

Curriculum Vitae

Last Name: MOVILEANU

First Name: LIVIU

Citizenship: United States citizen; Romanian citizen.

Office address: Department of Physics, Syracuse University, College of Arts and Sciences,
201 Physics Building, Syracuse, New York 13244-1130, USA

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315-443-0249 (Lab: B103/B105);
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Web: <http://www.physics.syr.edu/~lmovilea>

- Program Affiliations:**
- Structural Biology, Biochemistry and Biophysics Graduate Program (SB3), Syracuse University, 111 College Place, Syracuse, New York 13244-4100, USA
Phone: 315-443-5908; Fax: 315-443-4070; Web: <http://sb3.syr.edu/>
 - The Syracuse Biomaterials Institute (SBI), Syracuse University,
121 Link Hall, Syracuse, New York 13244, USA
Web: <http://biomaterials.syr.edu/>
 - The Institute of Complex Adaptive Matter (ICAM-I2CAM),
Supported by the NSF International Materials Institutes Program
Web: <http://icam-i2cam.org/>
 - The Upstate Cancer Research Institute, The SUNY Upstate Medical University,
750 East Adams Street, Syracuse, New York 13210, USA
Web: <http://www.upstate.edu/cri/>
 - The Forensic and National Security Science Institute (FNSSI), Syracuse
University, College of Arts and Sciences, Syracuse, New York 13244, USA
[http://thecollege.syr.edu/students/undergraduate/interdisciplinary/forensics/
/FNSSI.html](http://thecollege.syr.edu/students/undergraduate/interdisciplinary/forensics/FNSSI.html)
 - The IGERT Graduate Program, "Soft Interfaces - Bridging the Divide in
Graduate education (iBriD)," Soft Interfaces at Syracuse University, Syracuse,
New York 13244-1130, USA
Web: <http://soft-igert.syr.edu/>
 - International Institute of Biomedical Sciences and Technology (IIBMST), SUNY
Upstate Medical University, National Cheng Kung University and The
Technion-Israel Institute of Technology, Syracuse, New York, USA
Web: <http://upstate.edu/iibmst/>

Languages: English, Romanian. Some knowledge of French

Education:

- 1994-1997 Ph.D. in Biophysics
University of Bucharest, Bucharest, Romania.
- 1989-1990 M.S. in Polymer Physics
University of Bucharest, Bucharest, Romania.
- 1985-1989 B.S. in Physics
University of Bucharest, Bucharest, Romania.

Positions and Employment

- 2012 – present Director of Structural Biology, Biochemistry and Biophysics Graduate Program (SB3), Syracuse University, 111 College Place, Syracuse, New York 13244-4100, USA. Phone: 315-443-5908; Fax: 315-443-4070; Web: <http://sb3.syr.edu/>
- 2010 – present Associate Professor of Physics,
Syracuse University, Department of Physics,
College of Arts and Sciences, 201 Physics Building, Syracuse,
New York 13244-1130, USA
- 2004 - 2010 Assistant Professor of Physics,
Syracuse University, Department of Physics,
College of Arts and Sciences, 201 Physics Building, Syracuse,
New York 13244-1130, USA
- 1999 – 2004 Postdoctoral Research Associate,
The Texas A&M University, College of Medicine,
Health Science Center, Department of Medical Biochemistry and Genetics,
College Station, Texas 77843-1114, USA
- 2002 Assistant Professor,
The Delft University of Technology,
Department of NanoScience, Delft, The Netherlands
- 1998 - 2003 Associate Member of the Abdus Salam International Centre for Theoretical
Physics, Trieste, strada Costiera, I-34014, Italy
- 1997 - 1998 Postdoctoral Visiting Research Associate,
University of Missouri-Kansas City,
Division of Cell Biology and Biophysics,
School of Biological Sciences, Kansas City, Missouri, USA
- 1993 - 1994 Graduate Research Fellow,
Institute for Neurobiology, University of Amsterdam,
Faculty of Biology, Department of Experimental Zoology,
Amsterdam, The Netherlands
- 1991 - 1993
and 1994 – 1997 Research Assistant,
University of Bucharest, Faculty of Biology,
Biophysical Laboratory, Bucharest, Romania
- 1990 - 1991 Research Assistant,

Affiliations and Memberships:

American Association for the Advancement of Science (AAAS); American Nano Society (ANS); American Physical Society (APS); American Biophysical Society (ABS); Federation of American Societies for Experimental Biology (FASEB); American Association of Physics Teachers (AAPT); International Association of Nanotechnology; The Scientific Research Society Sigma XI; New York Biotechnology Association

Teaching experience:

A. Undergraduate-level classes

- Freshman Forum (**CAS 101**, Syracuse University (SU))
- Conceptual physics for non-science majors and premeds (Major Concepts of Physics, **PHY 102**, SU)
- Thermodynamics and Statistical Mechanics (**PHY 531**, SU, Senior level)
- Electromagnetics I (**PHY 424/ELE 324**, SU, Senior level)
- Biological and Medical Physics (**PHY 315**, SU, Junior level)
- Biophysics and Biophysical Chemistry for majors in Biology, Biochemistry and Environmental Sciences (University of Bucharest (UB))
- Laboratory class of Biophysics for majors in Biology and Biochemistry (UB)
- Laboratory class of Conceptual Physics for majors in Biology and Biochemistry (UB)

B. Graduate-level classes

- Biological and Medical Physics (**PHY 615**, SU)

C. Teaching mentor for all levels (undergraduate, graduate, postdoctoral, and junior faculty)

D. Teaching mentor for Future Professoriate Program (FPP) at Syracuse University

E. Committees and Programs for Undergraduate and Graduate Preparation

- Director of the Undergraduate Program in Biophysical Sciences at Syracuse University, January 2010-Present
- Inaugural Member of the Center for Graduate Preparation and Achievement (CGPA) Faculty Advisory Council of the Graduate School at Syracuse University, April 2009-Present

Research Fields of interest (*Membrane and Single-molecule Biophysics; Chemical and Synthetic Biology; Biophysical Chemistry; Biomaterials; Experimental Soft Condensed Matter; Protein design; Biosensors and Functional Biomaterials; Nanobiotechnology and Nanomedicine*)

A. Previous research topics:

- Ionic Transport Through Epithelial Cell Membranes
- Laser Raman Spectroscopy of Nucleic Acids
- Biophysical Chemistry of Nucleic Acids

B. Current research interests:

- Single-molecule and Membrane Biophysics
- Bionanotechnology, Nanofluidics and Nanomedicine
- Chemical and Synthetic Biology
- Biosensors and Functional Biomaterials
- Membrane protein design

EXPERTISE

A. Theoretical

(Models of Biomembranes; Epithelial Ionic Transport Models; Non-linear Dynamics in Biochemical Systems)

- A1. Software package CHARMM for molecular dynamics simulations
- A2. Graphic packages for structural biology
 - A2.1. Graphic interface QUANTA for molecular dynamics simulations
 - A2.2. Software package RASMOL, INSIGHT II for graphic analysis of molecular dynamics simulations
 - A2.3. Graphic package SPOCK for the visualization of biomolecular structures
- A3. Stochastic models for phospholipid - phospholipid interactions from bilayer lipid membranes
- A4. Computer models for the analysis of the ionic and water transport through epithelial membranes
- A5. Computer models for the analysis of non-linear dynamic processes and chaotic behavior in multiply regulated biochemical systems
- A6. Programming in BASIC, MAPLE V, TURBO PASCAL etc.
- A7. Models of single-channel kinetics and correction schemes for rate constants due to missed events.
- A8. Analytical models for the interaction of small molecules with substrate-specific ion channels

B. Experimental

B1. Electrophysiology and Membrane & Single-molecule Biophysics

- B1.1. Electrophysiology of ionic and water transport across epithelial cell membranes
 - B1.1.1. Classical Ussing chambers for the ionic transport through epithelial membranes. Voltage-clamp method. Ionic fluxes measured by macroscopic electrodes
 - B1.1.2. Conventional microelectrode technique (CMT) for ionic transport through epithelial cell membranes: applications to human colon carcinoma cell line
- B1.2. Reconstitution of ion channels and pore-forming bacterial toxins within planar bilayer lipid membranes (Single-channel recording and macroscopic current measurements)
 - B1.2.1. Method of folded bilayers (Montal-Müller). Single-channel recording
 - B1.2.1.1. Designing the temperature-control set-up for the BLM technique of “folded bilayers”
 - B1.2.1.2. Designing the perfusion system for the BLM technique of “folded bilayers”
 - B1.2.2. Method of painted bilayers. Capacitance/Conductance measurements on BLMs
- B1.3. Electrophysiology software packages (pCLAMP from Axon Instruments and QUB for single-channel recording analysis)
- B1.4. Noise analysis technique on single-channel recording (Butterworth filter, sampling rules, Fast Fourier transformation etc.)

