DOE-NP SBIR/STTR Exchange Meeting September 13-14, 2010 Hilton Washington DC North/Gaithersburg - Grand Ballroom-Salons A, B & C Dur. Presentation Title Time Speaker Organization **NP SBIR/STTR Topic** Monday, September 13, 2010 8:30 AM Welcome Remarks Timothy J. Hallman DOE, Office of Nuclear Physics 8:35 AM 15 **Nuclear Physics Program Overview** Jehanne Gillo DOE. Office of Nuclear Physics 8:50 AM 30 NP SBIR/STTR Program Overview Manouchehr Farkhondeh DOE, Office of Nuclear Physics Development of 500 MHz Multi-Channel Readout Elctronics for Wolfgang Hennig XIA, LLC Electronics 9:20 AM 25 Fast Radiation Detectors New Detector for Gamma Ray and Neutron Studies 9:45 AM Kanai Shah Radiation Monitoring Devices, Inc. Instrumentation Progress with Growth of Super-Conducting Films of Nb and Nb3Sn Using Energetic Condensation 10:10 AM 25 Mahadevan Krishnan Alameda Applied Sciences Corp. Accelerator Tech. 35 **Coffee Break** 10:35 AM 11:10 AM RHIC facility and the SBIR/STTR Program Ilan Ben-Zvi **Brookhaven National Laboratory** NP User Facilities I (RHIC) Integrated Multiple Effects Software for Nuclear Physics 11:40 AM 25 **Applications David Smithe** Tech-X Corp. Accelerator Tech. 12:05 PM 25 Development of SRF Multi-Spoke Cavities for Electron Linacs Terry Grimm Niowave, Inc. Accelerator Tech. 65 12:30 PM **Lunch Break** Thomas Jefferson National Accelerator TJNAF facility and the SBIR/STTR Program NP User Facilities II (TJNAF) 1:35 PM 30 Andrew Hutton Facility Overview of Computational Challenges for Coherent Electron Cooling 2:05 PM 25 David Bruhwiler Tech-X Corp. Accelerator Tech. 25 Progress on a Magnetometer for the nEDM Experiment Southwest Sciences, Inc. 2:30 PM David (Chris) Hovde Instrumentation Superconducting Sensor Dvelopment in Support of the Search for the Neutron Electric Dipole Moment STAR Cryoelectronics, LLC 2:55 PM **Robin Cantor** Instrumentation Integrated Spin System for Production of Large Quantities of Stable 3:20 PM 25 Isotopes Alfred Wong Nonlinear Ion Dynamics, LLC Instrumentation 3:45 PM 35 **Coffee Break**

David Radford

Kanai Shah

Terry Grimm

4:20 PM

4:50 PM

5:10 PM

5:30 PM

30

20

Adjourn

NP Low Energy Facilities and the SBIR/STTR Program

Fast, Low Noise Photodetectors for Nuclear Physics

Development of a Low Frequency SRF Electron Gun

NP User Facilities III (Low

Energy)

Instrumentation

Accelerator Tech.

Oak Ridge National Laboratory

Niowave, Inc.

Radiation Monitoring Devices, Inc.

Tuesday, Septer	mber 14. 2	2010			
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		The Development of an Inexpensive Compact Neutron Generator			
8:30 AM	25	for Gamma Calibration and Other Applications	Melvin Piestrup	Adelphi Technology, Inc.	Instrumentation
		Germanium Detector Systems and Germanium Crystals for Nuclear			
8:55 AM	25	Physics Research	Ethan Hull	PHDs Co.	Instrumentation
9:20 AM	25	High Performance Lossy Dielectric HOM Absorbers for SRF Cavities	Ender Savrun	Sienna Technologies, Inc.	Accelerator Tech.
		Development of Plasma Panel Based Radiation Detectors for			
		Nuclear and High Energy Physics, Medical Imaging and Homeland			
9:45 AM	25	Security	Peter Friedman	Integrated Sensors, LLC.	Instrumentation
L0:10 AM	25	Modeling of Signal Generation in Gamma-Ray Detectors	Paul Mullowney /Cory Ahrens	Tech-X Corp.	Instrumentation
L0:35 AM	35	Coffee Break	T		
1:10 AM	30	NP Isotope program and facilities and the SBIR Program	Robert Atcher	National Isotope Development Center	NP Isotope Facilities
		High Rate Digital Signal Processing for Multi-Channel			
1:40 AM	25	Microcalorimeters	Hui Tan	XIA, LLC	Electronics
2:05 PM	25	Solid-State Photomultiplier with Integrated Front End Electronics	James Christian /Erik Johnson	Radiation Monitoring Devices, Inc.	Electronics
12:30 PM	65	Lunch Break			
L:35 PM	25	Multi-Cavity Proton Cycltron Accelerator	Jay Hirshfield	Omega-p, Inc.	Accelerator Tech.
		Customizable Web Service for Efficient Access to Distributed		30.17	
2:00 PM	25	Nuclear Physics Relational Databases	Mark Green	Tech-X Corp.	Software
		Porous Refractory Materials as Potential Catchers for the Fast		·	
1:35 PM	25	Release of Unstable Ligh Nuclei	Uma Sampathkumaran	Innosense, LLC	Accelerator Tech.
2:25 PM	20	The Properties of Cryogenic CMOS Avalanche Photodiodes	James Christian /Erik Johnson	Radiation Monitoring Devices, Inc.	Instrumentation
2:00 PM					
		Porous Refractory Materials as Potential Catchers for the Fast			
2:45 PM	25	Release of Unstable Ligh Nuclei	Uma Sampathkumaran	Innosense, LLC	Accelerator Tech.
3:10 PM	35	Coffee Break	1		
		Some Aspects of Phase-I and Phase-II Research Performed by I.C.		I.C. Gomes Consulting & Investment,	
3:45 PM	25	Gomes C&I Inc.	Itacil Gomes	Inc.	Accelerator Tech.
4:10 PM	25	Integrated Modeling Tool of ECR Charge Breeder Ion Sources	Jin-Soo Kim	Far-Tech, Inc.	Accelerator Tech.
		New VORPAL Modeling Capabilities for 3D Multiscale Stimulations			
	25	of Charge Gain and Transport in Diamond Devices	Dimitre Dimitrov	Tech-X Corp.	Accelerator Tech.
:35 PM		in the second contract of the second contract			
:35 PM :00 PM	15	Closing Remarks	1	1	