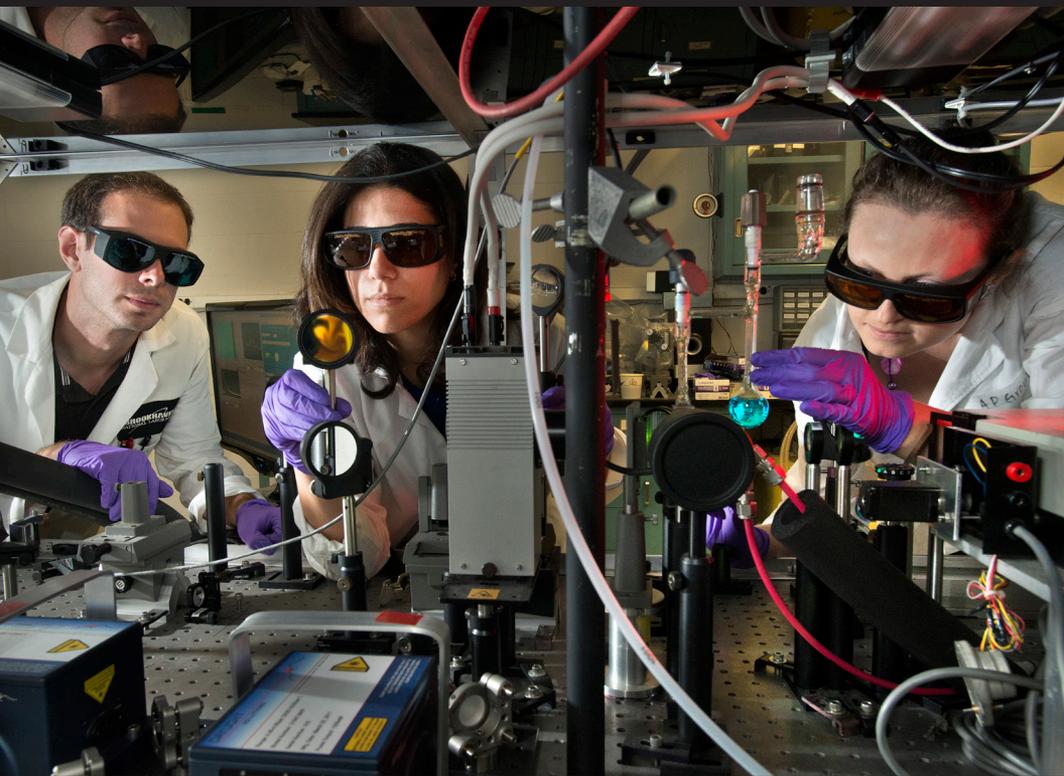


2013 Young Researcher Symposium

PROGRAM

NOVEMBER 15, 2013



 **YRS** YOUNG
RESEARCHER
SYMPOSIUM
2013
BROOKHAVEN NATIONAL LABORATORY

Dear Guest,

Welcome and thank you for participating in the second annual Young Researcher Symposium (YRS). It is the goal of the Association of Students and Postdocs (ASAP) to use this important event to celebrate the excellent research that is performed by graduate students and postdocs at Brookhaven National Lab. We have planned a fantastic scientific program featuring 18 oral presentations and 50 poster presentations by graduate students and postdocs. In the morning, J. G. White Distinguished Professor of Physics and Director of the Center for Emergent Superconductivity J. C. Séamus Davis will inspire young scientists with a career talk. In the afternoon, SUNY Distinguished Professor and Global and Regional Solutions Chief Scientist Esther Takeuchi will anchor the research portion of the day with a keynote presentation. It is our hope that after hearing the talks, visiting the posters and engaging with the young scientists, we will all have a better appreciation for the world-class research that is happening at BNL every day.

In 2012, the ASAP board expanded its focus from primarily coordinating social functions to include organizing professional development events such as today's symposium. The ASAP board recognizes the need to not only train our young researchers to be outstanding scientists but also give them the professional skills necessary to have successful, fulfilling and exciting careers. In that spirit, we are very pleased to be hosting Prof. Davis and a diverse career panel who will discuss the multitude of career paths available to young scientists.

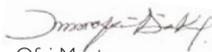
Today's symposium was organized by a group of postdocs, many of whom will also present their research. None of this would have been possible without their time, dedication, and ideas. Financial support was provided by the Director's Office, ASAP, and the sponsors listed on the back cover of this program. We encourage you to visit their booths during the exposition and the links provided on the YRS website.