B2. Biophysical Chemistry techniques

- B2.1. Circular dichroism of polypeptides
- B2.2. Laser Raman spectroscopy of DNA
 - B2.2.1. High Resolution Raman Difference (HRRD) Spectroscopy of nucleic acids
 - B2.2.2. Raman melting profiles for nucleic acids and their assemblies
 - B2.2.3. Software packages for Raman spectroscopy
 - SpectraCalc (Galactic Industries),
 - SpectraMax,
 - Software for data acquisition ISA/Jobin-Yvon (IBM compatible computer)
- B2.3. Differential scanning calorimetry of DNA
- B2.4. UV-VIS absorption spectroscopy of proteins and nucleic acids

B3. Protein Chemistry techniques – Protein overexpression and purification

- B3.1. SDS-PAGE gel electrophoresis of very short peptides (Tris-tricine gels) and proteins (transcriptional factors and membrane proteins)
- B3.2. Blue-native gels
- B3.3. High performance liquid chromatography (HPLC) of proteins
- B3.4. *In vitro* translation and transcription of the pore-forming bacterial toxins (IVTT)
- B3.5. Oligomerization of membrane protein pores on rabbit red blood cell membranes

- B3.6. Preparation of rabbit red blood cell membranes
- B3.7. Protein over-expression in *Escherichia coli* cells (transcriptional factors, membrane proteins, ABC transporters)
- B3.8. Site-directed mutagenesis and multi-site mutagenesis

B4. Cloning and manipulation of nucleic acids (purification, estimations and assays)

- B4.0. Bacteria. Cell cultures and competent cells
- B4.1. Denaturing and non-denaturing DNA gels
- B4.2. High performance liquid chromatography (HPLC) of nucleic acids (reversed-phase DNA chromatography, hydroxylapatite chromatography for DNA etc.)
- B4.3. Oligonucleotide/primer-design for cassette mutagenesis/PCR
- B4.4. Agarose-gel purification of DNA plasmids and oligonucleotides
- B4.5. Site-specific DNA plasmid digestion reactions via restriction enzymes
- B4.6. Phosphorylation and T4 DNA ligation of product reactions in polynucleotides and plasmids
- B4.7. Cassette, single-site and multi-site mutagenesis
- B4.8. Mini-, Midi- and Maxi-Preps's for DNA Plasmids
- B4.9. PCR methods - DNA plasmid amplification

Publications and invited talks:

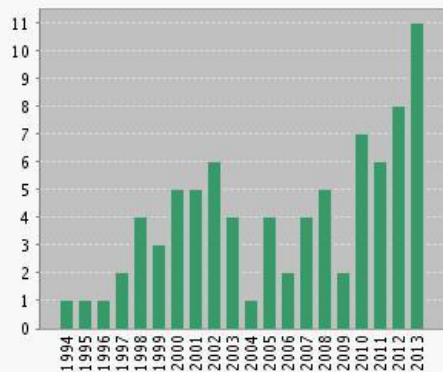
- 61 Peer-review articles in international journals and books
 - 4 Peer-review articles feature undergraduate lead authors
 - 2 Textbooks for students' use
 - 1 Book review article
 - 38 Abstracts in international journals
 - 26 Abstracts and short articles in Proceedings of international conferences
 - 124 Invited talks, seminars, plenary lectures
 - 21 Articles in Romanian scientific journals
- All publications are cited over 1500 times (total); h index = 22 (January 17th, 2013);

Citation Report: 82 Entries

You searched for: **AUTHOR:** (*Movileanu L*)
 Timespan=All years. Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH.
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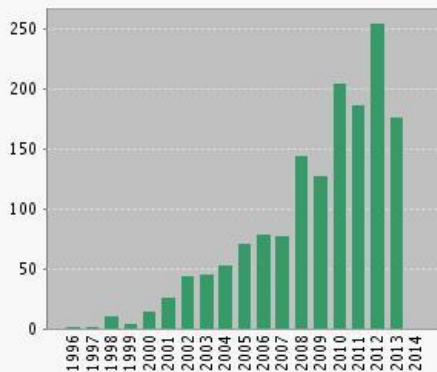
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Citing Articles: [?] : 825

Citing Articles without self-citations [?] : 775

Average Citations per Item [?] : 18.6

h-index [?] : 22

Articles cited in: *Acta Pharmacologica Sinica, Advanced Materials, American Journal of Clinical Nutrition, Analytical Chemistry, Analytical and Bioanalytical Chemistry, Analytical Biochemistry, Angewandte Chemie-International Edition, Animal Feed Science and Technology, Aquaculture, Archives of Biochemistry and Biophysics, Biochemical Pharmacology, Biochemical and Biophysical Research Communications, Biochemical Pharmacology, Biochemistry, Biochemistry and Cell Biology – Biochimie et Biologie Cellulaire, Bioelectrochemistry, Biochemical Journal, Biochimica et Biophysica Acta - Biomembranes, Biochimica et Biophysica Acta – Gene Structure and Expression, BioFactors, Biological Chemistry, BioMedCentral Cell Biology, Bioorganic and Medicinal Chemistry, Biophysical Chemistry, Biophysical Journal, Biopolymers, Bioscience Biotechnology and Biochemistry, BMC Cell Biology, Canadian Journal of Physiology and Pharmacology, Cell Biochemistry & Biophysics, Cellular and Molecular Life Sciences, Cellular Microbiology, Chemical Physics Letters, Chemistry & Biochemistry, Chemistry & Biology, Chemistry & Physical Chemistry, Chinese Chemical Letters, Chinese Physics, Clinical Microbiology and Infection, Clinical Pharmacokinetics, Comparative Hepatology, Current Medicinal Chemistry, Current Nanoscience, Current Opinion in Chemical Biology, Current Opinion in Colloid & Interface Science, Current Pharmaceutical Biotechnology, Current Topics in Nutraceutical Research, Digestive Diseases and Sciences, Disease Markers, Drug Discovery Today, Electrochimica Acta, Electrophoresis, EMBO Journal, E-Polymers, European Biophysics Journal, European Journal of Pharmacology, European Journal of Pharmaceutical Sciences, European Physical Journal E, European Journal of Pharmaceutical Sciences, FEBS Letters, FEBS Journal, Food and Chemical Toxicology, Gastroenterology, IEE Proceedings-Nanobiotechnology, Industrial and Engineering Chemistry Research, International Journal of Biological Macromolecules, Journal of Agricultural and Food Chemistry, Journal of Bacteriology, Journal of Biochemistry, Journal of Bioenergetics and Biomembranes, Journal of Chemical Information and Modeling, Journal of Clinical Investigation, Journal of Computational and Theoretical Nanoscience, Journal of Experimental and Theoretical Physics, Journal of Fluorescence, Journal of General Physiology, Journal of Neuroscience, Journal of Pharmacology, Journal of Pharmacy and Pharmacology, Journal of Agricultural and Food Chemistry, Journal of Physical Chemistry B, Journal of the American Chemical Society, Journal of Bioenergetics and Biomembranes, Journal of Biological Chemistry, Journal of Chemical Physics, Journal of General Physiology, Journal of Materials Chemistry, Journal of Membrane Biology, Journal of Molecular and Cellular Medicine, Journal of Molecular Biology, Journal of Molecular Modeling, Journal of Molecular Structure (THEOCHEM), Journal of Nanoscience and Nanotechnology, Journal of Neuroscience, Journal of Physics: Condensed Matter, Journal of Pineal Research, Journal of Raman Spectroscopy, Journal of Structural Biology, Langmuir, Life Sciences, Macromolecules, Microbiology and Immunology, Molecular and Cellular Biochemistry, Molecular Biosystems, Molecular Membrane Biology, Molecular Nutrition and Food Research, Mutation Research – Fundamental and Molecular Mechanisms of Mutagenesis, Molecular Simulation, Nano Letters, Nanomedicine, Nature, Nature Biotechnology, Nature Chemical Biology, Nature Nanotechnology, Neuron, Nonlinearity, Nucleic Acids Research, Oligonucleotides, Pharmaceutical Development and Technology, Pharmacology, Physica A – Statistical Mechanics and Its Applications, Physica Status Solidi-Basic Solid State Physics, Physical Chemistry & Chemical Physics, Physical Review Letters, Polymer, Proceedings of the National Academy of Sciences USA, Progress in Organic Coatings, Progress in Biophysics and Molecular Biology, Progress in Organic Coatings, Protein Science, Renal Failure, Sensors, Small, Review of Scientific Instruments, Sensors and Actuators B - Chemical, Spectrochimica Acta Part A-Molecular and Biomolecular Spectroscopy, Science, Talanta, Tetrahedron, Trends in Biotechnology, Virology etc.*

Comments of others about the P.I.'s work and/or other feature articles in professional journals/press release etc.

•Science 287 (5460), (2000) pp.1887-1889, Editor's choice: "Highlights of recent literature. Chemistry: **Polymer dynamics in a pore**". By Dr. Phil D. Surami – Field Editor – Science. The comments refer to the paper *J. Am. Chem. Soc.* **122(11)** (2000) 2411-2416.

•Nature Biotechnology **18 (10)**, (2000) pp. 1026, "**Protein identification at nanomolar concentration**". By Dr. Judy Jamison (Field Editor – Nature Biotechnol.) The comments refer to the paper *Nature Biotechnol.* **18 (10)** (2000) pp. 1091-1095.

