

**Comprehensive list of invited talks (T)**

I have delivered ~150 invited seminars, colloquia, and plenary lectures and contributed talks listed below. Over 100 invited talks have been given after joining Syracuse University. They are provided below in inverse chronological order. The presentations are annotated as *Invited*, *Selected* or *Contributed*.

**2018**

**T156.** The 2018 International Workshop on Biophysical Dynamics, Telluride Science Research Center (TSRC), July 9-13, 2018, Telluride, Colorado, USA. *"Single-Molecule Biological Physics using Engineered Nanopores,"* 50 min., *Invited*.

**T155.** Topical American Chemical Society (ACS) Meeting, North East Nanomaterials ACS Meeting, NENM 2018, "Nanomaterials: Applications and Environmental Impacts," June 1-3, 2018, Crowne Plaza Hotel and Resort, Lake Placid, New York, USA, *"Strategies for a Winning Grant Application,"* 20 min., *Invited*.

**T154.** The Annual Biosensors 2018 Conference "Medical Sensors for Integrated Healthcare Applications," May 16-17, 2018, Cambridge EnerTech, Cambridge Innovation Institute, The Aloft Boston Seaport Hotel, Boston, Massachusetts, USA, *"Engineered Nanopores for Fundamental and Applied Biotechnology,"* 30 min., *Invited*.

**T153.** Condensed Matter and Biological Physics Seminar, Tufts University, Department of Physics and Astronomy, May 16, 2018, Medford, Massachusetts, USA. *"Interrogating single proteins with a nanopore: challenges and opportunities,"* 60 min., *Invited*.

**T152.** Chemical Biology Seminar, Department of Chemistry and Biochemistry, The University of Delaware, March 5<sup>th</sup>, 2018, Newark, Delaware, USA. *"Engineered Protein Nanopores for Challenging Tasks in Molecular Biomedical Diagnostics,"* 60 min., *Invited*.

**2017**

**T151.** International WE - Heraeus Workshop: "Transport Mechanisms in Biological and Synthetic Nanopores," July 16<sup>th</sup> - 21<sup>st</sup>, 2017, Bremen, Germany, *Defragmenting V-ATPase for obtaining a quiet transmembrane c-ring proteolipid,* 50 min., *Invited*.

**T150.** Biomaterials Seminar, Syracuse Biomaterials Institute (SBI), April 12, 2017, Syracuse, New York, USA, *Engineered Nanopores for Fundamental and Applied Science,* 50 min, *Invited*.

**T149.** The 61st Annual Meeting of the Biophysical Society, Platform: Membrane Active Peptides and Toxins II, the Ernest N. Morial Convention Center, February 13, 2017, New Orleans, Louisiana, USA, *Functional Reconstitution of V-ATPase Proteolipid Ring Into A Planar Lipid Membrane,* 20 min, *Invited*.

**2016**

**T148.** Chemistry Seminar, Department of Chemistry, The University of Massachusetts at Amherst, December 1<sup>st</sup>, 2016, Amherst, Massachusetts, USA, *Interrogating the membrane protein-detergent interfacial dynamics*, 60 min., *Invited*.

**T147.** Public Lecture, Junior Café Scientifique, Milton J. Rubenstein Museum of Science & Technology (MOST) of Syracuse, September 17<sup>th</sup>, 2016, Syracuse, New York, USA, *New Frontiers in Synthetic Biology: Challenges, Opportunities and Ethical Ramifications*, 60 min., *Invited*.

**T146.** Knowledge Foundation's Second Biodefence World Summit 2016 and 10<sup>th</sup> International "Sample Prep Technologies" Sample Preparation for Virus, Toxin & Pathogen Detection & Identification, June 28-29, 2016, Baltimore, Maryland, USA, *Engineered Nanopores for Challenging Tasks in Biosensor Technology*, 30 min., *Invited*.

**T145.** Syracuse University – Tohoku University (SU – TU) Joint Forum on Energy and Environment, Syracuse Center of Excellence for Environmental and Energy Systems, April 11, 2016, Syracuse, New York, USA. *Engineered Nanopores for Next-generation Biosensor Technology*, 20 min., *Invited*.

## 2015

**T144.** Upstate New York NMR Conference and Structural Biology Symposium, State University of New York – Environmental Science and Forestry, Gateway Center, October 19-20, 2015, Syracuse, New York, USA. *Global Redesign of a Native  $\beta$ -barrel Scaffold for Nanobiotechnology*, 25 min., *Invited*.

**T143.** SCIX 2015 Conference, Symposium devoted to "Biopolymers in Electric Fields," American Electrophoresis Society, Rhode Island Convention Center, September 27 – October 2, 2015, Providence, Rhode Island, USA, *Engineered Protein Nanopores for Challenging Tasks in Molecular Diagnosis*, 30 min., *Invited*.

**T142.** Chemistry Colloquium, Department of Chemistry, Syracuse University, September 15, 2015, Syracuse, New York, USA, *Engineered Protein Nanopores for Challenging Tasks in Molecular Diagnosis*, 50 min., *Invited*.

**T141.** The Third Biennial Symposium: Optical Micro-spectroscopy & Molecular Imaging, The University of Wisconsin at Milwaukee, August 28-29, 2015, Milwaukee, Wisconsin, USA. *Engineered Protein Nanopores for Challenging Tasks in Biosensing*, 40 min., *Invited*.

**T140.** New York 2015 International Nanomedicine Symposium and Workshop "Impact of Nanobiotechnology Applications on the Future of Medicine and Personalized Medicine," The Pharmaceutical Research Institute, Albany College of Pharmacy and Health Sciences, August 3-7, 2015, Albany, New York, USA. *Engineered Protein Nanopores for Challenging Tasks in Molecular Diagnosis*, 30 min., *Invited*.