It is our hope that the Young Researcher Symposium continues to be an annual event and the highlight of the year for the BNL community. Thank you for your participation and support. Please take a moment and complete the feedback form in the back of this program.

Sincerely,



Diane K. Zhong



Ofei Mante



Joseph Brady



Anna Lewandowska-Andralojc

9:00 – 9:20	Welcome to YRS Berndt Mueller	Auditorium
9:25 – 9:45	Parallel Oral Sessions	A,B,C
9:45 – 10:05	Parallel Oral Sessions	A,B,C
10:05 – 10:25	Parallel Oral Sessions	A,B,C
10:30 – 11:30	That's Impossible! J. C. Séamus Davis	Auditorium
11:30 – 12:30	Career Panel Matteo Cavalleri, Jaime Farrington, Suzanne Golisz, Yue Hao, Deborah Keszenman	Auditorium
12:30 – 2:30	Poster Session 12:30 – 1:30: Odd numbered posters 1:30 – 2:30: Even numbered posters Exposition Lunch (on your own)	Lobby
2:30 – 2:50	Parallel Oral Sessions	A,B,C
2:50 – 3:10	Parallel Oral Sessions	A,B,C
3:10 – 3:30	Parallel Oral Sessions	A,B,C
3:30 – 4:30	In-situ and Ex-situ Explorations of Battery Cathodes Esther Takeuchi	Auditorium
4:30 – 5:00	YRS Closing Remarks Doon Gibbs Awards Presentation	Auditorium
5:00 – 6:00	Reception	Lobby

ROOM A

Session Chair: Arbin Timilsina

A High Temperature Superconductor-Based High Field Prototype Magnet for Energy Storage Applications

S. Lakshmi Lalitha (Superconducting Magnet Division, BNL), W. B. Sampson, R. C. Gupta* and P. Wanderer

9:25-9:45 AM

ROOM B

Session Chair: Son Hoang

First Principles Molecular Dynamics of metal/water interfaces under bias potential

Luana S. Pedraza (Department of Physics and Astronomy, Stony Brook University), A. R. Rocha, M. V. Fernandez-Serra*

Quantifying Contributions of Inherited and Horizontally Transferred Mutations to E. coli Genomic Diversity

Purushottam Dixit (Biosciences Department, BNL), T. Y. Pang, F. W. Studier*, S. Maslov*

9:45-10:05 AM

Impurity Free Ion Beams Accelerated by a 1 TW CO₂ Laser

Nathan M. Cook (Department of Physics and Astronomy, Stony Brook University), C. M. Maharjan, P. Shkolnikov, I. V. Pogorelsky*, M. N. Polyanskiy*, O. Tresca, N. P. Dover, Z. Najmudin

10:05-10:25 AM

ROOM C

Session Chair: Niji Ofei Mante

Mapping Spatially Resolved Charge Collection Probability within Bulk Heterojunction Photovoltaics

Nanditha M. Dissanayake (Sustainable Energy Technologies Department, BNL), A. Ashraf, Y. Pang, M. Eisaman*

Control of Plasma Shape with Pulsed Solenoid on Laser Ion Source

Megumi Sekine (Collider Accelerator Department, BNL) and M. Okamura*

Broadband Omnidirectional Antireflective Nanostructured Silicon Surfaces

Atikur Rahman (Center for Functional Nanomaterials, BNL), M. Eisaman, A. Ashraf, K. Kissinger, E. Stach, D. Su, and C. T. Black*

AFTERNOON SESSIONS

2:30-2:50 PM

2:50-3:10 PM

3:10-3:30 PM

ROOM A

Session Chair: Salvatore Fazio

Front-end ASICs for Radiation Detectors

Alessio D'andragora (Instrumentation Division, BNL) and G. De Geronimo*

Funneling Multiple Bunches of High Charge and High Polarization Electron Beam: The Gatling Electron Gun

Omer Rahman (Collider Accelerator Department, BNL), I. Ben-Zvi*, D. Gassner, A. Pikin, T. Rao, E. Riehn, B. Sheehy, J. Skarttka, E. Wang, Q. Wu

New Water Oxidation Chemistry of Seven-Coordinate Ruthenium Complexes with Tetradentate Ligands