- Nature Biotechnology **18 (10)**, (2000) pp. 1037, “**Sensing proteins outside of the box**”. By Professors F. Gisou van der Goot and Stefan Matile (University of Geneva) The comments refer to the paper *Nature Biotechnol.* **18 (10)** (2000) pp. 1091-1095.
- Doubletwist – Web publication (www.doubletwist.com), November 6, 2000 “**Protein Detection. Who's that yanking my chain?**” By Dr. Jim Kling (Editor) The comments refer to the paper *Nature Biotechnol.* **18 (10)** (2000) pp. 1091-1095.
- Journal of General Physiology **117(3)**, (2001) pp. 235-237. Commentary – **SCAM Feels the Pinch**. By Professor Arthur Karlin (Columbia University at New York). The comments refer to the paper *J. Gen. Physiol.* **117(3)** (2001) pp. 239-251.
- Journal of General Physiology **117(3)**, (2001) pp. 195-202. The 54th Annual Meeting and Symposium of the Society of General Physiologists – **Structures and Mechanisms of Channels and Transport Proteins** by Professors O. S. Andersen (Cornell University at New York) and R. W. Aldrich (U. Pennsylvania). The comments refer to the paper *J. Gen. Physiol.* **117(3)** (2001) pp. 239-251.
- Syracuse University, Department of Physics, Newsletter Physics Matters, 2nd News letter, Issue **2** (2007), page 3.
- Analytical Chemistry **80(1)**, 2008, pp. 23-27, “**Interest in nanoscale research has skyrocketed, and the humble pore has become a king.**” Feature article written by Dr. Jennifer Griffiths from *the American Chemical Society*. The article concerns the breakthroughs in the emerging realm of nanopore biophysics.
- Nanomaterials News **Vol. 3 (23)**, February 12th, 2008, pp. 1-8, “**Nanotech for low-cost DNA sequencing,**” written by Dr. Francis Sedgemore (IntertechPira.com, UK); comments about nucleic acids sequencing using nanopores
- Analytical Chemistry **80(11)**, 2008, pp. 3955, Feature “Biosphere” article written by Dr. Thomas Hayden from *the American Chemical Society*: “**Threading proteins through a nanopore needle.**” The comments refer to the paper M.M. Mohammad, S. Prakash, A. Matouschek and L. Movileanu, 2008, Controlling a single protein in a nanopore through electrostatic traps, *J. Am. Chem. Soc.* **130(12)**, 4081-4088.
- Chemical Biology **vol. 7, issue 6, 2008**, Paper: L. Movileanu, *Soft Matter* (Highlight Article) **4(5)**, 925-931, has been selected for inclusion in the **RSC's Chemical Biology** Research Articles virtual journal
- VerticalNews, Atlanta, GA, May 12th, 2008, “**Data on chemical research published by researchers at Syracuse University,**” The comments refer to the paper M.M. Mohammad, S. Prakash, A. Matouschek and L. Movileanu, 2008, Controlling a single protein in a nanopore through electrostatic traps, *J. Am. Chem. Soc.* **130(12)**, 4081-4088. VerticalNews publishes the largest weekly database of current news, research, and reports.
- VerticalNews, Atlanta, GA, June 2nd, 2008, “**Nanotechnology – Scientists at Syracuse University target soft matter,**” Comments refer to the following paper: L. Movileanu, *Soft Matter (Highlight Article)* **4(5)**, 925-931. VerticalNews publishes the largest weekly database of current news, research, and reports.
- SU Connections, Syracuse University/College of Arts and Sciences, Spring 2008, Comments regarding the interdisciplinary research and its integration with educational activities and training in Movileanu's laboratory at Syracuse University, page 21.
- NewsRx, Atlanta, GA – World's Largest Source of Health News, September 15th, 2008, “**Research on biophysics described by scientists at Syracuse University,**” The comments refer to the paper M.M.

Mohammad and L. Movileanu, 2008, Excursion of a single polypeptide into a protein pore: simple physics, but complicated biology, *Eur. Biophys. J.* **37(6)**, 913-925.

- *Syracuse University News* (www.sunews.syr.edu), 29th January, 2009, “**SU research team blazes new trails in emerging field of nanobiotechnology** (http://sunews.syr.edu/story_details.cfm?id=5657),” The comments refer to the paper M.M. Mohammad, S. Prakash, A. Matouschek and L. Movileanu, 2008, Controlling a single protein in a nanopore through electrostatic traps, *J. Am. Chem. Soc.* **130(12)**, 4081-4088.

- *Syracuse University, College of Arts and Sciences, Press Release*, 29th January, 2009, “**Tiny spaces yield big discoveries** (<http://www-hl.syr.edu/pressrelease/nanobiotechnology.htm>),” The comments refer to the paper M.M. Mohammad, S. Prakash, A. Matouschek and L. Movileanu, 2008, Controlling a single protein in a nanopore through electrostatic traps, *J. Am. Chem. Soc.* **130(12)**, 4081-4088.

- *Syracuse University, Press Release*, 9th February, 2010, “**NIH awards \$3 million in grants to College of Arts and Sciences researchers for leukemia, nanobiotechnology projects**,” by Judy Holmes, <http://insidesu.syr.edu/2010/02/09/laukemia-cancer-research/>, The commentary refers to an NIH R01-type award to Movileanu’s team in the amount of \$1,430,000 with the *National Nanotechnology Initiative* of the National Institutes of Health.

- *Syracuse University News, The College of Arts and Sciences, Press Release*, 3rd February, 2010, “**NIH awards \$3 million in grants to College of Arts and Sciences researchers**,” by Judy Holmes, http://www-hl.syr.edu/connections/news/NIH_award.html, The commentary refers to an NIH R01-type award to Movileanu’s team in the amount of \$1,430,000 with the *National Nanotechnology Initiative* of the National Institutes of Health.

- *Central New York Link, Edition Syracuse City Eagle, Press Release*, 9th February, 2010, “**NIH awards \$3 million in grants to SU researchers**,” http://cnylink.com/news/view_news.php?news_id=1265733799, The commentary refers to an NIH R01-type award to Movileanu’s team in the amount of \$1,430,000 with the *National Nanotechnology Initiative* of the National Institutes of Health.

- **Business Journal – Central New York**, Press Release, 9th February, 2010, “**NIH awards \$3 million in grants to SU researchers**,” by Eric Reinhardt, [http://www.cnybj.com/Channels/ArticleDetailDisplay/tabid/145/itemid/11830/sourceid/443/NIH-awards-\\$3M-in-grants-to-SU-researchers-Default.aspx?returnUrl=http://www.cnybj.com/default.aspx](http://www.cnybj.com/Channels/ArticleDetailDisplay/tabid/145/itemid/11830/sourceid/443/NIH-awards-$3M-in-grants-to-SU-researchers-Default.aspx?returnUrl=http://www.cnybj.com/default.aspx), The commentary refers to an NIH R01-type award to Movileanu’s team in the amount of \$1,430,000 with the *National Nanotechnology Initiative* of the National Institutes of Health.

- Facebook - Tuesday, February 9, 2010 at 10:32am, Syracuse University: “**NIH awards \$3 million in grants to College of Arts and Sciences researchers for leukemia, nanobiotechnology projects**,” http://ja-jp.facebook.com/note.php?note_id=308734593408, The commentary refers to an NIH R01-type award to Movileanu’s team in the amount of \$1,430,000 with the *National Nanotechnology Initiative* of the National Institutes of Health.

- Liviu Movileanu, “**research in the last hour**,” March, 2010, **TOP UB**, Online Journal of the University of Bucharest, Romania, <http://topub.unibuc.ro/?p=1416>, The commentary refers to an NIH R01-type award to Movileanu’s team in the amount of \$1,430,000 with the *National Nanotechnology Initiative* of the National Institutes of Health.

- **GEN – Genetic Engineering & Biotechnology News**, vol. 30 (10), 15 May, 2010, “**Tiny but Powerful Tools for Sample Prep**,” article written by Catherine Shaffer about the plenary talks of the 3rd Sample Prep 2010, Detection Technologies Conference Series, Sample Preparation for Virus, Toxin & Pathogen Detection, May 6-7, 2010, Baltimore, Maryland, USA, which has been organized by **Knowledge Foundation**.

- Syracuse University, Department of Physics, Newsletter Physics Matters, 5th News letter, Issue 5, 2010, page 6, short news article about the R01 award from the US National Institutes of Health.
- **SU awarded prestigious Beckman Scholars Program**, The Arnold and Mabel Beckman Foundation named Syracuse University an institutional recipient of the 2011 Beckman Scholars Program. Movileanu is one of the Beckman scholars, Monday, March 28th, 2011.
<http://campaign.syr.edu/2011/04/19/su-awarded-prestigious-beckman-scholars-program/>
- **Syracuse University awarded prestigious Beckman Scholars Program for undergraduate student research**, The Arnold and Mabel Beckman Foundation named Syracuse University an institutional recipient of the 2011 Beckman Scholars Program. Movileanu is one of the Beckman scholars, By Judy Holmes, Monday March 28, 2011, <http://insidesu.syr.edu/2011/03/28/beckman-scholars/>
- **Syracuse University awarded prestigious Beckman Scholars Program for undergraduate student research**, The Arnold and Mabel Beckman Foundation named Syracuse University an institutional recipient of the 2011 Beckman Scholars Program. Movileanu is one of the Beckman scholars, By Judy Holmes, March 28, 2011.
<http://www.noodls.com/viewNoodl/9478758/syracuse-university/syracuse-university-awarded-prestigious-beckman-scholars-pro>
- **NewsRx, Atlanta, GA – World’s Largest Source of Health News**, July 19th, 2011, “**Data on Biochemistry Described by Researchers at Syracuse University**” The comments refer to the paper B.R. Cheneke, B. van den Berg and L. Movileanu, 2011, Analysis of gating transitions among the three major open states of the OpdK channel, *Biochemistry* **50(22)**, 4987-4997.
- **NewsRx, Atlanta, GA – World’s Largest Source of Health News**, April 26th, 2011, “**Syracuse University Reports Research in Membrane Proteins**” The comments refer to the paper M.M. Mohammad, K.R. Howard and L. Movileanu, 2011, Redesign of a plugged beta-barrel membrane protein, *J. Biol. Chem.* **286(10)**, 8000-8013
- **Syracuse University**, Department of Physics, Newsletter Physics Matters, 6th News letter, Issue 6, 2011, Page 9: “**Cooperation with Tohoku University, Sendai, Japan.**”
- **Syracuse University**, Department of Physics, Newsletter Physics Matters, 7th News letter, Issue 7, 2012, Page 10.
- **Syracuse University's Beckman Scholars gain real-world research experience**, “From proteins to biosensors,” http://asnews.syr.edu/newsevents_2012/releases/2012_Beckman_Scholars_SU.html, Article by Judy Holmes, 19 December, 2012.
- **Syracuse University's Beckman Scholars gain real-world research experience**, http://www.youtube.com/watch?v=NuuspLYGA7w&feature=player_embedded, Video created by Julia Kipnis, 19 December, 2012.
- **New spectroscopic technique sheds light on an important protein complex**, article by Helen Bache (Royal Chemical Society), Development Editor, 28 January, 2013, The Royal Chemical Society, UK. This article describes recent collaborative work with the group of Prof. Valerica Raicu published in: D.R. Singh, M.M. Mohammad, S. Patowary, J.A. Oliver, L. Movileanu and V. Raicu, 2013, Determination of the Quaternary Structure of a Bacterial ATP-Binding Cassette (ABC) Transporter in Living Cells, *Integr. Biol. (Cambridge)* **5(2)**, 312-323; <http://blogs.rsc.org/ib/2013/01/28/new-spectroscopic-technique-sheds-light-on-an-important-protein-complex/>