**T139.** New York 2015 International Nanomedicine Symposium and Workshop "Impact of Nanobiotechnology Applications on the Future of Medicine and Personalized Medicine," The Pharmaceutical Research Institute, Albany College of Pharmacy and Health Sciences, August 3-7, 2015, Albany, New York, USA. *High-throughput biomolecular detection using hybrid nanopore-based arrays*, 30 min., *Invited*.

**T138.** The 2015 International Workshop on Biophysical Dynamics, Telluride Science Research Center (TSRC), July 6-10, 2015, Telluride, Colorado, USA. *"Tractable Global Engineering of a Native  $\beta$ -barrel Scaffold,"* 50 min., *Invited*.

**T137.** The 2015 International Workshop on Protein Electrostatics, Telluride Science Research Center (TSRC), July 6-10, 2015, Telluride, Colorado, USA. *"Non-additive electrostatic effects on polypeptide translocation through channels and pores,"* 50 min., *Invited*.

**T136.** Bioengineering Seminar, The REU Program in Biomaterials and Biointerfaces funded through National Science Foundation, Syracuse Biomaterials Institute, Syracuse University, July 2<sup>nd</sup>, 2015, Syracuse, New York, USA. *Challenges and opportunities in nanopore technologies*, 50 min., *Invited*.

**T135.** Bioengineering Seminar in Department of Biomedical Engineering, The City College of the City University of New York, April 29, 2015, New York City, New York, USA, *Engineered Protein Nanopores for Challenging Tasks in Molecular Diagnosis*, 60 min., *Invited*.

**T134.** Open Visiting Day for Accepted Graduate Students, Department of Physics, Syracuse University, March 23<sup>rd</sup>, 2015, Syracuse, New York, USA. *Medical Physics and Biophysics at SU*, 20 min., *Invited*.

## **2014**

**T133.** The 9<sup>th</sup> Undergraduate Research Day & Open House, Department of Physics, Syracuse University, November 15<sup>th</sup>, 2014, Syracuse, New York, USA, *Biological Physics with a Single Nanopore: Big Promise of Tiny Holes*, 30 min., *Invited*.

**T132.** Physics Seminar, Syracuse University Project Advance (SUPA), Syracuse University, Lubin House, November 7<sup>th</sup>, 2014, New York City, New York, USA. *Biological Physics with a Single Nanopore: Big Promise of Tiny Holes*, 80 min., *Invited*.

**T131.** Physics Seminar, Syracuse University Project Advance (SUPA), Syracuse University, November 5<sup>th</sup>, 2014, Syracuse, New York, USA. *Biological Physics with a Single Nanopore: Big Promise of Tiny Holes*, 80 min., *Invited*.

**T130.** Condensed Matter and Biological Physics Seminar, Department of Physics, Brown University, September 18, 2014, Providence, Rhode Island, USA. *Nanopore Technology for the Analysis of Proteins and DNA*, 60 min., *Invited*.

**T129.** Modeling of Biomolecular Systems Interactions, Dynamics, and Allostery: Bridging Experiments and Computations, September 10-14, 2014, Koc University - School of Medicine and College of Engineering, American Hospital, Nisantasi Campus, Istanbul, Turkey, *Engineered Protein Nanopores for Challenging Tasks in Molecular Diagnosis*, 20 min., *Invited*.

**T128.** Ph.D. Graduate Program in Physics at Syracuse University, Department of Physics, Syracuse University, August 19<sup>th</sup>, 2014, Syracuse, New York, USA, *Biological and Medical physics at Syracuse University*, 15 min., *Contributed*.

**T127.** International Workshop "Designing Biomolecular Switches," Telluride Science Research Center, 3-8 August, 2014, Telluride, Colorado, USA, *Engineered stimuli-responsive protein nanovalves for targeted release of small molecules*, 90 min., *Invited*.

**T126.** The Third International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, ANMBES 2014, Transylvania University of Brasov, 13-15 June, 2014, Brasov, Romania, *Engineered Nanopores for Challenging Tasks in Biosensor Technology*, 30 min., *Invited*.

**T125.** Biomaterials Talk, The Syracuse Biomaterials Institute - Advisory Board Meeting, The Syracuse Biomaterials Institute, Syracuse University, April 8, 2014, Syracuse, New York, *Engineered Protein Nanovalves for Controlled Chemical Release*, 20 min., *Invited*.

**T124.** Meeting of the Office of Advising and Academic Support, College of Arts and Sciences, Syracuse University, May 13<sup>th</sup>, 2014, Syracuse, New York, USA, *Biophysical Science Major at Syracuse University*, 20 min., *Contributed*.

## 2013

**T123.** Biology Seminar, Department of Biology, Syracuse University, November 11, 2013, Syracuse, New York, USA, *Engineered Protein Nanopores for the Analysis of Proteins and DNA*, 60 min., *Invited*.

**T122.** The 7<sup>th</sup> International Summer School of Biophysics: "Transport through Nanopores: From Understanding to Engineering," July 28<sup>th</sup> - August 3<sup>rd</sup>, 2013, Bremen, Germany, *Engineered protein nanopores for single protein detection*, 45 min., *Invited*.

**T121.** Telluride Workshop on Biophysical Dynamics, Telluride Science Research Center (TSRC), July 21-26, 2013, Telluride, Colorado, USA, *Engineered protein nanopores for single protein detection*, 20 min., *Invited*.