Marta Kowalczyk (Chemistry Department, BNL), Y. Badiel, D.E. Poljanskiy, E. Fujita, J.T. Muckerman*

ROOM B

Session Chair: Samema Sarowar

Tailoring Nanostructures for Enhanced Water Splitting Photocatalysis: An Ultrafast In-Situ Approach

Kannattassen Appavoo (Center for Functional Nanomaterials, BNL), M. Liu, M. Y. Sfeir*

New Non-Noble Metal Nitride Structure with High Electrocatalytic Activity for Hydrogen Evolution Reaction

Bingfei Cao (Chemistry Department, Stony Brook University), G. M. Veith, Y. Zhang, J. C. Neuefeind, J. X. Wang, R. R. Adzic, and P. G. Khalifah*

On the Photophysics of Engineered Surface States and Their Effect on Quantum Dot Heterostructures

Jessica Hoy (Center for Functional Nanomaterials, BNL), J. Han, S. S. Wong, M. Sfeir*

ROOM C

Session Chair: Arbin Timilsina

Rapid Synthesis of No-Carrier-Added $[^{13}\text{C}]\text{Indole}$ from $[^{13}\text{C}]\text{Cyanide}$ for Plant Imaging Studies

So Jeong Lee (Department of Bioscience, BNL), C. Weber, A. Nauth, B. A. Czeskis, J. M. Hooker, S. W. Kim, J. S. Fowler*

Energy Dependence of J/ψ production

Wangmei Zha
(for STAR Collaboration)

Ferroelectric Superlattices as a Route to Clean Graphene-Ferroelectric Interfaces

Mohammed H. Yusuf (Department of Physics and Astronomy, Stony Brook University), B. Nielsen, X. Du*, M. Dawber*

Name in *italics* — Presenter

Name with * — Supervising Scientist

Dr. Esther S. Takeuchi



Dr. Esther S. Takeuchi is a SUNY Distinguished Professor in the Departments of Materials Science and Engineering and Chemistry at Stony Brook University. She also has a joint appointment at Brookhaven National Laboratory as Chief Scientist in the Global and Regional Solutions Directorate.

Prior to her academic appointment, she was employed at Greatbatch, Inc., where her achievements in lithium battery research, particularly on cells for implantable applications, led to a number of key technological

developments, including the lithium/silver vanadium oxide (Li/SVO) battery, which powers the majority of implantable cardiac defibrillators (ICDs). A prolific inventor, she holds over 150 patents.

Dr. Takeuchi is a member of National Academy of Engineering and has received numerous awards for her research achievements. In 2009, Dr. Takeuchi was awarded the National Medal of Technology and Innovation by President Obama. In May, 2011 she was inducted into the National Inventors Hall of Fame. She was elected as a Charter Member of the National Academy of Innovation in 2013. She also received the E.V Murphree Award and Astellas Award from the American Chemical Society. She is a Fellow of the Electrochemical Society and received the Battery Technology Award.

Dr. Takeuchi received a bachelor's degree from the University of Pennsylvania with a double major in chemistry and history and completed a Ph.D. in chemistry at the Ohio State University. She completed post-doctoral research at the University of North Carolina and University at Buffalo. Her research focus is novel power sources including development of new materials and investigation of faradaic and non-faradaic mechanisms relevant to battery systems.

J.C. Séamus Davis



Séamus Davis received a B.Sc in Physics from the National University of Ireland (1983) and Ph.D. in Physics from the University of California-Berkeley (1989). He was appointed *Professor of Physics at the University of California-Berkeley* and a *Faculty Physicist at Lawrence Berkeley National Laboratory* between 1993 and 2003. He became *Professor of Physics at Cornell University*, New York, in 2003 and a *Senior Physicist at Brookhaven National Laboratory*, New York, in 2006. In 2007 he was appointed *Distinguished Research Professor of Physics at St. Andrews University*, Scotland, and in 2008 he became the *J.G. White Distinguished Professor of Physics at Cornell University*. He

became *Director of the Center for Emergent Superconductivity* of the *US Department of Energy* in 2009.

Séamus Davis' active research interests are in the general field of *Macroscopic Quantum Physics* including studies of superconductors, superfluids, supersolids, and exotic quantum fluids made of spins, magnetic monopoles, and heavy-fermions. He has received many awards and honors, most notably the premier prizes in two fields: the *Fritz London Memorial Prize* (2005) for his research on superfluids, and the *Kammerlingh-Onnes Prize* (2009) for his studies of high temperature superconductivity. In 2010 Séamus Davis was elected to the *US National Academy of Sciences*.

