Michael D Kaminski

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Professional Experience

For Argonne National Laboratory:

- September 2008-Present—Principal Investigator, Selective Separations of Sr from Urine
- September 2008-Present—Principal Researcher, Uncertainty Estimates from ICP-MS
- September 2007-Present—Principal Investigator, Magnetic Bead Based Sensor for Radionuclides
- January 2003-Present—Principal Investigator, Advanced Fuel Cycle Initiative
- May 2002-Present—Program Manager and Principal Investigator, Biostabilized Polymeric Drug Carriers for Medicine
- Dec. 2003-Dec. 2005—Program Manager , Superabsorbing Gel for Nuclear Decontamination of Building Materials
- October 2002-May 2003—Research Engineer, RDD Attribution
- October 2001-September 2002, Principal Investigator, Nuclear Fuel and Waste Corrosion
- January 1999-July 1999--Research Engineer, Brachytherapy Seeds
- October 1999-September 2001, Principal Investigator, Spent Nuclear Fuel Program
- July 1998-January 1999, Research Engineer, Decontamination of Ferrous Metals in Nuclear and Industrial Sectors
- January 1998-October 1998—Post-Doctoral Research Engineer, Open Gradient Magnetic Separation
- January 1998-October 1999, Research Engineer, Selective Magnetic Microparticles

Other:

- January 1998-July2000—Post-Doctoral Appointee, Argonne National Laboratory, Chemical Technology Division
- January 1996-January 1998—Graduate Research Assistant, University of Illinois in Urbana, Heavy Metals Contamination in Urban Soils
- September 1996--International Atomic Energy Agency Invited Instructor
- January 1994-January 1996—Graduate Research Assistant, Argonne National Laboratory

- July 1993-January 1994—Graduate Research Assistant, Argonne National Laboratory, Decontamination of radioactively contaminated stainless steels
- July 1992-July 1993-- Undergraduate Researcher, Argonne National Laboratory, Magnetic Particle Separations
- June 1991-July 1992--Undergraduate Researcher, University of Illinois in Urbana, Trace Elements in Municipal Solid Waste Incinerator Ash

Education

- Ph.D., Nuclear Engineering/Geochemistry Minor, 1998.
- M.S., Nuclear Engineering/Radioactive Waste Management, 1996.
- B.S., Nuclear Engineering, Cum Laude, 1994

Awards

- Selected as one of the Hispanic Power Hitters in Technology and Business for 2005
- HENAAC (Hispanic Engineer National Achievement Awards Conference), Outstanding Technical Achievement Award for 2004.
- Council for Chemical Research as the Collaboration Award Winner, 2003.
- Sun-Times Innovation Award, 2002
- Nominated, National Young Hispanic Engineer, 2001.
- Laboratory Graduate Appointment, Argonne National Laboratory Jan/1995-Jan/1996
- Illinois Minority Graduate Incentive Program Scholarship Award, Jan./1996- Jan./1998
- SURGE Scholarship Award, Jan./1996-Jan./1998
- INPO Scholar, 1991-1994.
- Honorable Mention, Radioactive Waste Management Scholarship, 1993

Career Activities & Highlights

- Founder, Collaborative Investigators for Nanotechnology in Medicine
- Reviewer for: Journal of Magnetism and Magnetic Material, Biotechnology Progress, Separation and Purification Technology, Journal of Polymer Research, Journal of Nuclear Materials, Langmuir, Progress in Nuclear Energy, Defense Threat Reduction Agency Basic Science Programs, Kentucky Science and Engineering Foundation Program, Grant Agency of the Academy of Sciences of the Czech Republic
- Founding Member and President of Hispanic/Latino Club at Argonne
- Committee member and rapporteur for Medical Countermeasures Working Group, *Nanotechnology for Chemical and Biological Defense 2030, CBDP Chief/Senior Scientists Meeting*, Bishop's Lodge, Santa Fe, New Mexico, Jan. 30-Feb 1, 2007.

Publications & Patents

- Waste form for cesium, strontium, and lanthanides, M. Kaminski and L. Ortega, ANL-IN-09-031.
- Stabilization of cesium and strontium into clay, M. Kaminski and C. Mertz, ANL-IN-07-102.
- Sequestration and photoluminescence detection of f-elements at the surface of functionalized microscopic spheres using mixed ligand complexation, I. Shkrob and M. Kaminski, ANL-IN-08-032.
- Compositions and Methods for Brain Specific targeted delivery of therapeutic agents, M. Kaminski, R. Kraig, Patent application, U.S. January 21, 2008.
- Improved Method for the Decontamination of Metallic Surfaces, A. Purohit, L. Nunez, M. Kaminski, Patent Issued, 6,504,077; 2003. Licensed to Applied Environmental Technologies (MI), 1999
- Foam and Gel Methods for the Decontamination of Metallic Surfaces, L. Nunez and M. D. Kaminski, U. S. Patent 7,166,758 B2, issued 2007.
- Magnetic Particle-Based Therapy, A. Rosengart and M. D. Kaminski, U.S. Patent Application No. 20060025713, February 2, 2006.
- Method of Decontaminating a Porous Surface Contaminated with Cesium, M. D. Kaminski, Carol Mertz, and M. R. Finck, Patent Application filed September 28, 2005
- Removal of Toxins and Other Substances from Blood Using Magnetic Particles and Extracorporeal Magnetic Separation, M. Kaminski, A. J. Rosengart, L. Nuñez, U.S. Patent Filed, May 12, 2003
- Magnetic Drug Targeting Approach With Enhanced Corporeal Penetration, James A. Ritter, Armin D. Ebner, Charles E. Holland, Axel J. Rosengart, Michael D. Kaminski, ANL-IN-05-076.
- Magnetic bead fluorescence sensor for radionuclides, M. Kaminski, ANL-IN-04-108, Nov. 2004.
- High Gradient Magnetic Field Separation Of Magnetic Drug Carriers Using A Capillary-Wire Design, Michael D. Kaminski, Axel Rosengart, Haitao Chen, ANL-IN-05-075.
- Non-Aggregating Nanospheres, M. Arora, M. Kaminski, C. Mertz, ANL-IN-06-080.
- The production method for monodisperse micron and submicron range magnetically-responsive particles as selective delivery agents for therapeutic treatments, L. Nunez, M. Kaminski, G. Larsen, “ANL-IN-06-023.
- Fabrication of cesium and strontium materials for long-term storage, M. Kaminski, ANL-IN-06-066.
- Fabrication of TRU products for interim storage, M. Kaminski, ANL-IN-06-055.