**T120.** The 18<sup>th</sup> Conversation: Albany 2013, Department of Chemistry & Biological Sciences, The State University of New York at Albany, June 11-15, 2013, Albany, New York, USA, *Designing Stiff Protein Nanopores for Challenging Tasks in Biosensing*, 20 min., *Invited*.

**T119.** The NSF Workshop at the University of Wisconsin: "Open Forum for Innovation in Two-Photon Microspectroscopy," The University of Wisconsin at Milwaukee, 19-20 April, 2013, Milwaukee, Wisconsin, USA, *Are Bacterial ABC Transporters Multimeric Complexes?* 30 min., *Invited*.

**T118.** Workshop on "The use of nanopore technology for the analysis of proteins and DNA," The American Association for Clinical Chemistry (AACC) Oak Ridge Conference, 18-19 April, 2013, Baltimore, Maryland, USA, *Nanopore Technology for the Analysis of Proteins and DNA*, 30 min., *Invited*.

## 2012

**T117.** 2<sup>nd</sup> International Conference on Nanotek & Expo - Nanotek-2012, Double Tree by Hilton Philadelphia City Center, December 3-5, 2012, Philadelphia, Pennsylvania, USA. *Engineering Nanopores for Protein Detection*, 30 min, *Invited*.

**T116.** Guest Lecture, Biotechnology Program, Department of Biology, Syracuse University, 9<sup>th</sup> November, 2012, Syracuse, New York, USA. *Single-molecule protein detection using engineered nanopores*, 50 min., *Invited*.

**T115.** International Conference on "Fibrous Protein Nanocomposites for Tailored Hybrid Biostructures and Devices," Engineering Conference International (ECI), October 7-12, 2012, Daios Cove Resort, Crete, Greece. *Engineered Protein Nanopores for Single-Molecule Protein Detection*, 30 min, *Invited*.

**T114.** International Conference on Research and High-Education: "Seeds for the Future," Workshop on "Evaluation of cellular dynamics: relationships among analytical experimental methods and theoretical approaches," International Centre of Biodynamics, September 25-28, 2012, Bucharest, Romania. *Structural, functional and biophysical studies of the molecular transport across the porins from Pseudomonas aeruginosa*, 30 min, *Invited*.

**T113.** Ph.D. Graduate Program in Physics at Syracuse University, Department of Physics, Syracuse University, August 21<sup>st</sup>, 2012, Syracuse, New York, USA, *Biological and medical physics at Syracuse University*, 15 min., *Contributed*.

**T112.** The Second International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, ANMBES 2012, Transylvania University of Brasov, 24-27 May, 2012, Brasov, Romania, *Engineering Nanopores for Single-molecule Protein Detection*, 30 min., *Invited*.

**T111.** Department of Physics and Chemical Biology, Northeastern University, 19<sup>th</sup> April, 2012, Boston, Massachusetts, USA. *Single-molecule Science with Engineered Nanopores*, 60 min., *Invited*.

**T110.** The International Conference on Nanotechnology and Nanomedicine, NANO 2012, The OMICS Group Conferences, Omaha Marriott Hotel Center, 14 March, 2012, Omaha, Nebraska, USA. *Engineered Nanopores for Protein Detection*, 40 min., *Invited*.

## **2011**

**T109.** Department of Polymer Science and Engineering, University of Massachusetts at Amherst, 13 December, 2011, Amherst, Massachusetts, USA. *Single-molecule detection using engineered nanopores*, 50 min., *Invited*.

**T108.** Guest Lecture, Biotechnology Program, Department of Biology, Syracuse University, 14 November, 2011, Syracuse, New York, USA. *Single-molecule detection using engineered nanopores*, 50 min., *Invited*.

**T107.** 8<sup>th</sup> International Conference on Flow Dynamics, Molecular and Nanoscale Phenomena in Fluids and Interfaces, Sendai International Center, Tohoku University, November 9<sup>th</sup>-11<sup>th</sup>, 2011, Sendai, Japan. *Stabilizing protein nanopores*, 40 min., *Invited*.

**T106.** Department of Theoretical Physics, Horia Hulubei National Institute of Physics and Nuclear Engineering, October 6<sup>th</sup>, 2011, Bucharest-Magurele, Romania. *Engineered Nanopores for Single-molecule Detection*, 60 min., *Invited*.

**T105.** International Conference "Processes in isotopes and molecules" (PIM-2011), National Institute for Research and Development of Isotopic and Molecular Technologies (ICNDTIM), Cluj-Napoca, September 29<sup>th</sup> - October 1<sup>st</sup>, 2011, Cluj-Napoca, Romania. *Engineered Nanopores for Protein Detection*, 30 min., *Invited*.

**T104.** The Upstate Cancer Research Institute (CRI) Monthly Seminar, 2011-2012, Department of Pharmacology, The State University of New York - Upstate Medical University, September 15<sup>th</sup>, 2011, Syracuse, New York, USA. *Single-molecule detection with engineered nanopores*, 30 min., *Invited*.

**T103.** 2011 Nanoelectronic Devices for Defense & Security (Nano-DDS) Conference, Polytechnic Institute of New York University, August 29<sup>th</sup> - September 1<sup>st</sup>, 2011, Brooklyn, New York, USA. *Single-molecule Sensing with A Nanopore: Inspiration from Nature*, 25 min., *Selected*.

**T102.** 2011 In Vitro Diagnostics Technology and Industry Development Summit, Biochips and Biosensors Based Molecular Diagnostics, Shanghai Ever Bright Convention & Exhibition Center, June 18-20, 2011, Shanghai, China. *Single-molecule Science with A Nanopore: Inspiration from Nature*, 40 min., *Invited*.