Matteo Cavalleri



Matteo studied Chemistry at the University of Milan (Italy) and University of Valencia (Spain) before obtaining his Ph.D. in the Quantum Chemistry group of the Physics Department at Stockholm University (Sweden) with a thesis entitled "Local Structure of Hydrogen Bonded Liquids". After a 3 years' PostDoc experience at the Theory Department of the Fritz-Haber-Institut in Berlin (Germany), he joined Wiley in August 2008 as an Editor of *physica status solidi*. After an experience as Associate Editor of the *Journal of Polymer Science Part B: Polymer Physics* he moved on to become the Editor-in-Chief of *Int. Journal of Quantum Chemistry* in October 2011.

Jaime Farrington



Jaime Farrington is the Technology Development Scientist at Sydor Instruments LLC, working on the commercialization of novel technologies for the particle accelerator and synchrotron radiation communities. He serves as Sydor's scientific liaison, coordinating technology transfer, development and beta testing. Jaime earned his Ph.D. in Physics from the Graduate Center of CUNY in 2010. He has worked in different research areas, in addition to areas outside research such as graduate program recruitment and in the film industry as a consultant. These diverse experiences made him realize that there are many nontraditional opportunities for scientists where valuable skills can be transferred and that there is much to gain when working outside our comfort zone.

Suzanne Golisz



Suzanne is a Research Chemist at Chevron in Richmond, CA. She provides chemical expertise to six North American refineries with respect to the quality of gasoline. Her other responsibilities include evaluating naphtha-range biofuels, consulting on emerging refinery processes and advising the supply and trading business unit. Prior to joining Chevron, Suzanne was a Research Associate at Brookhaven National Lab where she investigated carbon dioxide reduction. Suzanne has a B.S. from the University of Rochester and a Ph.D. in Organometallic Chemistry from the California Institute of Technology. Outside of chemistry, Suzanne competes in triathlons and plays the violin in a community orchestra.

Yue Hao



Dr. Yue Hao received his Ph.D from Indiana University at Bloomington. He then joined BNL and focused his study towards the future electron ion collider eRHIC. He works on various beam dynamics issues and related numerical algorithm. From 2010, he became adjunct professor of Department of Physics and Astronomy, Stony Brook University.

Deborah Keszenman



Dr. Keszenman studied Medicine at the Medical School of the Universidad de la Republica (UdelaR) in Montevideo, Uruguay. After earning the MD degree, Dr. Keszenman obtained a Master of Science and a PhD in Biophysics from the UdelaR-PEDECIBA in Uruguay. Before joining Brookhaven National Laboratory, Dr Keszenman worked at the School of Medicine and Faculty of Sciences as a Professor of Biophysics, as a research member of PEDECIBA, and as a General Physician in Clinical Practice in Uruguay. Her research in Radiation Biology includes radiation induced DNA damage and repair. Dr. Keszenman started at BNL as a Postdoctoral Research Associate and at present, she is a Biologist Associate in the Biosciences Department, and a Beam Line Scientist of the NASA Space Radiation Laboratory.