Cover Pictures for Scientific Journals:

- *Nature Biotechnology* vol. 18 (October), Issue **10** (2000)
- *Trends in Biotechnology* vol. 27 (June), Issue **6** (2009): Nanopore sensing of proteins
- *Integrative Biology* vol. 5 (February), Issue **2** (2013): High-throughput FRET technique for determining the quaternary structure of a bacterial ABC transporter

Key title on front covers:

- *Nature Biotechnology* vol. 18 (October), Issue **10** (2000): Protein sensor on a tether
- *Trends in Biotechnology* vol. 27 (June), Issue **6** (2009): Nanopore sensing of proteins

SOURCES OF PAST & PRESENT FUNDING:

All sources of funding, including the Syracuse University start-up funds, add up to a total of ~\$3,833,000.

All sources of funding during tenure at Syracuse University make ~\$3,196,000.

A. Pending Grant Applications

S15. *National Science Foundation* - DMR-1408781, The Biomaterials Program, Division of Materials Research (DMR): "A Versatile Platform for Sampling Protein-Protein Interactions," (No Co-P.I.);

\$530,049; 06/01/14 - 05/31/17

S14. *National Institutes of Health* - R01 GM-088403 (NIGMS) - Nanotechnology Study Section, Nanoscience and Nanotechnology in Biology and Medicine (NNBM) Program: "Engineered Nanopores for Single-molecule Stochastic Sensing," (No Co-P.I.);

\$1,448,217; 09/01/14 - 08/31/18

S13. *National Science Foundation* - PHY-1401263, Physics of Living Systems (PoLS) Program, Division of Physics (PHY): "Facilitated Substrate Translocation through Outer Membrane Proteins," (No Co-P.I.);

\$522,797; 06/01/14 - 05/31/17

S12. *National Institutes of Health* - R01 GM-111442-01 (NIGMS) - Biochemistry and Biophysics of Membranes (BBM) Program: "Deciphering the Molecular Basis of Substrate Specificity of Outer Membrane Proteins," (No Co-P.I.);

\$1,411,529; 09/01/14 - 08/31/18

S11. *National Science Foundation* - CBET-1361873, Nano-Biosensing Program, Division of Chemical, Bioengineering, Environmental and Transport Systems (CBET): "Selective Nanobiosensing Elements for Selective Capture of Nucleic Acids and Proteins," (No Co-P.I.);

\$361,262; 04/01/14 - 03/31/17

S10. *Department of Defense* - DTRA-IDQ Program - Defense Threat Reduction Agency, "Detection with Hybrid Nanopore-based Devices" (Co-P.I.; Prof. Robert Silver, Syracuse University, The P.I.);

\$6,900,000; 03/01/13 - 02/28/18

B. Current Funding

S9. *National Science Foundation* - DMR-1006332, Biomaterials Program (BMAT), Division of Materials Research: "Single-molecule detection of proteins," (No Co-P.I.);

\$420,000; 07/15/10 - 02/28/14

S8. *National Institutes of Health* - R01 GM-088403 (NIGMS) - Nanoscience and Nanotechnology in Biology and Medicine (NNBM) Program: "Engineered nanopores for single-molecule stochastic sensing," (No Co-P.I.);

\$1,430,268; 09/21/09 - 08/31/14

C. Past Funding

- S7. National Institutes of Health - R01 GM-085785 (NIGMS) - Biophysics and Biochemistry of Membranes (BBM) Program:** "Structural and biochemical characterization of the OprD membrane protein family," (Co-P.I.; Prof. Bert Van den Berg, U. Mass. Medical School, The P.I.);
\$183,000 (SU Part); 09/01/08 - 08/31/12
- S6. Syracuse University (SU) – Equipment, Equipment Upgrades, and Maintenance**
"Instrument for high-resolution, single-molecule detection using engineered protein nanopores," (No Co-P.I.);
\$53,000; 04/01/11-04/30/11
- S5. National Science Foundation - DMR-706517 Biomaterials Program (BMAT):** "Single-molecule stochastic sensing of DNA and proteins," (No Co-P.I.);
\$390,000; 07/01/07 – 06/30/11
- S4. Syracuse Biomaterials Institute (SBI) – Equipment, Equipment Upgrades, and Maintenance**
"Patch-clamp Instrument for Single-Channel Recordings on Lipid Vesicles and Cell Membranes," (No Co-P.I.);
\$ 25,000; 11/01/08-10/30/09
- S3. Syracuse University – Start-up funds, Syracuse, New York,** "Single-molecule biological physics laboratory," (No Co-P.I.);
\$695,000; 08/01/04 – 07/31/07
- S2. FOM Projectruimte:** "Threading a single protein through a nanopore," with The Delft University of Technology, Delft, The Netherlands (The P.I.; Prof. Cees Dekker, Co-P.I.);
\$450,000; 09/01/02 – 08/31/05
- S1. The Wellcome Trust Award 054406/Z/98:** "Inhibitory mechanisms in the pancreatic ductal epithelium," with The University of Newcastle, Newcastle upon Tyne, UK (Co-P.I.; Prof. Barry E. Argent, The P.I.);
\$187,000; 11/01/98 – 10/31/00

PATENTS AND INVENTIONS:

- US Patent 6,916,665: "BIOSENSOR COMPOSITIONS AND METHODS OF USE;" Authors: Hagan Bayley, Stefan Howorka and Liviu Movileanu, Texas A&M University System Health Science Center, College Station, Texas; Issued: July 11, 2005; Filing date: February 11, 2001; Serial Number: 09/781,697; Status: Issued.
- Non-Provisional US Patent application filed with the US Patent and Trademark Office (1st June, 2011): No. 20120003694. Title: "Bioengineered Protein Pores," Authors: Mohammad M. Mohammad and Liviu Movileanu, Syracuse University, Syracuse, New York; Status: Pending.

Honors and Awards

- 1997 – **Associate Member Fellowship of the Abdus Salam International Center for Theoretical Physics**, Trieste, European Union
- 1997 - **Research Fellowship of TEMPUS Program** of the European Community – Higher Education Commission, European Union
- 1997 - "**Research Fellow Recognition**" of the American Biographical Institute, Raleigh, NC, USA
- 1998 - The **Wellcome Trust Award** for International Post-doctoral Fellows, United Kingdom
- 2009 – Selected Biography in **Marquis Who's Who Biography**. Marquis Who's Who LLC.
- 2011 – "**Certificate of Appreciation**" Award from the American Chemical Society, for valuable contribution and dedicated service in the peer review of manuscripts submitted to the American Chemical Society
- 2011 – **2011 Stanford Who's Who Registry among Executives, Professionals & Entrepreneurs**, New York
- 2012 – **Beckman Research Faculty Mentor**
- 2014 – "**Certificate of Appreciation**" from the American Biophysical Society, for valuable contribution and dedicated service in the peer review of manuscripts submitted to *Biophysical Journal* within the period Jan-Dec 2013. This is recognition for consistent and responsive service to the biophysics community with multiple high-quality reviews in 2013.

Meetings organizer/chairperson/session chair:

- Chairperson and Organizer of the Invited Symposium of the American Physical Society March Meeting, “Nanopore world: from single-molecules to nanobiotechnology prospects”, March 7th, 2007, Denver, Colorado.
- Session Chair, The 4th Summer School of Biophysics: “Biosensing with channels 2009: Heading for faster, smaller, smarter biosensors,” June 28th – July 4th, 2009, Bremen, Germany.
- Session Chair, The 3rd Sample Prep 2010, Detection Technologies Conference Series, Sample Preparation for Virus, Toxin & Pathogen Detection, May 6-7, 2010, Baltimore, Maryland, USA.
- Session Co-chair, The First International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, June 18-20, 2010, Brasov, Romania.
- Session Chair, The 5th Summer School of Biophysics: “Biosensing with channels 2010: Heading for faster, smaller, smarter biosensors”, August 21st – 27th, 2010, Berder, Rennes, France.
- Symposium Chair, 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.
- Session Chair, The NSF Workshop at the University of Wisconsin: “Open Forum for Innovation in Two-Photon Microspectroscopy,” The University of Wisconsin at Milwaukee, 18-19 November, 2011, Milwaukee, Wisconsin, USA.
- Member of the Organizing Committee, The International Conference on Nanotechnology and Nanomedicine, Nano-2012, The OMICS Group Conferences, Omaha Marriott Hotel Center, 12-14 March, 2012, Omaha, Nebraska, USA.
- Symposium Chair, “*Nanodevices, Nanoelectronics and Applications of Nanotechnology,*” The International Conference on Nanotechnology and Nanomedicine, Nano-2012, The OMICS Group Conferences, Omaha Marriott Hotel Center, 14 March, 2012, Omaha, Nebraska, USA.
- Member of the Organizing Committee, The International Conference and Expo on Material Science & Engineering, Material Science – 2012, The OMICS Group Conferences, Double Tree by Hilton Chicago-North Shore, 22-24 October, 2012, Chicago, Illinois, USA.
- Member of the Organizing Committee, The 2nd International Conference on Nanotek and Expo, Nanotek –2012, The OMICS Group Conferences, Double Tree by Hilton Chicago-Philadelphia City Center, 3-5 December, 2012, Philadelphia, Pennsylvania, USA.
- Session Co-Chair, “Nanodevices and Nanosensors,” The 2nd International Conference on Nanotek and Expo, Nanotek –2012, The OMICS Group Conferences, Double Tree by Hilton Chicago-Philadelphia City Center, 3-5 December, 2012, Philadelphia, Pennsylvania, USA.

