



### Basic Research and Innovation Collaboration Center

4075 Wilson Boulevard, Suite 350  
Arlington, VA 22203

Day 1 - Monday, 5 May 2014

Time	Topic	Speaker
0730-0830	Registration	
<b>INTRODUCTIONS</b>		
0830-0840	Welcome and Introduction	<b>Dr. Sofi Bin-Salamon</b> Program Manager Air Force Office of Scientific Research
0840-0850	Opening Remarks	<b>Dr. E. William Colglazier</b> S&T Adviser to the Secretary of State Department of State
0850-0905	Opening Remarks	<b>The Honorable Ebrahim Rasool</b> Ambassador of South Africa to the US Embassy of South Africa
0905-0920	South Africa - US International Armaments Cooperation Framework	<b>Mr. Duncan Lang</b> International Cooperation Officer Office of the Under Secretary of Defense for Acquisition, Technology & Logistics
0920-0940	<a href="#">Introduction</a>	<b>Mr. Duncan Lang</b> International Cooperation Officer Office of the Under Secretary of Defense for Acquisition, Technology & Logistics
0830-0840	<a href="#">Department of Defense S&amp;T Priorities</a>	<b>Mr. Robert Baker</b> Deputy Director - Plans & Programs Assistant Secretary of Defense for Research & Engineering
0940-0950	<b>BREAK</b>	
0950-1010	<a href="#">US Air Force Office of Scientific Research</a>	<b>Dr. Patrick Carrick</b> Director of Research Air Force Office of Scientific Research
1010-1030	<a href="#">US Naval Research Laboratory</a>	<b>Dr. Richard Colton</b> Chemistry Division Superintendent Naval Research Laboratory

1030-1050	<a href="#">Enabling Research for the Soldier of Tomorrow</a>	<b>Dr. Stephen Lee</b> Chief Scientist Army Research Office
1050-1110	BREAK	
1110-1130	<a href="#">Overview of South Africa’s National System of Innovation</a>	<b>Dr. Mahlori Mashimbye</b> Director of Chemical Sciences Republic of South Africa Dept. of S&T
1130-1150	<a href="#">Overview of the NRF Role in the South African National System of Innovation</a>	<b>Ms. Prudence Makhura</b> Director for Overseas Cooperation National Research Foundation
1150-1210	<a href="#">Overview of the Council for Scientific &amp; Industrial Research of South Africa</a>	<b>Dr. Mahlanyane Kenny Mathe</b> Energy Materials Manager Council for Scientific & Industrial Research
1210-1230	<a href="#">Overview of MINTEK’s Research and Development</a>	<b>Dr. Makhapa Makhafola</b> R&D General Manager MINTEK
1230-1330	LUNCH	
PRESENTATIONS		
1330-1400	<a href="#">Convergence of Physical Sciences for Biomedical Applications</a>	<b>Dr. Larry Nagahara</b> OPSO Associate Director National Institutes of Health
1400-1430	Division of Materials Research Funded Activities in Africa	<b>Dr. Tessema Guebre</b> Program Director National Science Foundation
1430-1500	<a href="#">Low-Density Materials</a>	<b>Dr. Joycelyn Harrison</b> Program Manager Air Force Office of Scientific Research
1500-1530	The <a href="#">African Laser Centre</a> and South Africa’s <a href="#">Synchrotron Light Source Initiatives</a>	<b>Dr. Sekazi Mtingwa</b> Principal Partner Triangle Science, LLC
1530-1600	BREAK	
1600-1630	<a href="#">Industry &amp; University Cooperative Research Centers Program</a>	<b>Dr. Shashank Priya</b> Program Director National Science Foundation
1630-1700	<a href="#">Aerospace Materials for Extreme Environments</a>	<b>Dr. Ali Sayir</b> Program Manager Air Force Office of Scientific Research

KEYNOTE		
1700-1800	<a href="#">Collaborative Opportunities between the U.S. and African Countries</a>	<b>Prof. Geraldine Richmond</b> Presidential Chair of Chemistry University of Oregon President-elect of the American Association for the Advancement of Science
1800-	COACH RECEPTION	



### Basic Research and Innovation Collaboration Center

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Day 2 - Tuesday, 6 May 2014

Time	Topic	Speaker
0800-0830	Registration	
<b>TECHNICAL PRESENTATIONS</b>		
0900-0930	<a href="#">Towards Low-Loss, Mid-IR Nanophotonics and Metamaterials: Localized Surface Phonon Polariton Modes in Polar Dielectric Crystals</a>	<b>Dr. Joshua Caldwell</b> Naval Research Laboratory
0930-1000	<a href="#">Comparative Study of the Q-Switching Behaviour of Three Differently Doped Fibre Lasers</a>	<b>Dr. Hencharl Strauss</b> Council for Scientific & Industrial Research
1000-1030	<a href="#">1121 NM Resonator Properties and Impact on the Design of a 50 W 1178 NM Sodium Guidestar Laser</a>	<b>Dr. Leanne Henry</b> Air Force Research Laboratory
1030-1100	<b>BREAK</b>	
1100-1130	<a href="#">Spectroscopy and Dynamics of Plasmonic Metal Nanorods</a>	<b>Dr. Jeffrey Owrutsky</b> Naval Research Laboratory
1130-1200	<a href="#">Structural Mechanics and Prognosis</a>	<b>Dr. David Stargel</b> Air Force Office of Scientific Research
1200-1230	<a href="#">Africa Materials Research Society</a>	<b>Dr. Josephat Zimba</b> Salene Technologies
1230-1330	<b>LUNCH</b>	
1330-1400	High-Power Interband Cascade Lasers for the Mid-IR	<b>Dr. Jerry Meyer</b> Naval Research Laboratory
1400-1430	<a href="#">Platinum Alloys for High-Temperature Materials</a>	<b>Prof. Lesley Cornish</b> University of the Witwatersrand
1430-1500	<a href="#">Chemically Modifying Graphene for Surface Functionality</a>	<b>Dr. Paul Sheehan</b> Naval Research Laboratory
1500-1530	<a href="#">Development and Study of Hard and Ultrahard Materials</a>	<b>Prof. Iakovos Sigalas</b> University of the Witwatersrand
1530-1600	<b>BREAK</b>	