1. **Layered to Spinel Conversion Free Li-rich Layered Metal Oxides for Li-ion Batteries**
*Mehmet N. Ates, S. Mukerjee, K.M. Abraham**
2. **Correlating Structural Changes and Gas Evolution during Thermal Decomposition of Charged Cathode Materials**
Seong-Min Bak, E. Hu, Y. Zhou, X. Yu, K-W. Nam, X-Q. Yang**
3. **Perovskite Oxynitrides and Pyrochlore Oxides: Light Harvesting and Surface Chemistry of Complex Semiconductors**
*Polina V. Burmistrova, A. Malingowski, L. Wang, B. Cao, D. Zakharov, E. Stach, J.C. Lofaro, M. White, W. Si, G. Gu, C. Homes, Q. Mi, N. Lewis, P. Khalifah**
4. **Cobalt Molybdenum Oxynitride Catalysts for the Oxygen Reduction Reaction**
*Bingfei Cao, R.E. Diaz, E.A. Stach, R.R. Adzic, P.G. Khalifah**
5. **Au-Ni@Pt Electrocatalysts for the Oxygen Reduction Reaction: The Effects of Cores**
*Guangyu Chen, K. Sasaki, D. Su, K.A. Kuttiyiel, C. Wang, D. Buceta, G. Yin, R.R. Adzic**
6. **Biomass-Derived Electrocatalysts for Generating Hydrogen from Water**
*Wei-Fu Chen, S. Iyer, S. Iyer, K. Sasaki, C.-H. Wang, Y. Zhu, J.T. Muckerman, E. Fujita**
7. **A Monte Carlo Simulation Approach to the Reliability Modeling of the Beam Permit System of Relativistic Heavy Ion Collider (RHIC) at BNL**
Prachi Chitnis, K.A. Brown, T.G. Robertazzi**
8. **Synthesis and Characterization of New Materials for Control of Heterojunction Morphology in Organic Photovoltaics**
*Deokkyu Choi, R.B. Grubbs**
9. **Ru-based Molecular Catalysts that Catalyze Both Carbon Dioxide Reduction and Water Oxidation**
*Lele Duan, E. Fujita**
10. **Energy Calibration in the AGS Using Depolarization through Vertical Intrinsic Spin Resonances**
Yann Dutheil, L. Ahrens, H. Huang, F. Méot, V. Schoefer*
11. **Theory of Amplification of Density Modulations in Coherent Electron Cooling**
*Andrey Elizarov, V. Litvinenko**
12. **Collinear Two-Color Saturation Spectroscopy in CNA-X (1-0) and (2-0) Bands**
*Damien Forthomme, C.P. McRaven, T.J. Sears, G.E. Hall**
13. **Direct Observation of Lithium Electrochemical Reactions in Individual Nanoparticles by in-situ TEM**
*Peng Gao, L. Wang, W. Zhang, F. Wang**
14. **Development and Application of Live Cell FTIR Imaging for the Study of Protein Misfolding and Aggregation**
*Paul Gelfand, R. Smith, L.M. Miller**
15. **Design of the Injection into the 800 MeV/amu High Power Cyclotron**
Malek Haj Tahar, L. Calabretta, A. Calanna, F. Meot, N. Tsoupas*
16. **Determination of CO₂ Hydrate Morphology Using X-ray Computed Microtomography**
Kristine Horvat, D. Mahajan, K. Jones**
17. **Single-atom Metal Decorated M/C (M=Zn, Cu, Ni, Co, Fe) for Electrochemical Reduction of CO₂**
*Yu-Chi Hsieh, D. Polyansky**

18. **Protein Engineered Coiled-Coil Nano- and Microfibers**
*Jasmin Hume, J. Sun, R. Jacquet, J.K. Montclare**
19. **Visualizing Biofilms in Porous Media Using Synchrotron Based X-ray Computed Microtomography**
*Gabriel Iltis, Y. Davit, J. Connolly, R. Gerlach, D. Wildenschild**
20. **First-Principles Calculations of Sub-nm Noble Metal Clusters on CdS Surfaces for Photocatalytic Hydrogen Evolution**
*Eric B. Isaacs, S. Xiong, Y. Li**
21. **Direct Measurement of the Thickness-Dependent Electronic Band Structure of MoS₂ Using Angle-Resolved Photoemission Spectroscopy**
*Wencan Jin, P.-C. Yeh, N. Zaki, D. Zhang, J. T. Sadowski, A. Al-Mahboob, A. M. van de Zande, D. A. Chenet, J. Dadap, I. P. Herman, P. Sutter, J. Hone, R. M. Osgood Jr**
22. **Coupling Spin Resonances with Siberian Snakes**
*Nermeen Khalil, V. Ptitsyn**
23. **Structural and Electronic Properties of Photocatalytic GaN/ZnO Alloy-Water Interfaces**
Neerav Kharche, M.S. Hybertsen, J.T. Muckerman**
24. **A Compact Automated System for ¹⁴C Labeled Precursors**
*Dohyun Kim, D. Alexoff, S.W. Kim, J. Fowler**
25. **A 4x4 Pixelated Silicon Photomultiplier for a Multi-Channel Radiation Monitoring System Correct**
*Heonjoo Kim, D. Kim, S.W. Kim, J. Fowler**
26. **In-Situ Tomographic Discharge Characterization of Ag₂VP₂O₈ Li-Ion Batteries using Energy Dispersive X-ray Diffraction**
*Kevin C. Kirshenbaum, D.C. Bock, A.C. Marschilok, Z. Zhong, K.J. Takeuchi, E.S. Takeuchi**
27. **New Water Oxidation Chemistry of Seven-Coordinate Ruthenium Complexes with Tetradentate Ligands**
*Marta Kowalczyk, Y. Badiei, D.E. Polyanskiy, E. Fujita, J.T. Muckerman**
28. **Synthesis of Coinage Metal Nanowires under Ambient, Seedless, Surfactantless Conditions**
*Crystal S. Lewis, L. Wang, H. Liu, S.S. Wong**
29. **Accumulation and Speciation of Iron and Other Transition Metals in N₂-fixing Root Nodules of *Medicago sativa***
*Feifei Li, A.M. Orville**
30. **Preparation and Investigation of Antimony Thin Films for Multi-Alkali Photocathodes**
Xue Liang, M. Ruiz-Osés, I. Ben-Zvi, S. Schubert, E. Wang, Q. Wu, T. Rao, K. Attenkofer, J. Smedley, J. Wong, H. Padmore, J. Jordan-Sweet*
31. **KMC Study of Metal Oxide/Cu (I I) Catalysts for Methanol Synthesis**
Shizhong Liu, Y. Yang, M.G. White, P. Liu**
32. **Energy Transfer from a Conjugated Polyelectrolyte to a DNA Photonic Wire: Towards Label Free, Sequence Specific DNA Sensing**
*Zhongwei Liu, H.-L. Wang, M. Cotlet**
33. **High Activity of Ni-W-Ce Mixed-Metal Oxides Catalysts for H₂ Production through Ethanol Steam Reforming**
*Zongyuan Liu, W. Xu, S. Yao, A.C. Johnson-Peck, F. Zhao, A. Kubacka, S.D. Senanayake, E.A. Stach, M. Fernández-García, J.A. Rodriguez**