National and International Advisory Boards & Panels & Strategic Workshops:

- Panel member, *Designing Nanostructures Pre-Conference*, National Academies Keck Futures Initiative, Videoconference between the Keck Center of the National Academies (Washington, DC) and the Arnold and Mabel Beckman Center of the National Academies (Irvine, CA), September 18th-19th, 2004, Washington, D.C., USA
- Panel adviser, *The National Academies/Keck Future Initiatives: “Designing Nanostructures at the Interface between Biomedical and Physical Systems,”* Arnold and Mabel Beckman Center of the National Academies, November 18-21, 2004, Irvine, California, USA
- Panel member & adviser, The NSF Workshop on Biosensing and Bioactuation, “*The NSF Initiative in Biosensing and Bioactuation,*” The University of Maryland, Department of Aerospace Engineering, November 27-28, 2007, College Park, Maryland, USA
- Panel adviser, The 2nd 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 21-25, 2011, Bucharest-Magurele, Romania.
- Board Member of the Romanian Council for the Approval of the titles, certificates and degrees in higher-education institutions (CNATDCU), as solicited by the Romanian Minister of Education and Research, 2011-

- Panel adviser, The NSF Workshop at the University of Wisconsin: “Open Forum for Innovation in Two-Photon Microspectroscopy,” The University of Wisconsin at Milwaukee, 18-19 November, 2011, Milwaukee, Wisconsin, USA

- Panel member & adviser, The NSF Biomaterials Workshop – Important Areas for Future Investment, Section on Thin Films and Interfaces, “*The NSF Initiative in Biomaterials*,” June 19-20, 2012, Arlington, Virginia, USA

- Participant, The NSF Biomaterials Briefing on “Important Areas for Future Investment,” Section on Thin Films and Interfaces, December 3rd, 2012, Arlington, Virginia, USA

- Selected Participant, The National Academies Keck *Futures Initiative* (NAKFI), a program of the National Academy of Sciences (NAS), the National Academy of Engineering (NAE), and the Institute of Medicine (IOM), to participate in a group concept mapping project. The major goal of this project was to formulate perspectives on strategies or actions that NAKFI could use to stimulate more innovative interdisciplinary research across fields of science, engineering, and medicine, November 19th, 2013.

Editorial Boards

- Member of the Editorial Board of *Romanian Journal of Biophysics* (2006-);

<http://www.biophysicsnet.ro/rjb/>

- Member of the Editorial Board of *Applied Medical Informatics* (2009-);

<http://ami.info.umfcluj.ro/index.php/AMI>

- Member of the Editorial Board of *World Journal of Biological Chemistry* (2009-2013);

<http://www.wjgnet.com/1949-8454/index.htm>

- Member of the Editorial Board of *Journal of Nanomedicine and Nanotechnology* (2010-2013);

<http://omicsonline.org/jnmnhome.php>

- Member of the Editorial Board of *the International Scholarly Research Network (ISRN) Biomathematics* (2011-);

<http://www.isrn.com/journals/biomathematics/editors/>

- Member of the Editorial Board of *Journal of Biosensors and Bioelectronics* (2012-2014);

<http://omicsonline.org/jbsbehome.php>

- Member of the Editorial Board of *Journal of Toxins* (2012-);

<http://www.hindawi.com/journals/toxins/>

- Member of the Editorial Board of *Advances in Biosensors and Bioelectronics* (2012-2013);

<http://www.seipub.org/abb/>

- Member of the Editorial Board of *Frontiers in Sensors* (2012-2013);

<http://www.seipub.org/fs/>

- Member of the Editorial Board of *Discoveries Journals* (2014-);

<http://www.discoveriesjournals.org/>

- Member of Revista de Politica Stiitei si Scientometrie (2014-);

<http://rpss.inoe.ro/>

Grant and Panel Reviewer

- Panel Reviewer, the US National Science Foundation, USA, January 2008

- Reviewer, the US National Science Foundation, USA, October 2008, February 2009

- Reviewer, the US National Science Foundation, USA, April 2008

- Panel Reviewer, the US National Science Foundation, USA, March 2009

- Panel Reviewer, the US National Science Foundation, USA, January 2011

- Grant Reviewer, the Netherlands Organization for Scientific Research (NWO), Holland, November 2011

- Grant Reviewer, the Belgian Research Council, Belgium, February 2012

- Panel Reviewer, the US National Science Foundation, USA, November 2012

- Panel Reviewer, the US National Science Foundation, USA, March 2014

Scientific referee for the following journals:

Accounts of Chemical Research; ACS Chemical Biology, ACS Nano; Analytica Chimica Acta; Analytical Chemistry; Applied Physics Letters; Biochemistry; Biochimica et Biophysica Acta; BioMedCentral Pharmacology; Biophysical Journal; Biopolymers; Chemical Reviews; Chemical Science; Chemical Society Reviews; Chemistry – An European Journal; Chemistry and Physical Chemistry; Environmental Microbiology; European Biophysics Journal; European Journal of Clinical Nutrition; FEBS Letters; Fluctuation and Noise Letters; IEEE NanoBiotechnology; IEEE Transactions on Nanotechnology; International Journal of Molecular Sciences; ISRN Biomathematics; Journal of Applied Physics; Journal of Bacteriology; Journal of Bioenergetics and Biomembranes; Journal of Chemical Information and Computer Sciences; Journal of Chemical Theory and Computation; Journal of Micromechanics and Microengineering; Journal of Peptide Science; Journal of Physical Chemistry B; Journal of Physical Chemistry Letters; Journal of Physics: Condensed Matter; Journal of the American Chemical Society; Journal of Theoretical Biology; Journal of Visualized Experiments; Langmuir; Nano Letters; Nanomedicine; Nanotechnology; Nature Nanotechnology; Nature Protocols; Nature Communications; PLoS One; Proceedings of the National Academy of Sciences USA; Protein and Peptide Letters; Small; Vibrational Spectroscopy; WIREs Nanomedicine and Nanobiotechnology;

Textbook Reviewer for Biological Physics, Biophysics, Biophysical Chemistry, Single-molecule Biophysics, Statistical Physics and Thermodynamics, and Nanobiotechnology at the undergraduate and graduate level:

- Elsevier Science Publishers, Butterworth-Heinemann, Burlington, USA
- Oxford University Press, Oxford, UK
- Garland Science, Taylor & Francis Group, New York, USA
- Blackwell Publishing/John Wiley & Sons, Boston, Massachusetts, USA
- Prentice Hall, Pearson Education, Upper Saddle River, New Jersey, USA
- John Wiley & Sons Ltd, Chichester, UK
- Springer, New York, New York, USA
- Taylor & Francis, CRC Press, Boca Raton, Florida, USA
- W.H. Freeman and Company, New York, New York, USA

International Symposiums, Conferences, Schools or Associate Research Fellow in other laboratories

(i) Participations (without Communications) (A)

A19. The 13th New York Complex Matter Workshop, Syracuse University, December 14th, 2012, Ithaca, New York, USA

A18. The 12th New York Complex Matter Workshop, Cornell University, December 9th, 2011, Ithaca, New York, USA

A17. The NSF Workshop at the University of Wisconsin: “Open Forum for Innovation in Two-Photon Microspectroscopy,” The University of Wisconsin at Milwaukee, 18-19 November, 2011, Milwaukee, Wisconsin, USA.

A16. Soft Active Materials: From Granular Rods to Flocks, Cells and Tissues, Syracuse University, May 18-21, 2009, Syracuse, New York, USA

A15. The 5th New York Complex Matter Workshop, Syracuse University, December 14th, 2008, Syracuse, New York, USA

A14. The 4th New York Complex Matter Workshop, Cornell University, June 15th, 2007, Ithaca, New York, USA

A13. The 2006 Summer Meeting of the American Association of Physics Teachers, Syracuse University Sheraton Hotel, July 22nd - 26th, 2006, Syracuse, New York, USA

A12. 2005 Workshop for New Physics and Astronomy Faculty, The American Center for Physics, November 10-13, 2005, College Park, Maryland, USA

A11. DNA Detection & Sequencing Panel on *Designing Nanostructures at the Interface between Biomedical and Physical Systems*, the 2nd Annual National Academies Keck Futures Initiatives Conference, Beckman Center, November 18-21, 2004, Irvine, California, USA

A10. *Designing Nanostructures Pre-Conference*, National Academies Keck Futures Initiative, Videoconference between the Keck Center of the National Academies (Washington, DC) and the Arnold and Mabel Beckman Center of the National Academies (Irvine, CA), September 18th-19th, 2004, Washington, D.C., USA

A9. Grant Writing Workshop "Write Winning Grants", organized by the Texas A&M Research Foundation (presented by Prof. Steve Russell, University of California at San Diego), the College Station Conference Center, November 10-11, 2000, College Station, Texas, USA.