KEYNOTE		
1600-1700	<a href="#">Partnerships for Enhanced Engagement in Research (PEER)</a>	<p><b>Dr. Dalal Najib</b> Program Officer US National Academies of Sciences</p> <p><b>Dr. Rachel Parker</b> Office of Science &amp; Technology US Agency for International Development</p>
1700-1800	<a href="#">Building STEM Capacity in Tanzania through PEER: Computational Mathematics, Modeling and Analysis of Biological, Bio-Inspired and Engineering Systems</a>	<p><b>Prof. Padmanabhan Seshaiyer</b> Professor of Mathematical Sciences George Mason University</p> <p><b>Prof. Burton Mwamila</b> Vice Chancellor Nelson Mandela African Institute of S&amp;T, Tanzania</p>
1800	MEETING ADJOURN	
1815-	NO HOST DINNER	



### Basic Research and Innovation Collaboration Center

4075 Wilson Boulevard, Suite 350  
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Day 3 - Wednesday, 7 May 2014

TIME	TOPIC	SPEAKER
0800-0830	Registration	
<b>PRESENTATIONS</b>		
0900-0930	<a href="#">An Overview of Materials-related Research Initiatives in the Advanced Materials Division at Mintek</a>	<b>Dr. M. Jones Papo</b> MINTEK
0930-1000	<a href="#">Manganese Oxide Nanoarchitectures: Redesigning an Old Material for Next-generation Energy Storage and Beyond</a>	<b>Dr. Jeffrey Long</b> Naval Research Laboratory
1000-1030	<a href="#">Manganese Oxide Based Nanostructures in Lithium Ion Batteries and Electrochemical Capacitors</a>	<b>Dr. Kenneth Ozoemena</b> Council for Scientific & Industrial Research
1030-1100	<b>BREAK</b>	
1100-1130	<a href="#">Diagnostic Tools for Lithium-Ion Battery State-of-Health Monitoring</a>	<b>Dr. Corey Love</b> Naval Research Laboratory
1130-1200	<a href="#">Atomistic Simulation Studies of Lithium and Magnesium Insertion into Electrolytic Manganese Dioxide</a>	<b>Prof. Regina Maphanga</b> University of Limpopo
1200-1230	<a href="#">Visible-Light Plasmonic-Sensitized Photochemistry in 3D Nanoscale Networks</a>	<b>Dr. Jeremy Pietron</b> Naval Research Laboratory
1230-1330	<b>LUNCH</b>	
1330-1400	<a href="#">Efficacy of Broad Spectrum Antimicrobials within Heavy Traffic Textured Surfaces</a>	<b>Dr. James Wynne</b> Naval Research Laboratory
1400-1430	Computational Modeling of Crystalline Structures at the Microscale	<b>Prof. Andrew McBride</b> University of Cape Town
1430-1500	Computational Mathematics	<b>Dr. Fariba Fahroo</b> Air Force Office of Scientific Research
1530-1600	<b>BREAK</b>	
1600-1630	<a href="#">Large Scale Simulation Studies of Lithiated Nano-Architectures of Metal Oxides</a>	<b>Prof. Phuti Ngoepe</b> University of Limpopo
1630-1700	<a href="#">Need for Novel Materials in Extreme Environments – A Space-Based Perspective</a>	<b>Prof. Norman Fitz-Coy</b> University of Florida
1700-1730	<a href="#">Protection Against Blast Loads</a>	<b>Dr. Steeve Chung Kim Yuen</b> University of Cape Town
1730	<b>MEETING ADJOURN</b>	



### Army Research Laboratory

2800 Powder Mill Rd,  
Adelphi, MD 20783

Day 4 - Thursday, 8 May 2014

TIME	TOPIC
0715	Transport departs 4075 Wilson Blvd, Arlington
0800-1700	Visit to US Army Research Laboratory ( <u>No Personal Electronic Devices Allowed, e.g., laptops, tablets, cell phones, etc.</u> )

### Day 5 Draft Agenda



### Basic Research and Innovation Collaboration Center

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Day 5 - Friday, 9 May 2014

TIME	TOPIC	SPEAKER
0800-0900	Registration	
CLOSING DISCUSSIONS AND REMARKS		
0900-1100	Action Item Discussion	
1100-1130	BREAK	
1130-1200	Closing Remarks	
1200	MEETING CONCLUSION	