

(ii) Comprehensive list of invited talks (T)

I have delivered ~80 invited seminars, colloquia, and plenary lectures and contributed talks listed below. ~45 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*.

2010

T82. The 6th 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 3rd 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 4th Undergraduate Research Day & Open House, Department of Physics, Syracuse University, November 14th, 2009, Syracuse, New York, USA, *Single-molecule Science with A Nanopore, 30 min., Invited.*

T79. Physics Colloquium, Syracuse University, Department of Physics, September 10th, 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 17th, 2009, Syracuse, New York, USA, *Single-molecule Science with A Nanopore: Inspiration from Nature, 45 min., Contributed.*

T77. The 4th Summer School of Biophysics: "Biosensing with channels 2009: Heading for faster, smaller, smarter biosensors," June 28th – July 4th, 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 16th 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 2nd, 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 12th, 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 27th, 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 13th, 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 11th, 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 5th, 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 13th, 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 23rd, 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 21st, 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, Centrarò, 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 10th, 2008, Trento, Italy, *Grabbing Single Proteins Through Electrostatic Traps*, 60 min., *Invited*.

T62. The 4th 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 25th, 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 23rd, 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 11th, 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 7th, 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 27th, 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 7th, 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 5th, 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 10th, 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 1st, 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 21st, 2007, Syracuse, New York, USA, *Single-molecule biophysics with a protein nanopore*, 60 min., *Invited*.

T51. The 3rd Summer School of Biophysics: "Biosensing with channels 2007: Heading for faster, smaller, smarter biosensors", August 25th – 31st, 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 2nd Regional Biophysics Conference 2007 (RBC 2007) – A biannual meeting of the biophysicists from Austria, Croatia, Hungary, Italy, Serbia, and Slovenia, August 21st – 25th, 2007, Balatonfüred, Hungary, *Single-molecule stochastic sensing using nanopores*, 30 min., *Invited*.

T49. The 2nd 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 20th, 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 23rd, 2007, Ann Arbor, Michigan, USA, *Single-molecule biophysics with a protein nanopore*, 60 min., *Invited*.

2006

T46. 2nd Summer School: “Biosensing with channels: Heading for faster, smaller, smarter biosensors”, International University of Bremen, July 28th - August 4th, 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 19th, 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 30th-31st, 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 13th-17th, 2006, Baltimore, Maryland, USA, *Protein unraveling through a single protein nanopore*, 35 min., *Invited*.

2005

T42. 1st New York Complex Matter Workshop, Department of Physics, Syracuse University, December 2nd, 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 15th, 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 20th, 2005, Austin, Texas, USA, *Stochastic sensing with a single protein nanopore*, 60 min., *Invited*.

T39. Department of Physics, Brown University, September 15th, 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 31st - August 6th, 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. 49th Annual Meeting of the American Biophysical Society, February 16th, 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 22nd, 2004, Syracuse, New York, USA, *Single polymer detection with a protein nanopore*, 60 min., *Invited*.

T33. The 3rd 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 1st, 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 23rd, 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 19th, 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 11th, 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 6th, 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 2nd, 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 29th, 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 23rd, 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 20th, 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 16th, 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 15th, 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 19th, 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, 7th-8th October, 2002, Lunteren, The Netherlands, *Single polymer dynamics in a large protein channel*, 45 min., *Invited*.

T19. 46th 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. 46th 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 14th, 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 11th, 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 1st, 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 30th, 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 27th, 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 19th, 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", 16th-18th 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, 18th November, 2000, Hilton Conference Center, College Station, Texas, USA, *Single-molecule detection of proteins*, 30 min., *Invited*.

T8. The 16th 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. 44th 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. 11th 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 10th, 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*.