A8. The MURI Meeting (Multiple University Research Initiative of Air Force Office of Scientific Research (AFOSR)) jointly organized by the Office of Naval Research USA and the University of Texas at Austin, 7th-8th June, 1999, Austin, Texas, USA.

A7. The 42nd Annual Meeting of the Biophysical Society, organized by the American Biophysical Society, 22nd-26th February, 1998, Kansas City, Missouri, USA.

A6. Workshop "College on Introductory Computational Physics", organized by the International Centre for Theoretical Physics, 19th May - 13th June, 1997, Trieste, Italy.

A5. Workshop "Proteins, Membranes and Their Interactions", organized by the International Centre for Theoretical Physics, 22nd July-2nd August, 1996, Trieste, Italy.

A4. Fellowship for attending the 16th International Congress of Biochemistry and Molecular Biology, 19-22 September, 1994, New Delhi, India.

A3. International Conference "Whole heart modelling" sponsored by Priority Programm "Nonlinear Dynamics" of the Netherlands Organization for Advanced Research, 11-13 February, 1994, Utrecht, The Netherlands.

A2. International Symposium "Biophysics of Membrane Transport", International Symposium in the Memory of Late Peter Lauger, 19-23 July, 1993, Konstanz, Germany.

A1. French-Romanian Summer School of Biophysics, 23-29 September, 1991, Bucharest, Romania. Theme: "Structure, Dynamics and Function of Proteins"

Comprehensive list of invited talks (T)

I have delivered ~125 invited seminars, colloquia, and plenary lectures and contributed talks listed below. ~90 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*.

2014

T125. 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*.

T124. Condensed Matter and Biological Physics Seminar, Department of Physics, Brown University, March 27, 2014, Providence, Rhode Island, USA. *Nanopore Technology for the Analysis of Proteins and DNA*, 60 min., *Invited*.

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

T121. Telluride Workshop on Biophysical Dynamics, Telluride Science Research Center (TSRC), 21-26 July, 2013, Telluride, Colorado, USA *Engineered protein nanopores for single protein detection*, 50 min., *Invited*.

T120. The 18th 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. 2nd 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 Undergraduate Program, Department of Biology, Syracuse University, 9th 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," 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, Department of Physics, Syracuse University, August 21st, 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, 19th 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. 8th International Conference on Flow Dynamics, Molecular and Nanoscale Phenomena in Fluids and Interfaces, Sendai International Center, Tohoku University, November 9th-11th, 2011, Sendai, Japan. *Stabilizing protein nanopores*, 40 min., *Invited*.

T106. Department of Theoretical Physics, Horia Hulubei National Institute of Physics and Nuclear Engineering, October 6th, 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 29th - October 1st, 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 15th, 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 29th - September 1st, 2011, Brooklyn, New York, USA. *Single-molecule Sensing with A Nanopore: Inspiration from Nature*, 25 min., *Invited*.

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 8th, 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 28th, 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 27th, 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 13th, 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 7th International Conference on Flow Dynamics, Liaison Office Session, Sendai International Center, Tohoku University, November 1st, 2010, Sendai, Japan. *Global Exchange Education and Research Program*, 20 min., *Invited*.

T95. The 7th International Conference on Flow Dynamics, Keynote Lecture, Molecular and Nanoscale Phenomena in Fluids and Interfaces, Sendai International Center, Tohoku University, November 3rd, 2010, Sendai, Japan. *Single-molecule Science with A Nanopore: Inspiration from Nature*, 40 min., *Invited*.

T94. Department of Physics, The University of Ottawa, October 14th, 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 8th, 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 28th, 2010, Mississauga, Ontario, Canada, *Single-molecule Science with A Nanopore: Inspiration from Nature*, 60 min., *Invited*.

T91. The 2nd 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 21-25, Bucharest-Magurele, Romania, *Evaluation Strategies of Research Programs in the United States*, 25 min., *Invited*.

T90. The 5th Summer School of Biophysics: "Biosensing with channels 2010: Heading for faster, smaller, smarter biosensors", August 21st – 27th, 2010, Berder, Rennes, France, *Quantitative assessment of the conformational fluctuations of a monomeric β -barrel protein pore*, 60 min., *Invited*.

T89. The Structural Biology, Biochemistry and Biophysics (SB3) Research Symposium, Syracuse University, The Life Sciences Complex, 14th 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", 462th 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 18th, 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 17th, 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 16th, 2010, Bucharest, Romania, *Single-molecule Science with A Nanopore: Inspiration from Nature*, 60 min., *Invited*.
- T83.** The 3rd 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 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., *Invited*.
- 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*.

(iii) Associate Research Fellow or Visiting Fellow in laboratories (C)

C6. November 1998 - July 2004: Postdoctoral Research Associate: Texas A&M University, College of Medicine, Health Science Center, Department of Medical Biochemistry and Genetics, 440 Reynolds Medical Building, College Station, Texas 77843-1114, USA.

C5. October 2002 - January 2003: Assistant Professor Fellow, Delft University of Technology, Department of NanoScience, Lorentzweg 1, 2628 CJ Delft, The Netherlands.

C4. October 1997 - October 1998: Postdoctoral Fellow: University of Missouri-Kansas City, Division of Cell Biology and Biophysics, School of Biological Sciences, 405 Biological Sciences Building, 5100 Rockhill Road, Kansas City, Missouri 64110-2499, USA.

C3. June- July 1997: Research Mobility Bursary of Tempus Programm S-JEP 09373/95: Centre d'Etudes Nucléaires de Saclay, Section de Biophysique des Protéines et des Membranes, Laboratoire de Simulation Moleculaire, 91191 Gif-sur-Yvette, Paris, France.

C2. January- February 1997: Research Mobility Bursary of Tempus Programm S-JEP 09373/95: Centre d'Etudes Nucléaires de Saclay, Section de Biophysique des Protéines et des Membranes, Laboratoire de Simulation Moleculaire, 91191 Gif-sur-Yvette, Paris, France.

C1. September 1993 - July 1994: Graduate Research Fellow: Institute for Neurobiology, University of Amsterdam, Faculty of Biology, Department of Experimental Zoology, Kruislaan 320, 1098 SM Amsterdam, The Netherlands.

COMPREHENSIVE LIST OF PUBLICATIONS

Articles in international scientific journals (D)

D63. M.M. Mohammad, K.R. Howard, N. Tomita, M. Ohta and **L. Movileanu**, 2014, Insights into the quaternary structure of a bacterial ABC transporter involved in polysaccharides export, *EMBO J*, *In preparation*.

D62. B.R. Cheneke, B. van den Berg, E.A. Schiff, and **L. Movileanu**, 2014, Enthalpy-entropy Compensation within A Fluctuating Protein Nanopore, *ACS Nano*, *In preparation*.

D61. **L. Movileanu**, 2014, Watching Single Proteins Using Engineered Nanopores, *Protein Pept. Lett.* **21(3)**, In Press.

D60. E. Eren, J. Parkin, A. Adelanwa, B.R. Cheneke, **L. Movileanu**, S. Khalid and B. van den Berg, 2013, Towards understanding the outer membrane uptake of small molecules by *Pseudomonas aeruginosa*, *J. Biol. Chem.* **288(17)**, 12042-12053. PMID: PMC3636890

D59. N. Tomita, M.M. Mohammad, D.J. Niedzwiecki, M. Ohta and **L. Movileanu**, 2013, Does the lipid environment impact the open-state conductance of an engineered β -barrel protein nanopore?, *Biochim. Biophys. Acta Biomembranes* **1828(3)**, 1057-1065. PMID: PMC3560310

D58. **L. Movileanu** and E.A. Schiff, 2013, Enthalpy-entropy Compensation of Biomolecular Systems in Aqueous Phase: a Dry Perspective, *Monatsh Chem. - Chem. Monthly* **144(1)**, 59-65. PMID: PMC3747987

D57. D.J. Niedzwiecki, R. Iyer, P.N. Borer and **L. Movileanu**, 2013, Sampling a Biomarker of the Human Immunodeficiency Virus across a Synthetic Nanopore, *ACS Nano* **7(4)**, 3341-3350. PMID: PMC3634884

D56. D.R. Singh, M.M. Mohammad, S. Patowary, J.A. Oliver, **L. Movileanu** and V. Raicu, 2013, Determination of the Quaternary Structure of a Bacterial ATP-Binding Cassette (ABC) Transporter in Living Cells, *Integr. Biol. (Cambridge)* **5(2)**, 312-323. PMID: PMC3558595

D55. J. Liu, A.J. Wolfe, E. Eren, J. Vijayaraghavan, M. Indic, B. van den Berg and **L. Movileanu**, 2012, Cation Selectivity is a Conserved Feature in the OccD Subfamily of *Pseudomonas aeruginosa*, *Biochim. Biophys. Acta Biomembranes* **1818(11)**, 2908-2916. PMID: PMC3424372

D54. D.J. Niedzwiecki, M.M. Mohammad and **L. Movileanu**, 2012, Inspection of the Engineered FhuA $\Delta C/\Delta 4L$ Protein Nanopore by Polymer Exclusion, *Biophys. J.* **103(10)**, 2115-2124. PMID: PMC3512039

D53. B.R. Cheneke, M. Indic, B. van den Berg and **L. Movileanu**, 2012, An Outer Membrane Protein undergoes Enthalpy- and Entropy-driven Transitions, *Biochemistry* **51(26)**, 5348-5358. PMID: PMC3448022