34. **Unique Properties of Interface of CeO_xTiO_2 : Electronic Structure and Growth of Oxide on Oxide Nanostructures**
*Si Luo, S. D. Senanayake, A.C. Johnston-Peck, L. Barrio, S. Kundu, W. Xu, R.M. Navarro, E.A. Stach, L. Piper, J.A. Rodriguez**
35. **Influence of Hydroxyl-substituted Ligands on the Rhenium-catalyzed Conversion of CO_2 to CO**
*Gerald Manbeck, E. Fujita**
36. **Production of renewable phenols from lignin waste via catalytic pyrolysis**
*Ofei D. Mante, J.A. Rodriguez, S.P. Babu**
37. **Importance of the Metal–Oxide Interface in Catalysis: In situ Studies of the Water–Gas Shift Reaction by Ambient-Pressure X-ray Photoelectron Spectroscopy**
*Kumudu Mudiyansele, D.J. Stacchiola**
38. **Enzyme-aided Synthesis of Radiofluorinated Sugars**
Alina Nazir, J. S. Fowler, A.N. Gifford*
39. **Ex-situ Electrochemical Lithiation Studies of the High Capacity Cathode Material $\epsilon\text{-VOPO}_4$ Using Soft X-ray Spectroscopy**
Nicholas F. Quackenbush, S. Sallis, L. F. J. Piper, D. O. Scanlon, Z. Chen, R. Zhang, N. A. Chernova, M.S. Whittingham*
40. **Understanding the Bacterial Pili Assembly and Secretion Mechanism as Catalyzed by the Outer Membrane Protein Usher**
*Samema Sarowar, T. Wang, D. Thanassi, H. Li**
41. **AC Dipole based Optics Measurement and Correction at RHIC**
Xiaozhe Shen, S.Y. Lee, M. Bai, S. White, G. Robert-Demolaize, Y. Luo, A. Marusic, R. Tomás*
42. **In-situ Synthesis of High-energy Cathode Materials for Lithium-ion Batteries**
*Liping Wang, J. Bai, S-W. Kim, X. Wang, F. Wang**
43. **Ex-situ X-ray Spectroscopic Study of the Electronic and Chemical Composition of $\text{Li}_x\text{V}_2\text{O}_5$**
*Linda W. Wangoh, S. Sallis, N.F. Quackenbush, M. Wahila, P. Marley, S. Banerjee, L.F. Piper**
44. **Optimizing Bio-energy Production by Imaging Nutrient Exchange in the Plant Root Rhizosphere using Infrared Microspectroscopy**
*Tiffany W. Victor, N.A. Delpratt, L.J. Cseke, L.M. Miller**
45. **Diamond Amplifier Design and Preliminary Test Results**
Tianmu Xin, S. Belomestnykh, I. Ben-Zvi, M. Gaowei, E. Muller, T. Rao, J. Skaritka, J. Smedley, E. Wang, Q. Wu*
46. **Cosmic Ray Test of Thick Gas Electron Multiplier for Transition Radiation Detector**
Shuai Yang, Z. Xu
47. **Pair Distribution Function-Computed Tomography**
*Xiaohao Yang, S. D.M. Jacques, M. Di Michiel, S.A.J. Kimber, R.J. Cernik, A.M. Beale, S.J.L. Billinge**
48. **Synthesis of Block Copolymers for Energy Applications**
*Daniel H. Yi, T. Wu, Y. Cai, Y. Pang, M.D. Eisaman, R.B. Grubbs**
49. **A General Strategy for the DNA-Mediated Self-Assembly of Functional Nanoparticles into Heterogeneous Systems**
*Yugang Zhang, F. Lu, K. G. Yager, D. van der Lelie, O. Gang**
50. **The ATF – A Unique Facility for Advanced Accelerator Physics**
Christina Swinson