**T101.** Department of Physics and Astronomy, Tufts University, April 8<sup>th</sup>, 2011, Medford, Massachusetts, USA. *Single-molecule Science with A Nanopore: Inspiration from Nature*, 60 min., *Invited*.

**T100.** Open Visiting Day for Accepted Graduate Students, Department of Physics, Syracuse University, March 28<sup>th</sup>, 2011, Syracuse, New York, USA. *Medical Physics and Biophysics at SU*, 20 min., *Invited*.

## **2010**

- T99.** Biological Physics Seminar, The University of Wisconsin at Milwaukee, Department of Physics, December 27<sup>th</sup>, 2010, Milwaukee, Wisconsin, USA, *Single-molecule science with a nanopore*, 60 min., *Invited*.
- T98.** "Living Matter Seminar Series," Department of Physics and Astronomy, The University of Pennsylvania at Philadelphia, December 13<sup>th</sup>, 2010, Philadelphia, Pennsylvania, USA. *Single-molecule Science with A Nanopore: Inspiration from Nature*, 60 min., *Invited*.
- T97.** Institute of Natural Sciences, and Department of Physics, Shanghai Jiao Tong University, December 6-10, 2010, Shanghai, China. *Single-molecule Science with A Nanopore: Inspiration from Nature*, 60 min., *Invited*.
- T96.** The 7<sup>th</sup> International Conference on Flow Dynamics, Liaison Office Session, Sendai International Center, Tohoku University, November 1<sup>st</sup>, 2010, Sendai, Japan. *Global Exchange Education and Research Program*, 20 min., *Invited*.
- T95.** The 7<sup>th</sup> International Conference on Flow Dynamics, Keynote Lecture, Molecular and Nanoscale Phenomena in Fluids and Interfaces, Sendai International Center, Tohoku University, November 3<sup>rd</sup>, 2010, Sendai, Japan. *Single-molecule Science with A Nanopore: Inspiration from Nature*, 40 min., *Invited*.
- T94.** Department of Physics, The University of Ottawa, October 14<sup>th</sup>, 2010, Ottawa, Ontario, Canada, *Single-molecule Science with A Nanopore: Inspiration from Nature*, 60 min., *Invited*.
- T93.** Department of Physics, The University of Arkansas at Fayetteville, October 8<sup>th</sup>, 2010, Fayetteville, Arkansas, USA, *Single-molecule Science with A Nanopore: Inspiration from Nature*, 60 min., *Invited*.
- T92.** Department of Chemistry, The University of Toronto at Mississauga, September 28<sup>th</sup>, 2010, Mississauga, Ontario, Canada, *Single-molecule Science with A Nanopore: Inspiration from Nature*, 60 min., *Invited*.
- T91.** The 2<sup>nd</sup> International Conference on Research and Higher Education in Romania, Institute of Physics and Nuclear Engineering, Workshop on "Criteria of Evaluation of Research Programs in Romania and abroad," September 21-24, 2010, Bucharest-Magurele, Romania, *Evaluation Strategies of Research Programs in the United States*, 25 min., *Invited*.
- T90.** The 5<sup>th</sup> Summer School of Biophysics: "Biosensing with channels 2010: Heading for faster, smaller, smarter biosensors", August 21<sup>st</sup> - 27<sup>th</sup>, 2010, Berder, Rennes, France, *Quantitative assessment of the conformational fluctuations of a monomeric  $\beta$ -barrel protein pore*, 60 min., *Invited*.
- T89.** The Structural Biology, Biochemistry and Biophysics (SB3) Research Symposium, Syracuse University, The Life Sciences Complex, 14<sup>th</sup> July, 2010, Syracuse, New York, USA. *Single-molecule Science with A Nanopore: Inspiration from Nature*, 45 min., *Invited*.
- T88.** The International Summer School "Transport across membranes: multiple drug resistance, mechanisms and tools", 462<sup>th</sup> WE Heraeus Seminar, Jacobs University of Bremen, 4-10 July, 2010, Bremen, Germany, *Functional Reconstitution of a Bacterial Bicomponent ABC Transporter*, 45 min., *Invited*.
- T87.** The First International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (ANMBES 2010), Transylvania University of Brasov, June 18-20, 2010, Brasov, Romania, *Single-molecule Science with A Nanopore: Inspiration from Nature*, 45 min., *Invited*.
- T86.** Department of Physics, The University of Bucharest, June 18<sup>th</sup>, 2010, Bucharest-Magurele, Romania, *Single-molecule Science with A Nanopore: Inspiration from Nature*, 60 min., *Invited*.
- T85.** Horia Hulubei National Institute of Physics and Nuclear Engineering, June 17<sup>th</sup>, 2010, Bucharest-Magurele, Romania, *Single-molecule Science with A Nanopore: Inspiration from Nature*, 60 min., *Invited*.

**T84.** Department of Animal Physiology and Biophysics, Center for Membrane Biophysics, The University of Bucharest, June 16<sup>th</sup>, 2010, Bucharest, Romania, *Single-molecule Science with A Nanopore: Inspiration from Nature*, 60 min., *Invited*.

**T83.** The 3<sup>rd</sup> Sample Prep 2010, Detection Technologies Conference Series, Sample Preparation for Virus, Toxin & Pathogen Detection, May 6-7, 2010, Baltimore, Maryland, USA, *Single-molecule Science with A Nanopore: Inspiration from Nature*, 30 min., *Invited*.