D52. J. Liu, E. Eren, J. Vijayaraghavan, B.R. Cheneke, M. Indic, B. van den Berg and **L. Movileanu**, 2012, OccK Channels from *Pseudomonas aeruginosa* Exhibit Diverse Single-channel Electrical Signatures, but Conserved Anion Selectivity, *Biochemistry* **51(11)**, 2319-2330. PMID: PMC3311111

D51. M.M. Mohammad, R. Iyer, K.R. Howard, M.P. McPike, P.N. Borer and **L. Movileanu**, 2012, Engineering a Rigid Protein Tunnel for Biomolecular Detection, *J. Am. Chem. Soc.* **134(22)**, 9521-9531. PMID: PMC3415594

- D50.** E. Eren, J. Vijayaraghavan, J. Liu, B.R. Cheneke, D.S. Touw, B.W. Lepore, M. Indic, **L. Movileanu** and B. van den Berg, 2012, Substrate specificity within a family of outer membrane carboxylate channels, *PLoS Biol.* **10(1)**, e1001242. PMID: PMC3260308
- D49.** M.M. Mohammad and **L. Movileanu**, 2012, Protein Sensing with Engineered Protein Nanopores, in "Nanopore-Based Technology, *Methods Mol. Biol.*, M.E. Graceva (Ed.), vol. 870, Springer, New York, pp. 21-37. PMID: PMC3708658
- D48.** **L. Movileanu**, 2012, Single-molecule detection of proteins using nanopores, Chapter 25, In: *Frontiers in Sensing – From Biology to Engineering*, F.G. Barth, J.A.C. Humphrey and M.V. Srinivasan (Eds.), First Edition, Springer, Wien, New York, pp. 363-381.
- D47.** B.R. Cheneke, B. van den Berg and **L. Movileanu**, 2011, Analysis of gating transitions among the three major open states of the OmpK channel, *Biochemistry* **50(22)**, 4987-4997. PMID: PMC3107985
- D46.** D.J. Niedzwiecki and **L. Movileanu**, 2011, Monitoring protein adsorption with solid-state nanopores, *J. Vis. Exp.* **58**, e3560, DOI: 10.3791/3560.
- D45.** M.M. Mohammad, K.R. Howard and **L. Movileanu**, 2011, Redesign of a plugged beta-barrel membrane protein, *J. Biol. Chem.* **286(10)**, 8000-8013. PMID: PMC3048687
- D44.** R. Bikwemu, A.J. Wolfe, X. Xing and **L. Movileanu**, 2010, Facilitated translocation of polypeptides through a single nanopore, *J. Phys.: Condens. Matter* **22(45)**, 454117. PMID: PMC3108026
- D43.** D.J. Niedzwiecki, J. Grazul and **L. Movileanu**, 2010, Single-molecule observation of protein adsorption onto an inorganic surface, *J. Am. Chem. Soc.* **132(31)**, 10816-10822. PMID: PMC2917251
- D42.** M.M. Mohammad and **L. Movileanu**, 2010, Impact of distant charge reversals within a robust β -barrel protein pore, *J. Phys. Chem. B* **114(26)**, 8750-8759. PMID: PMC2907733
- D41.** **L. Movileanu**, 2009, Interrogating single proteins through nanopores: challenges and opportunities, *Trends Biotechnol.* **27(6)**, 333-341.
- D40.** S. Biswas, M.M. Mohammad, **L. Movileanu** and B. van den Berg, 2008, Crystal structure of outer membrane protein OmpK from *Pseudomonas aeruginosa*, *Structure* **16(7)**, 1027-1035.
- D39.** C. Chimere, **L. Movileanu**, S. Pezeshki, M. Winterhalter and U. Kleinekathöfer, 2008, Transport at the nanoscale: Temperature dependence of ion conductance, *Eur. Biophys. J.* **38(1)**, 121-125.
- D38.** D. Popescu, **L. Movileanu** and A.G. Popescu, 2008, The behavior of the lipid vesicle under osmotic stress, Chapter 11, *Invited review article*, In: *Mathematical Biology Research Trends*, L.B. Wilson (Ed.), Nova Science Publishers, New York, pp. 275-294.
- D37.** **L. Movileanu**, 2008, Squeezing a single polypeptide through a nanopore, *Soft Matter* (Highlight Article) **4(5)**, 925-931.
- D36.** M.M. Mohammad and **L. Movileanu**, 2008, Excursion of a single polypeptide into a protein pore: simple physics, but complicated biology, *Eur. Biophys. J.* **37(6)**, 913-925.
- D35.** M.M. Mohammad, S. Prakash, A. Matouschek and **L. Movileanu**, 2008, Controlling a single protein in a nanopore through electrostatic traps, *J. Am. Chem. Soc.* **130(12)**, 4081-4088.

- D34.** A.J. Wolfe, M.M. Mohammad, S. Cheley, H. Bayley and **L. Movileanu**, 2007, Catalyzing the translocation of polypeptides through attractive interactions, *J. Am. Chem. Soc.* **129(45)**, 14034-14041.
- D33.** S. Biswas, M.M. Mohammad, D.R. Patel, **L. Movileanu** and B. van den Berg, 2007, Structural insight into OprD substrate specificity, *Nature Struct. Mol. Biol.* **14(11)**, 1108-1109.
- D32.** C.P. Goodrich, S. Kirmizialtin, B.M. Huyghues-Despointes, A. Zhu, J.M. Scholtz, D.E. Makarov and **L. Movileanu**, 2007, Single-molecule electrophoresis of β -hairpin peptides by electrical recordings and Langevin dynamics simulations, *J. Phys. Chem. B* **111(13)**, 3332-3335.
- D31.** Y.H. Jung, H. Bayley and **L. Movileanu**, 2006, Temperature-responsive protein pores, *J. Am. Chem. Soc.* **128(47)**, 15332-15340.
- D30.** **L. Movileanu**, D. Popescu, S. Ion and A.I. Popescu, 2006, Transbilayer pores induced by thickness fluctuations, *Bull. Math. Biol.* **68(6)**, 1231-1255.
- D29.** D. Dinu, M.T. Nechifor and **L. Movileanu**, 2005, Ethanol-induced alterations of the antioxidant defense system in rat kidney, *J. Biochem. Mol. Toxicol.* **19(6)**, 386-395.
- D28.** **L. Movileanu**, J.P. Schmittschmitt, J.M. Scholtz and H. Bayley, 2005, Interactions of peptides with a protein pore, *Biophys. J.* **89(2)**, 1030-1045. PMID: PMC1366589
- D27.** **L. Movileanu** and D. Popescu, 2004, The birth, life and death of statistical pores into a bilayer membrane, *Invited review article*, In: *Recent Research Developments in Biophysics*, vol. 3, Part I, Transworld Research Network, Kerala, pp. 61-86.
- D26.** **L. Movileanu**, S. Cheley and H. Bayley, 2003, Partitioning of individual flexible polymers into a nanoscopic protein pore, *Biophys. J.* **85(2)**, 897-910.
- D25.** D. Popescu, S. Ion, A. I. Popescu and **L. Movileanu**, 2003, Elastic properties of bilayer lipid membranes and pore formation, *Invited review article*, In: *Membrane Science and Technology Series (vol. 7), Planar Lipid Bilayers (BLMs) and Their Applications*, H. Ti Tien and A. Ottova (Eds.), Elsevier Science Publishers, Amsterdam, pp. 173-204.
- D24.** S. Avram, **L. Movileanu**, D. Mihailescu and M.-L. Flonta, 2002, Comparative study of some energetic and steric parameters of the wild type and mutants HIV-1 protease: a way to explain the viral resistance, *J. Cell Mol. Med.* **6(2)**, 251-260.
- D23.** **L. Movileanu**, J.M. Benevides and G.J. Thomas, Jr., 2002, Temperature dependence of the Raman spectrum of DNA. II. Raman signatures of premelting and melting transitions of poly(dA)•poly(dT) and comparison with poly(dA-dT)•poly(dA-dT), *Biopolymers* **63(3)**, 181-194.
- D22.** **L. Movileanu**, J.M. Benevides and G.J. Thomas, Jr., 2002, Determination of Base and Backbone Contributions to the Thermodynamics of Premelting and Melting Transitions in B DNA, *Nucleic Acids Res.* **30(17)**, 3767-3777.
- D21.** G. Miles, Jr., **L. Movileanu** and H. Bayley, 2002, Subunit composition of a bicomponent toxin: staphylococcal leukocidin forms an octameric transmembrane pore, *Protein Sci.* **11(4)**, 894-902. PMID: PMC2373538
- D20.** **L. Movileanu**, and H. Bayley, 2001, Partitioning of a polymer into a nanoscopic protein pore obeys a simple scaling law. *Proc. Natl. Acad. Sci. USA* **98(18)**, 10137-10141. PMID: PMC56928

- D19.** S. Howorka, **L. Movileanu**, O. Braha and H. Bayley, 2001, Kinetics of duplex formation for individual DNA strands within a single protein nanopore. *Proc. Natl. Acad. Sci. USA* **98(23)**, 12996 - 13001. PMID: PMC60813
- D18.** **L. Movileanu**, S. Cheley, S. Howorka, O. Braha and H. Bayley, 2001, Location of a constriction in the lumen of a transmembrane pore by targeted covalent attachment of polymer molecules. *J. Gen. Physiol.* **117(3)**, 239-251. PMID: PMC2225620
- D17.** **L. Movileanu**, S. Howorka, O. Braha and H. Bayley, 2000, Detecting protein analytes that modulate transmembrane movement of a polymer chain within a single protein pore. *Nature Biotechnol.* **18(10)**, 1091-1095.
- D16.** S. Howorka, **L. Movileanu**, X. Lu, M. Magnon, S. Cheley, O. Braha and H. Bayley, 2000, A protein pore with a single polymer chain tethered within the lumen. *J. Am. Chem. Soc.* **122(11)**, 2411-2416.
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G20. D. Popescu, L. Movileanu, F. Pluteanu, S. Avram, D. Marinescu and M.-L. Flonta, 2001, The elastic waves induce the appearance of pores in a lipid bilayer membrane (II), *Romanian J. Biophys.* **11(3-4)**, 163-170.

