20

Vladimir Utyonkov
FLNR-JINR, Dubna, Russia

Synthesis of Superheavy Nuclei at Limits of Stability: 239,240Pu + 48Ca and 249-251Cf + 48Ca Reactions

11:40 12:00 0:20

Kosuke Morita
RIKEN Nishina Center, Japan

SHE research at RIKEN/GARIS

12:00 12:20 0:20

Anatoli Afanasjev
Mississippi State University, USA

Recent progress in the study of the heaviest nuclei in covariant density functional theory

12:20 12:25 0:05

William H. Bassichis
Texas A&M University, USA

Ancient Map: Island of Stability

12:25 12:45 0:20

Discussion

12:45 14:00 1:15

Lunch

Decay Properties and Nuclear Structure of the Heaviest Nuclei

Chair: Teng Lek Khoo ANL, USA

14:00 14:20 0:20

Jacklyn Marie Gates
LBNL, USA

Decay Spectroscopy of Element 115 Daughters

14:20 14:40 0:20

Michael Itkis
FLNR-JINR Dubna Russia

Production of new neutron rich heavy and superheavy nuclei

14:40 15:00 0:20

Adam Sobczewski
NCNR, Poland

Theoretical Description of Decay Properties of Superheavy Nuclei

15:00 15:20 0:20

Mark Stoyer
LLNL, USA

Approaching the Island of Stability: Synthesizing the Heaviest Elements

15:20 15:40 0:20

Alexander Yerebin
FLNR-JINR, Dubna, Russia

Spectroscopy Of Transfermium Isotopes At Dubna: Results And Plans

15:40 16:00 0:20

Discussion

16:00 16:20 0:20

Coffee Beak

16:20 16:35 0:15

Zhongzhou Ren
Nanjing University, China

Nuclear Charge Radii of Superheavy Nuclei and Exotic Nuclei From the Experimental Decay Data

16:35 16:55 0:20

Michael Kowal
NCNR, Poland

Candidates for Long Lived High-K Ground States in Superheavy Nuclei

16:55 17:15 0:20

Dieter Ackermann
GSI Helmholtzzentrum, Germany

Paving the Way to the Island of Stability – Superheavy Element Research at GSI and Beyond

17:15 17:35 0:20

Rolf Herzberg
University of Liverpool, UK

Combined Electron and Gamma Spectroscopy of Heavy Nuclei – Optimising the SAGE Spectrometer

17:35 17:55 0:20

Peter Möller
LANL, USA

Comments on Superheavy-Element Stability and Production

17:55 18:05 0:10

George Souliotis
National University of Athens, Greece

Microscopic Calculations of Low Energy Fission within the CoMD (Constrained Molecular Dynamics) Model

18:05 18:25 0:20

Discussion

April 1, 2015

Reactions of Synthesis of New Elements and Isotopes

Chair: Joseph Natowitz

Texas A&M University, USA

8:30	9:00	0:30	Walter Loveland Oregon State University, USA	Heavy Element Synthesis Reaction Mechanisms
9:00	9:20	0:20	Gurgen Adamian BLTP-JINR, Dubna, Russia	Isotopic Trends in Production of Superheavy Nuclei
9:20	9:40	0:20	Cody Folden Texas A&M University, USA	Production of Near-Spherical Nuclei in Hot Fusion Reactions
9:40	10:00	0:20	Galina Knyazheva FLNR-JINR, Dubna, Russia	Fusion probabilities in heavy ion induced reactions
10:00	10:10	0:10	Alexander Karpov FLNR-JINR, Dubna, Russia	Superheavy nuclei: which regions of nuclear map are accessible in the nearest future
10:10	10:30	0:20	Discussion	

10:30 10:50 0:20

Coffee Break

10:50	11:10	0:20	Dariusz Seweryniak ANL, USA	Recent Spectroscopic Results Near the Z=100, N=152 Closed Shells
11:10	11:30	0:20	Gottfried Muenzenberg GSI Helmholtzzentrum, Germany	SHE Research with Rare-Isotope Beams – Challenges and Perspectives
11:30	11:45	0:15	Sophia Heinz GSI Helmholtzzentrum, Germany	Probing the Stability of Superheavy Nuclei with Radioactive Ion Beams
11:45	12:00	0:15	Sait Umar Vanderbilt University, USA	Dynamics of Quasifission and Fission
12:00	12:15	0:15	Andzei Wieloch SIP, Jagiellonian University, Poland	New Experimental Approach to the Super and Hyper Nuclei Search
12:15	12:30	0:15	Katsuhisa Nishio ASRC, JAEA, Japan	In-beam fission study at JAEA
12:30	12:50	0:20	Discussion	