**T82.** The 6<sup>th</sup> Workshop of the Mathematical Biosciences Institute (MBI) of the Ohio State University at Columbus: "Transport in A Cell," April 12-16, 2010, Columbus, Ohio, USA, *Molecular Transport With and Without ATP, to be delivered*, 45 min., *Invited*.

## 2009

**T81.** BIT Life Sciences, The 3<sup>rd</sup> World Congress of Gene-2009: March into New Era of Bio-Economy, December 1-7, 2009, Foshan, China, *Single-molecule stochastic sensing of proteins with engineered nanopores*, 25 min., *Invited*.

**T80.** The 4<sup>th</sup> Undergraduate Research Day & Open House, Department of Physics, Syracuse University, November 14<sup>th</sup>, 2009, Syracuse, New York, USA, *Single-molecule Science with A Nanopore*, 30 min., *Invited*.

**T79.** Physics Colloquium, Syracuse University, Department of Physics, September 10<sup>th</sup>, 2009, Syracuse, New York, USA, *Single-molecule Science with A Nanopore: Inspiration from Nature*, 60 min., *Invited*.

**T78.** Summer REU-SBI Program, Syracuse Biomaterials Institute (SBI), Syracuse University, College of Engineering, July 17<sup>th</sup>, 2009, Syracuse, New York, USA, *Single-molecule Science with A Nanopore: Inspiration from Nature*, 45 min., *Contributed*.

**T77.** The 4<sup>th</sup> Summer School of Biophysics: "Biosensing with channels 2009: Heading for faster, smaller, smarter biosensors," June 28<sup>th</sup> – July 4<sup>th</sup>, 2009, Bremen, Germany, *ATP-dependent Routes of Polysaccharides: ABC Transporters at Work*, 45 min., *Invited*.

**T76.** The International Workshop on "Single-molecule Dynamics," Telluride Science Research Center (TSRC), June 22-26, 2009, Telluride, Colorado, USA, *Pulling single proteins through electrostatic traps*, 45 min., *Invited*.

**T75.** The 16<sup>th</sup> Conversation: Albany 2009, Department of Chemistry & Biological Sciences, The State University of New York at Albany, June 16-20, 2009, Albany, New York, USA, *Interrogating single nucleic acid and protein molecules with a nanopore*, 20 min., *Contributed*.

**T74.** Department of Physics and Materials Science Program, The State University of New York at Binghamton, April 2<sup>nd</sup>, 2009, Binghamton, New York, USA, *Single-molecule science with a nanopore: inspirations from nature*, 60 min., *Invited*.

**T73.** Seminar Series of The Nanostar Institute, Department of Physics, The University of Virginia, March 12<sup>th</sup>, 2009, Charlottesville, Virginia, USA, *Single-molecule biophysics with a protein nanopore*, 60 min., *Invited*.

**T72.** Physics Colloquium, The University of Wisconsin at Milwaukee, Department of Physics, February 27<sup>th</sup>, 2009, Milwaukee, Wisconsin, USA, *Single-molecule biophysics with a protein nanopore*, 60 min., *Invited*.

**T71.** ICES Seminar – Molecular Biophysics Series, The University of Texas at Austin, Department of Chemistry and Biochemistry, February 13<sup>th</sup>, 2009, Austin, Texas, USA, *Interrogating single proteins with a nanopore: challenges and opportunities*, 60 min., *Invited*.

**T70.** Departments of Chemistry, and Chemical and Biomolecular Engineering, Rice University, February 11<sup>th</sup>, 2009, Houston, Texas, USA, *Interrogating single proteins with a nanopore: challenges and opportunities*, 60 min., *Invited*.

**T69.** Nanobiophysics & Chemistry Zing Conference, Zing Conferences in Chemistry, January 21-24, 2009, Jolly Beach Resort, Bolans Village, Antigua and Barbuda, *Channel-based stochastic sensing of proteins*, 30 min., *Contributed*.

## **2008**

**T68.** Seminar Series of Condensed Matter & Biological Physics, Syracuse University, Department of Physics, December 5<sup>th</sup>, 2008, Syracuse, New York, USA, *Interrogating single proteins with a nanopore: challenges and opportunities*, 60 min., *Invited*.

**T67.** Seminar Series of Condensed Matter and Biological Physics, Brown University, Department of Physics, November 13<sup>th</sup>, 2008, Providence, Rhode Island, USA, *Interrogating single proteins with a nanopore: challenges and opportunities*, 60 min., *Invited*.

**T66.** Department of Electricity and Biophysics, The University of Bucharest, October 23<sup>rd</sup>, 2008, Bucharest-Magurele, Romania, *Single-molecule biophysics with a protein nanopore*, 60 min., *Invited*.

**T65.** Seminar Series of Biochemistry, Institute of Biochemistry of the Romanian Academy of Sciences, October 21<sup>st</sup>, 2008, Bucharest, Romania, *Single-molecule biophysics with a protein nanopore*, 60 min., *Invited*.

**T64.** International Conference on "Sensors and Sensing in Biology and Engineering," Engineering Conferences International, organized by the US Office of Naval Research and National Science Foundation, Grand Hotel San Michele, October 12-16, 2008, Centraro, Calabria, Italy, *Channel-based stochastic sensing of proteins*, 30 min., *Invited*.

**T63.** Seminar of Biophysics, Consiglio Nazionale delle Ricerche - Istituto di Biofisica at Povo (Trento), October 10<sup>th</sup>, 2008, Trento, Italy, *Grabbing Single Proteins Through Electrostatic Traps*, 60 min., *Invited*.

**T62.** The 4<sup>th</sup> Focused Workshop on Electronic Recognition of Biomolecules (ERBM), University of Liege, September 10-12, 2008, Liege, Belgium, *Grabbing Single Proteins Through Electrostatic Traps*, 30 min., *Invited*.