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G16. L. Movileanu, 1995b, Epithelial transport modelling on sea water fish intestinal cells. II. The steady state condition analysis. *Romanian J. Biophys.* **5**, 125-133.

G15. L. Movileanu, 1995a, Epithelial transport modelling on sea water fish intestinal cells. I. Computing strategy. *Romanian J. Biophys.* **5**, 111-123.

G14. D. Popescu and **L. Movileanu**, 1995, Sensibilitatea proceselor de asociere dintr-un amestec binar de lizofosfolipide la modificarile mediului electrolitic extern. *Buletin SNBC* **23**, 135.

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G11. **L. Movileanu** and I. Ion, 1994, Investigations on some dissipative structures from multi-enzimatic systems. *St. Cerc. Biochim.* **37**, 3-11.

G10. **L. Movileanu**, 1993, Examination of deterministic chaos in biochemical systems. *Anal. Univ. Bucuresti, Fizica* **42**, 7-14.

G9. **L. Movileanu**, 1993, Hopf bifurcation occurrence in a multiply regulated biochemical system. *Romanian J. Biophys.* **3**, 123-127.

G8. **L. Movileanu** and I. Ion, 1993, A computer simulation of the chaotic states in biochemical systems. *Romanian J. Phys.* **38**, 714-724.

G7. **L. Movileanu** and D. Popescu, 1993, Hydrophobic chain-length influence on the selectivity of association processes into single-chain binary mixture. *Rev. Roum. Biochim.* **30**, 115-125

G6. **L. Movileanu** and M.L. Flonta, 1991-1992, The analysis of oscillatory biological systems in two-variable models. *Anal. Univ. Bucuresti, Fizica* **40-41**, 81-88.

G5. **L. Movileanu**, G. Serban, D. Mihailescu, M.-L. Flonta and P.T. Frangopol, 1992, An investigation on the topology of chaos in a multiply regulated biochemical system. *Romanian J. Biophys.* **2**, 77-83.

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G1. A.I. Popescu and **L. Movileanu**, 1990, The primary structure-three dimensional structure correlation in the case of proteins. *Anal. Univ. Bucuresti, Fizica* **39**, 31-40.

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H26. B.R. Cheneke, Bert van den Berg and **L. Movileanu**, 2011, Three-state discrete kinetics of the OpdK protein pore, Proceedings of the 8th International Conference on Flow Dynamics, Tohoku University, 9-11 November, 2011, Sendai, Miyagi, Japan, pp. 466-467.

H25. **L. Movileanu**, 2011, Plenary Lecture, "Engineered Nanopores for Protein Detection," The International Conference "Processes in isotopes and molecules" (PIM-2011), National Institute for Research and

Development of Isotopic and Molecular Technologies (ICNDTIM), Cluj-Napoca, September 29th – October 1st, 2011, Cluj-Napoca, Romania., pp 8.

H24. L. Movileanu, 2011, “Single-molecule science with a nanopore: inspiration from nature,” 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, pp. 46.

H23. D.J. Niedzwiecki and L. Movileanu, 2010, Single-molecule Science with a Nanopore: Inspiration from Nature, Keynote Lecture, Proceedings of the 7th International Conference on Flow Dynamics, Tohoku University, 1-3 November, Sendai, Japan, pp. 392-393.

H22. L. Movileanu, Single-molecule Science with A Nanopore: Inspiration from Nature, The 5th Summer School of Biophysics: “Biosensing with channels 2010: Heading for faster, smaller, smarter biosensors”, August 21st – 27th, 2010, Berder, Rennes, France, pp. 33.

H21. L. Movileanu, Single-molecule Science with A Nanopore: Inspiration from Nature, 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, pp. 22.

H20. L. Movileanu, Single-molecule stochastic sensing of proteins with engineered nanopores, BIT Life Sciences, The 3rd World Congress of Gene-2009: March into New Era of Bio-Economy, December 1-7, 2009, Foshan, China, pp. 104.

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H15. L. Movileanu, M.L. Flonta, D. Mihailescu and P.T. Frangopol, Explanation of the flip-flop diffusion by the selective association of phospholipids into bilayer lipid membranes, 11th Balkan Biochemical and Biophysical Days, 15-17 May, 1997, Thessaloniki, Greece, pp. 9 (abstract in English).

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- H11. L. Movileanu** and D. Popescu, Sensitivity of hydrophobic effects to the changes in external aqueous medium for a single-chain binary mixture, The NATO Workshop "Molecular Dynamics of Biomembranes", 19th June - 1st July, 1995, Cargèse, Corsica, France (abstract in English).
- H10. L. Movileanu** and D. Popescu, Electrostatic forces and lipid-lipid interactions in biological membranes, Young Scientists Programme to the 16th International Congress of Biochemistry and Molecular Biology, 16th-7th September, 1994, New Delhi, India, pp. 24, (abstract in English).
- H9. L. Movileanu** and D. Popescu, Specific interactions and association phenomena into single-chain binary mixtures, contribution to the International FEBS Special Meeting "Biological Membranes", organized by the Federation of European Biochemical Societies, 25th June - 1st July, 1994, Helsinki, Finland, pp. 51 (abstract in English).
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- H7. L. Movileanu** and D. Popescu, Sensitivity of amphiphile molecule association to adjacent electrolytic changes, National Conference of Physics, 13-15 September, 1993, Constantza, Romania, pp. 121 (abstract in Romanian).
- H6. L. Movileanu** and D. Popescu, An investigation on the binary mixture of single-chain amphiphiles into planar monolayers. A 3D approach, Contribution to International Symposium "Dynamics and Function of Biomolecules", 30th July - 2nd August, 1993, Szeged, Hungary, pp. 70 (abstract in English).
- H5. L. Movileanu** and M.L. Flonta, Erratum to BioSystems, 24 (1990) 31-37.
- H4. A.I. Popescu** and **L. Movileanu**, Temporal organization in dissipative structures of biochemical interest, National Conference of Physics, 1990, Cluj-Napoca, Romania, pp. 23 (abstract in Romanian).
- H3. L. Movileanu**, Primary structure-tertiary structure correlation of biological macromolecules through information theory, National Conference of Physics, 1990, Cluj-Napoca, Romania, pp. 17 (abstract in Romanian).
- H2. L. Movileanu**, Aspects of information theory on the study of macromolecules of biophysical interest, Progress in Physics, September, 1989, Oradea, Romania, pp. 601-602 (abstract in Romanian).
- H1. L. Movileanu**, G. Mihailescu and P.T. Frangopol, Oscillations in a multiply regulated enzyme-substrate system and experimental model of membrane. Contribution to the 9th Balkan Biochemical and Biophysical Days, 21-23 May, 1992, Thessaloniki, Greece (abstract in English).

I. Research and Trained Personnel during tenure at Syracuse University (2004-2014)

I0. Senior Research Faculty.

Mohammad M. Mohammad (2012-2014), Research Assistant Professor

I1. Postdoctoral Researchers.

Aiping Zhu (2004-2005) U. Michigan - Ann Arbor

Mohammad M. Mohammad (2005-2012), Syracuse U.

Ajit Mahapatro (2010) – U. New Delhi, India

Noriko Tomita (2011-2013) – Tohoku U., Sendai, Japan

Nan Qin (2011-2012) Florida Solar Energy Centrum, U. Central Florida

I2. Graduate Students

Jiawei Kong (2004-2005)

David Quint (2005) Syracuse U., Stanford U.

Khalil Raja Howard (2008-2011) New York City

David J. Niedzwiecki (2007-2013) U. Pennsylvania

Belete R. Cheneke (2009-2013) Johns Hopkins U. Medical School

Jiaming Liu (2010-2012) – Samsung Corporation – Galaxy R&D, Seattle

Aaron J. Wolfe (2011-)

Avinash Kumar Thakur (2013-)

I3. Technicians

Avinash Kumar Thakur (2012-2013) Syracuse U.

I4. Undergraduate Reserchers

Aaron J. Wolfe (2005-2008)

Auyon J. Ghosh (2008-2010)

Carl P. Goodrich (2005-2007) U. Pennsylvania

Catalin Chimerele (2005) Cambridge University – Cavendish Laboratory

Khalil Raja Howard (2006-2008) New York City

Teresa Murray (2007) Project Management Institute (PMI), Syracuse

Tatyana Koniakhina (2008) – Cornell University Biophysics Program, Ithaca

Danielle Verschueren (2009) REU Biomaterials Student

Robert Bikwemu (2009-2011) AGEP REU student – Colgate University

Benjamin Young (2010-2011)

Hiebin Kwon (2010-2011)

Ryan Devendorf (2011-2012)

Manu Aarul (2011-)

Jeffrey Roberge (2012) REU Biomaterials student

Jaymin Patel (2013) REU Biomaterials student

Katharine Anne Pe Rosiene (2012-)

Joshua Mills (2012-)

I5. High-school Students

Micol Marchetti-Bowick (2004-2005) – Stanford U., Carnegie Mellon U.

Tudor Cisu (2005-2006) – Johns Hopkins U. Medical School, U. Virginia, Harvard Medical School.

Paul Topor (2010-2011) Siena College

Tiberiu Mihaila (2013-)

Articles featuring lead undergraduate authors (together with their citations as in Jan 17th, 2014).

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