YRS ■ FEEDBACK FORM ■ 2013

Thank you for attending YRS 2012. Your response to this survey is essential to ensuring a successful event for years to come. Please take a few minutes to answer the questions below. Your completed survey may be deposited in the box outside Berkner Auditorium.

1. Who are you? (Check one)

- BNL Scientific Staff BNL Non-Scientific Staff
 Postdoc/Graduate Student External Guest

2. How did you hear about YRS? (Check all that apply)

- Monday Memo BNL Website
 ASAP Mailing List Posters at BNL
 Email Invitation Word of Mouth
 Other: _____

3. What session(s) did you attend today? (Check all that apply)

- Opening Remarks (Berndt Mueller) Poster Session
 Oral Session (AM) Oral Session (PM)
 Career Lecture (J. C. Séamus Davis) Keynote Talk (Esther Takeuchi)
 Career Panel Concluding Remarks (Doon Gibbs)
 Exposition Reception

4. Please rate the usefulness of the symposium from 1 to 5 in the following areas with 1 being not useful and 5 being very useful.

	1	2	3	4	5
Enhancing knowledge of BNL research activities					
Initiating collaboration across BNL departments					
Networking					
Learning about vendors					
Getting career advice					

5. Will you attend next year? YES NO
 6. Would you recommend that your friends and colleagues attend next year? YES NO
 7. Would you like to be a presenter (either oral or poster) next year? YES NO

continued on reverse

YRS ■ FEEDBACK FORM ■ 2013

8. If you would like to volunteer to help organize next year's symposium, please provide your name and email here:

Name Email

9. Tell us what you loved about this year's event:

10. Tell us what you would like to see changed for next year:

Thank You

Sam Aronson	Paul I. Freimuth	Danielle Pontieri
Elke Aschenauer	Etsuko Fujita	Alex Reben
Rick Backofen	Oleg Gang	Theodore Sampieri
Charles Black	Pete Genzer	Martin Schoonen
Noel Blackburn	Erin Gettler	Qun Shen
Tiffany Bowman	Joseph Gettler	Graham Smith
Scott Bronson	Doon Gibbs	Eric Stach
Terrence Buck	Adrian Gozar	Diktys Statakis
Chris Carter	James Green	Gerald Stokes
CEGPA	Ramesh Gupta	Roger Stoutenburgh
William Christie	Robert Harrison	Marco Stratmann
Ruth Comas	Carol Kessler	Anne Troutman
Joanne Delles	Jim Muckerman	Chris Weaver
James Dickerson	Paul O'Connor	Stan Wong
Justin Eure	Peter Petreczky	
Liz Flynn	Marc-André Pleier	

Special thanks to all of the scientists that served as judges for both the poster and oral sessions.

Organizing Committee

Yosra Badié, Joseph Brady, Benedetto DiRuzza, Salvatore Fazio, Son Hoang, Prahlad Kumar, Anna Lewandowska-Andralojc, Ofei Mante, Annalia Palumbo, Samema Sarowar, Christina Swinson, Arbin Timilsina, Silvia Verdu-Andres, Yu Zhang, Diane Zhong

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