**T61.** Ph.D. Graduate Program in Physics at Syracuse, Department of Physics, Syracuse University, August 25<sup>th</sup>, 2008 Syracuse, New York, USA, *Biological and medical physics at Syracuse University*, 20 min., *Contributed*.

**T60.** The Tech Forum Workshop, The Syracuse Center of Excellence in Environmental and Energy Systems, Syracuse University, June 23<sup>rd</sup>, 2008, Syracuse, New York, USA, *Bionanotechnology at Syracuse*, 15 min., *Contributed*.

**T59.** The session "Biochip Physics," The APS March Meeting, The American Physical Society, March 11<sup>th</sup>, 2008, New Orleans, Louisiana, USA, *Single-molecule stochastic sensors for proteins using engineered nanopores*, 15 min., *Contributed*.

**T58.** Seminar Series of Biological Physics, The University of Illinois at Urbana-Champaign, Department of Physics, March 7<sup>th</sup>, 2008, Urbana-Champaign, Illinois, USA, *Single-molecule biophysics with a protein nanopore*, 60 min., *Invited*.



## 2007

**T57.** The NSF Workshop on Biosensing and Bioactuation, The University of Maryland, Department of Aerospace Engineering, November 27<sup>th</sup>, 2007, College Park, Maryland, USA, *Single-molecule stochastic sensing with protein nanopores*, 20 min., *Contributed*.

**T56.** Division of Physical and Structural Biology, The National Institute of Child Health and Human Development, The US National Institutes of Health, November 7<sup>th</sup>, 2007, Bethesda, Maryland, USA, *Single-molecule biophysics with a protein nanopore*, 60 min., *Invited*.

**T55.** Department of Physics, Division of Condensed Matter, and Biological and Medical Physics, The University of Rochester, November 5<sup>th</sup>, 2007, Rochester, New York, USA, *Single-molecule biological physics with a protein nanopore*, 60 min., *Invited*.

**T54.** "Frontiers of Science" Lecture Series, Syracuse University, Department of Science Teaching, Syracuse University, October 10<sup>th</sup>, 2007, Syracuse, New York, USA, *Bionanotechnology: between reality and dream*, 60 min., *Invited*.

**T53.** Department of Biochemistry and Molecular Biology, The State University of New York - Upstate Medical University, October 1<sup>st</sup>, 2007, Syracuse, New York, USA, *Single-molecule biophysics with a protein nanopore*, 60 min., *Invited*.

**T52.** Department of Biomedical and Chemical Engineering, Syracuse University, September 21<sup>st</sup>, 2007, Syracuse, New York, USA, *Single-molecule biophysics with a protein nanopore*, 60 min., *Invited*.

**T51.** The 3<sup>rd</sup> Summer School of Biophysics: "Biosensing with channels 2007: Heading for faster, smaller, smarter biosensors", August 25<sup>th</sup> – 31<sup>st</sup>, 2007, Berder, Rennes, France, *Pushing, pulling and stretching a single polypeptide across a nanopore through external stimuli and electrostatic traps*, 60 min., *Invited*.

**T50.** The 2<sup>nd</sup> Regional Biophysics Conference 2007 (RBC 2007) – A biannual meeting of the biophysicists from Austria, Croatia, Hungary, Italy, Serbia, and Slovenia, August 21<sup>st</sup> – 25<sup>th</sup>, 2007, Balatonfüred, Hungary, *Single-molecule stochastic sensing using nanopores*, 30 min., *Invited*.

**T49.** The 2<sup>nd</sup> International Congress of Nanobiotechnology & Nanomedicine (NanoBio2007), June 18-21, 2007, San Francisco, California, USA, *Single-molecule stochastic sensing using nanopores*, 30 min., *Invited*.

**T48.** Department of Physics, and Center for Materials Research, Clarkson University, April 20<sup>th</sup>, 2007, Potsdam, New York, USA, *Single-molecule biophysics with a protein nanopore*, 60 min., *Invited*.

**T47.** Biophysics Graduate Program, and Department of Chemistry, The University of Michigan, March 23<sup>rd</sup>, 2007, Ann Arbor, Michigan, USA, *Single-molecule biophysics with a protein nanopore*, 60 min., *Invited*.

## 2006

**T46.** 2<sup>nd</sup> Summer School: "Biosensing with channels: Heading for faster, smaller, smarter biosensors", International University of Bremen, July 28<sup>th</sup> - August 4<sup>th</sup>, 2006, Bremen, Germany, *Protein translocation at single-molecule resolution*, 60 min., *Invited*.

**T45.** NanoCuse Workshop, State University of New York at Syracuse – Environmental Science and Forestry, April 19<sup>th</sup>, 2006, Syracuse, New York, USA, *Stochastic sensing with a single protein nanopore*, 60 min., *Contributed*.

**T44.** The NEUROFEST Workshop, sponsored by the Neuroscience Program at SUNY Upstate Medical University, March 30<sup>th</sup>-31<sup>st</sup>, 2006, Skaneateles, New York, USA, *Protein translocation at single-molecule resolution*, 40 min., *Invited*.

**T43.** Invited Plenary Lecture for Symposium on Nanopore Biophysics, APS March Meeting, American Physical Society, March 13<sup>th</sup>-17<sup>th</sup>, 2006, Baltimore, Maryland, USA, *Protein unraveling through a single protein nanopore*, 35 min., *Invited*.

## **2005**

**T42.** 1<sup>st</sup> New York Complex Matter Workshop, Department of Physics, Syracuse University, December 2<sup>nd</sup>, 2005, Syracuse, New York, USA, *Watching an unusual temperature-responsive nanostructure*, 30 min., *Invited*.

