

**Topical Meeting "Isotope-Based Energy Sources"
May 15-16, 2017, The George Washington University,
Washington, DC**



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| Monday, May 15 "Radioisotope power sources" | | Location: Lehman Auditorim, Science and Engineering Hall, 800 22nd St NW, Washington, DC |
| Time | Speaker | Title |
| 8:30 – 8:40 | Welcome remarks | |
| 8:40 – 9:20 | Marc Litz, ARL | Beta-photovoltaic cells using planar and volumetric configurations |
| 9:20 – 10:00 | John Russo, ARL | Tritiated organic carrier for betavoltaic cells |
| 10:00 – 10:30 | Break | |
| 10:30 – 11:10 | Chris Thomas, Widetronix | Betavoltaics: Long life Power Sources for Ultra Low Power Sensor Applications |
| 11:10 – 11:50 | Jae Kwon, U. Missouri | Unconventional Atomic Cells |
| 11:50 – 12:30 | Bill Ayers, Princeton Research | High Power Beta Electron Energy Conversion Device |
| 12:30 – 13:30 | Lunch | |
| 13:30 – 14:10 | Mike Squillante, RMD | Enhanced Beta Battery for Long Term Remote Applications |
| 14:10 – 14:50 | Tom Adams, Purdue/NSWC | Research and Development in Radioisotope Power Sources, and Applications within the Navy, DoD and other Agencies |
| 14:50 – 15:20 | Break | |
| 15:20 – 16:00 | Modeste Tchakoua, U Missouri | Power generation using Photon-Intermediate Direct Energy conversion and Radioisotopes |
| 16:00 – 16:40 | Shadi Shahedipour-Sandvik, SUNY Buffalo | III-Nitride based 3D structures for high performance betavoltaic battery |
| 16:40 – 17:10 | Discussion | |

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| Tuesday, May 16 "Gamma rays, nuclei and matter" | | Location: Room 310, Marvin Center, 800 21st Street NW, Washington, DC |
| Time | Speaker | Title |
| 8:30 – 8:40 | Introduction | |
| 8:40 – 9:20 | Olga Kocharovskaya, TAMU | Coherent Control of the γ -Photon Waveforms and Quantum Interface between γ -Photons and Nuclear Ensembles |

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| 9:20 – 10:00 | Andrei Afanasev, GWU | Selective Photoexcitation of Quantum States with High Orbital Angular Momentum |
| 10:00 – 10:30 | Break | |
| 10:30 – 11:10 | Allen Mills, UC Riverside | Progress towards an annihilation photon laser |
| 11:10 – 11:50 | Yi-Hsieh, Wang, U MD | Spinor Bose-Einstein Condensates of Positronium |
| 11:50 – 12:30 | James Carroll, ARL | Search for isomer depletion mechanisms in nuclear structure studies |
| 12:30 – 13:30 | Lunch | |
| 13:30 – 14:10 | Don Umstadter, UN-L | Controlled release of energy from nuclear isomers by laser-driven x-rays |
| 14:10 – 14:50 | Chris Chiara, ARL | First experimental evidence of NEEC |
| 14:50 – 15:20 | Break | |
| 15:20 – 16:00 | Yuanbin Wu, MPIK Heidelberg | Nuclear excitation with lasers - x-ray free-electron lasers and intense optical lasers |
| 16:00 – 16:40 | Cameron Geddes, LBNL | Mono-Energetic Photons from Laser Wakefields |
| 16:40 – 17:10 | Discussion | |