12:50 14:05 1:15

Lunch

Super Heavy Atoms. Chemistry of the Super Heavy Elements

Chair: Joseph Hamilton

Vanderbilt University, USA

14:05	14:35	0:30	Hartmut Backe Universität Mainz, Germany	Prospects for Laser Spectroscopy at Superheavy Elements
14:35	15:05	0:30	Christoph Düllmann GSI Helmholtzzentrum, Germany	Chemical studies of the heaviest elements
15:05	15:25	0:20	Valeria Pershina GSI Helmholtzzentrum, Germany	Advanced Theoretical Studies for Chemical Identification of the Superheavy Elements
15:25	15:45	0:20	Discussion	

15:45 16:05 0:20

Coffee Break

16:05	16:25	0:20	Robert Eichler Heavy Elements group PSI-University of Bern, Switzerland	Superheavy Element Chemistry from Switzerland
16:25	16:45	0:20	Yuichiro Nagame ASRC, JAEA, Japan	Chemical Studies of the Heaviest Elements at JAEA
16:45	16:55	0:10	Discussion	

Production and Fabrication of Actinide Targets

16:55	17:20	0:25	James Roberto ORNL, USA	Production and fabrication of actinide targets for super-heavy element research
17:20	17:35	0:15	Michail Onegin NPI, St. Petersburg, Russia	Investigation of the Possibilities of Heavy Actinide Isotopes Production in High-flux Reactor PIK
17:35	17:50	0:15	Klaus Eberhardt Universität Mainz, Germany	Fabrication and characterization of actinide targets for super-heavy element studies
17:50	18:00	0:10	Rose A. Boll ORNL, USA	Actinide Materials at Oak Ridge National Laboratory
18:00	18:15	0:15	Discussion	

19:15

Dinner

April 2, 2015

Accelerator Facilities and Setups

Chair: Sydney Gales

INPN Orsay/CNRS, France

8:30	8:50	0:20	Sherry Yennello Texas A&M University, USA	Rare Isotope Beams at TAMU Cyclotron Institute
8:50	9:15	0:25	Sergey Dmitriev FLNR-JINR, Dubna, Russia	FLNR SHE Factory
9:15	9:40	0:25	Christelle Stodel GANIL, France	Study of very heavy nuclei at GANIL-SPIRAL2 facilities
9:40	10:05	0:25	Michael Thoennessen NSCL, MSU, USA	The Facility for Rare Isotope Beams
10:05	10:25	0:20	Discussion	
10:25	10:45	0:20	Coffee Break	
10:45	11:05	0:20	Winfried Barth GSI Helmholtzzentrum, Germany	R&D Activities Towards a Future CW LINAC at GSI
11:05	11:25	0:20	Michael Block GSI Helmholtzzentrum, Germany	Nuclear Structure Revealed by High-Precision Mass Measurements
11:25	11:45	0:20	Greg Chubarian Texas A&M University, USA	High efficiency recoil spectrometer for Superheavy Element Factory
11:45	12:00	0:15	Zach Kohley NSCL, MSU, USA	Opportunities to study the SHE production mechanism with rare isotopes at the ReA3 facility
12:00	12:15	0:15	Aditya Wakhle NSCL, MSU, USA	Isospin Dependence of Quasifission and Heavy-ion Fusion with Neutron Rich RIBs
12:15	12:35	0:20	Discussion	
12:35	13:35	1:00	Lunch	
13:35	13:55	0:20	Andrey Popeko FLNR-JINR, Dubna, Russia	On-line Separators for the Dubna Superheavy Element Factory
13:55	14:15	0:20	Oleg Tarasov NSCL, MSU, USA	Using LISE++ for heavy ion reactions at low energies
14:15	14:30	0:15	Nathan Brewer ORNL, USA	Microsecond Activity from α -emitters observed at the DGFRS with Digital Electronics
14:30	14:45	0:15	Discussion	
14:45	14:55	0:10	Closing	
15:15			Cyclotron Tour	