**T41.** Center for BioMolecular Science and Engineering, Naval Research Laboratory, November 15<sup>th</sup>, 2005, Washington, D.C., USA, *Stochastic sensing with a single protein nanopore*, 60 min., *Invited*.

**T40.** Department of Chemistry and Biochemistry, The University of Texas at Austin, October 20<sup>th</sup>, 2005, Austin, Texas, USA, *Stochastic sensing with a single protein nanopore*, 60 min., *Invited*.

**T39.** Department of Physics, Brown University, September 15<sup>th</sup>, 2005, Providence, Rhode Island, USA, *Single polymer detection with a protein nanopore*, 60 min., *Invited*.

**T38.** "Second Focused Workshop on Electronic Recognition of Bio-molecules", Beckman Institute for Advanced Science and Technology, University of Illinois at Urbana-Champaign, September 7-9, 2005, Urbana-Champaign, Illinois, USA, *Stochastic sensing with a single protein nanopore*, 30 min., *Contributed*.

**T37.** Summer School "Biosensing with channels: Heading for faster, smaller, smarter biosensors", International University of Bremen, July 31<sup>st</sup> - August 6<sup>th</sup>, 2005, Bremen, Germany, *Temperature-responsive protein nanopores*, 60 min., *Invited*.

**T36.** European Biophysical Society Workshop "Biophysical Chemistry meets Molecular Medicine", 1-4 June, 2005, Sesimbra, Portugal, *Temperature-responsive protein nanopores*, 30 min., *Invited*.

**T35.** 49<sup>th</sup> Annual Meeting of the American Biophysical Society, February 16<sup>th</sup>, 2005, Long Beach, California, USA, *Temperature-responsive protein nanopores*, 15 min., *Contributed*.

## **2004**

**T34.** Department of Biomedical and Chemical Engineering, Syracuse University, School of Engineering, October 22<sup>nd</sup>, 2004, Syracuse, New York, USA, *Single polymer detection with a protein nanopore*, 60 min., *Invited*.

**T33.** The 3<sup>rd</sup> International Colloquium "Mathematics in Engineering and Numerical Physics", 7-9 October, 2004, Bucharest, Romania, *Stochastic pore formation within lipid bilayers*, 15 min., *Selected*.

**T32.** Department of Polymer Science & Engineering, The University of Massachusetts, March 1<sup>st</sup>, 2004, Amherst, Massachusetts, USA, *Single polymer dynamics within a protein nanopore*, 60 min., *Invited*.

**T31.** Department of Physics and Astronomy, The University of California at Irvine, School of Arts and Sciences, February 23<sup>rd</sup>, 2004, Irvine, California, USA, *Single molecule-biophysics with a protein nanopore*, 60 min., *Invited*.

**T30.** Department of Physics and Astronomy, The University of Georgia, School of Arts and Sciences, February 19<sup>th</sup>, 2004, Athens, Georgia, USA, *Single molecule-biophysics with a protein nanopore*, 60 min., *Invited*.

**T29.** Department of Physics, The University of Florida, College of Liberal Arts and Sciences, February 11<sup>th</sup>, 2004, Gainesville, Florida, USA, *Single molecule-biophysics with a protein nanopore*, 60 min., *Invited*.

**T28.** Department of Chemistry and Biochemistry, The University of Texas at Arlington, February 6<sup>th</sup>, 2004, Arlington, Texas, USA, *Single molecule-biophysics with a protein nanopore*, 60 min., *Invited*.

**T27.** Department of Physics, Emory University, College of Arts and Sciences, February 2<sup>nd</sup>, 2004, Atlanta, Georgia, USA, *Single molecule-biophysics with a protein nanopore*, 60 min., *Invited*.

**T26.** Dalton Cardiovascular Research Institute, Department of Biological Engineering, University of Missouri at Columbia, School of Engineering, January 29<sup>th</sup>, 2004, Columbia, Missouri, USA, *Single molecule-biophysics with a protein nanopore*, 60 min., *Invited*.

**T25.** Department of Physics, University of Alabama at Birmingham, College of Liberal Arts and Sciences, January 23<sup>rd</sup>, 2004, Birmingham, Alabama, USA, *Single-molecule biophysics with a protein nanopore*, 60 min., *Invited*.

**T24.** School of Physics and Astronomy, Institute of Technology, University of Minnesota at Minneapolis, January 20<sup>th</sup>, 2004, Minneapolis, Minnesota, USA, *Single-molecule biophysics with a protein nanopore*, 60 min., *Invited*.

**T23.** Department of Physics, Condensed Matter/Statistical Physics Seminar, Syracuse University, College of Arts and Sciences, January 16<sup>th</sup>, 2004, Syracuse, New York, USA, *Single molecule-biophysics with a protein nanopore*, 60 min., *Invited*.

**T22.** Department of Physics, Physics Colloquia Spring 2004, Syracuse University, School of Arts and Sciences, January 15<sup>th</sup>, 2004, Syracuse, New York, USA, *Polymer Dynamics within A Nanopore: Fundamental Science and Nanotech Prospects*, 60 min., *Invited*.

## **2003**

**T21.** Department of Chemistry, University of Louisville, College of Arts and Sciences, December 19<sup>th</sup>, 2003, Louisville, Kentucky, USA, *Single polymer dynamics within a protein nanopore*, 60 min., *Invited*.

## **2002**

**T20.** The Bi-Annually Meeting of the Molecular Biophysics Group of the Dutch Biophysical Society, 7<sup>th</sup>-8<sup>th</sup> October, 2002, Lunteren, The Netherlands, *Single polymer dynamics in a large protein channel*, 45 min., *Invited*.

**T19.** 46<sup>th</sup> Annual Meeting of The American Biophysical Society, 23-27 February, 2002, Moscone Convention Center, San Francisco, California, USA. (PEG-attached pore), *Interrogating large ion channels with tethered flexible polymers: a new strategy for basic science and nanobiotech*, 15 min., *Contributed*.

**T18.** 46<sup>th</sup> Annual Meeting of The American Biophysical Society, 23-27 February, 2002, Moscone Convention Center, San Francisco, California, USA. *DNA duplex formation of individual DNA strands within a single protein pore*, 15 min., *Selected*.

**T17.** Division of Pharmaceutics, The University of Iowa, College of Pharmacy, February 14<sup>th</sup>, 2002, Iowa City, Iowa, USA, *Interrogating transmembrane protein pores with flexible polymers*, 60 min., *Invited*.

**T16.** Department of Physics and Astronomy, The Arizona State University at Tempe, February 11<sup>th</sup>, 2002, Tempe, Phoenix, Arizona, USA, *Interrogating a nanopore with a single flexible polymer*, 60 min., *Invited*.

**T15.** Center for Biomolecular Science & Engineering, The University of California at Santa Cruz, February 1<sup>st</sup>, 2002, Santa Cruz, California, USA, *Interrogating transmembrane protein pores with flexible polymers*, 60 min., *Invited*.

## **2001**

**T14.** Department of Animal Physiology and Biophysics, University of Bucharest, Faculty of Biology, November 30<sup>th</sup>, 2001, Bucharest, Romania, *Single-molecule biophysics with flexible polymers tethered within a nanopore*, 60 min., *Invited*.

**T13.** Department of Electricity and Biophysics, University of Bucharest, Faculty of Physics, November 27<sup>th</sup>, 2001, Bucharest-Magurele, Romania, *Single-molecule biophysics with flexible polymers tethered within a nanopore*, 60 min., *Invited*.

**T12.** Molecular Biophysics Group, The Delft University of Technology, Faculty of Applied Sciences, Department of Applied Physics, November 19<sup>th</sup>, 2001, Delft, The Netherlands, *Single-molecule biophysics with flexible polymers tethered within a nanopore*, 60 min., *Invited*.

**T11.** Symposium of the Center for Advanced Biomolecular Research (CABR) of The Texas A&M University System, 3-4 November, 2001, Camp Allen, Navasota, Texas, USA, *Subunit composition of a bi-component toxin: an octameric transmembrane pore*, 20 min., *Selected*.

**T10.** The Workshop on "Polymers in Nanoscopic Pores: Applications to Single Molecule Analysis and Metabolite Transport", 16<sup>th</sup>-18<sup>th</sup> April, 2001, US National Institutes of Health, Bethesda, Maryland, USA, *Dynamics of a neutral flexible polymer in the lumen of a transmembrane protein pore: application to single molecule detection of proteins*, 50 min., *Invited*.

## **2000**

**T9.** Symposium of the Center for Advanced Biomolecular Research (CABR) of The Texas A&M University System, 18<sup>th</sup> November, 2000, Hilton Conference Center, College Station, Texas, USA, *Single-molecule detection of proteins*, 30 min., *Invited*.

**T8.** The 16<sup>th</sup> Annual Lost Pines Molecular Biology Conference, 13-15 October, 2000, University of Texas M.D. Anderson Cancer Center, Science Park-Research Division, Smithville, Texas, USA, *Single-molecule detection of proteins*, 25 min., *Invited*.

**T7.** 44<sup>th</sup> Annual Meeting of The American Biophysical Society, 12-16 February, 2000, New Orleans, Louisiana, USA, *Local and nonlocal structural changes associated with premelting and melting transitions of double-stranded B DNA: new insights from Raman spectroscopy*, 15 min., *Selected*.

## **1992 - 1999**

**T6.** 11<sup>th</sup> Conversation in the Discipline Biomolecular Stereodynamics, June 15-19, 1999, University of Albany, The State University of New York at Albany, Albany, New York, USA, *Structure and thermostability of DNA containing A·T pairs in alternating and non-alternating sequences: investigation of premelting, melting and postmelting phenomena by Raman spectroscopy*, 20 min., *Selected*.

**T5.** Department of Electricity and Biophysics, University of Bucharest, School of Physics, April 10<sup>th</sup>, 1997, Bucharest-Magurele, Romania, 60 min., *Thesis Disertation*.

**T4.** International Meeting "European Intestinal Transport Group '95", 21-25 May, 1995, Lecce, Italy, *A rapid method for computer modeling of ion transport through intestinal cells*, 30 min., *Invited*.

**T3.** The International FEBS Special Meeting "Biological Membranes", organized by Federation of European Biochemical Societies, 26th June-1st July, 1994, Helsinki, Finland, *Specific interactions and association phenomena into single-chain binary mixtures*, 30 min., *Invited*.

**T2.** Joint Meeting of the Dutch Physiological Society and the British Physiological Society, 10-11 June, 1994, Nijmegen, The Netherlands, *Cellular and transepithelial responses of the HT-29 cl.19A human colonocytes to K-substitutions. Electromotive forces of the cellular pathway*, 25 min., *Contributed*.

**T1.** 9th Balkan Biochemical and Biophysical Days, 21-23 May, 1992, Thessaloniki, Greece, *Oscillations in a multiply regulated enzyme-substrate system and experimental model of membrane*, 25 min., *Invited*.