# Vassiliy Lubchenko

Department of Chemistry
University of Houston
110 Fleming Building
Houston, TX 77204-5003

832-842-8853 (phone)
713-743-2709 (fax)
vas@uh.edu

## EDUCATION

| | |
|---|---|
| 2002 | Ph.D. in Physical Chemistry (University of Illinois at Urbana-Champaign; Urbana, IL). *Research Advisor:* Professor Peter G. Wolynes |
| 1995 | M.S. in Chemistry (Carnegie Mellon University, Pittsburgh, PA) |
| 1994 | M.S. in Materials Science (Moscow Institute of Physics and Technology, Kiev Division; Kiev, Ukraine) |
| 1992 | B.S. in Physics, Applied Math and Engineering with Honors (Moscow Institute of Physics and Technology; Moscow, USSR) |
| 1988 | Diploma (Physics and Math Specialized Boarding School at Kiev State University; Kiev, USSR) |

## PROFESSIONAL EXPERIENCE

| | |
|---|---|
| 2010–present | Associate Professor of Chemistry (University of Houston)<br>(Joint Appointment in the Department of Physics, University of Houston) |
| 2005–2010 | Assistant Professor of Chemistry (University of Houston) |
| 2003–2005 | Postdoctoral Fellow (Massachusetts Institute of Technology)<br>*Research Advisor:* Professor Robert J. Silbey |
| 2002–2003 | Postdoctoral Associate (University of California at San Diego)<br>*Research Advisor:* Professor Peter G. Wolynes |
| 1996–2002 | Research and Teaching Assistant (University of Illinois at Urbana-Champaign)<br>*Research Advisor:* Professor Peter G. Wolynes |
| 1994–1995 | Research and Teaching Assistant (Carnegie-Mellon University)<br>*Mentors:* Dr. Yu. Dakhnovsky and Professor Rob Coalson |
| 1992–1993 | Research Assistant in X-ray Spectroscopy Lab (Institute of Metal Physics, Ukrainian Academy of Sciences; Kiev, Ukraine)<br>*Mentor:* Dr. V. N. Uvarov |
| 1992–1993 | Research Internship (Institute of General Physics, Soviet Academy of Sciences; Moscow, USSR; Department of Strong Magnetic Fields)<br>*Mentor:* Professor V. G. Veselago |
| 1987 | Research Internship in Mössbauer Spectroscopy lab (Kiev State University; Kiev, Ukraine)<br>*Mentor:* Dr. N. N. Gerasimchuk |

## HONORS AND AWARDS

| | |
|---|---|
| 2011-2013 | Sloan Research Fellowship |
| 2010-2015 | NSF CAREER Award |
| 2008-2011 | Beckman Young Investigator |
| 1997-1998 | *Hovorka* Fellowship, University of Illinois at Urbana-Champaign |
| 1996-1997 | *University* Fellowship, University of Illinois at Urbana-Champaign |

**AFFILIATIONS**

Member of the American Chemical Society.

**PEER-REVIEWED PUBLICATIONS FROM THE UNIVERSITY OF HOUSTON**

*Asterisk * indicates the corresponding author.*

1. "Amorphous chalcogenides as random octahedrally-bonded solids: I. Implications for the first sharp diffraction peak, photodarkening, and Boson peak," A. Lukyanov and V. Lubchenko*, submitted to *J. Chem. Phys.*, **2017**. (22 pp)
2. "The Chemical Bond as an Emergent Phenomenon," Jon C. Golden, Vinh Ho, and V. Lubchenko*, *J. Chem. Phys.*, **2017**, *146*, 174502. (20 pp)
3. "Glass transition imminent, resistance is futile," V. Lubchenko*, *Proc. Natl. Acad. Sci.*, **2017**, *114*, 3289-3291.
4. "Energy Landscapes, Inherent Structures, and Condensed-Matter Phenomena. Frank H. Stillinger. ISBN 978-0-691-16680-3. (Vassiliy Lubchenko, Reviewer.)," V. Lubchenko*, *Am. J. Phys.*, **2016**, *84*, 727-728.
5. "Lack of Dependence of the Sizes of the Mesoscopic Protein Clusters on Electrostatics," M. A. Vorontsova, Ho Yin Chan, V. Lubchenko and P. G. Vekilov*, *Biophys. J.*, **2015**, *109*, 1959-1968.
6. "Pressure in the Landau-Ginzburg functional: Pascal's law, nucleation in fluid mixtures, a meanfield theory of amphiphilic action, and interface wetting in glassy liquids," Ho Yin Chan and V. Lubchenko*, *J. Chem. Phys.*, **2015**, *143*, 124502. (17 pp)
7. "Theory Of The Structural Glass Transition: A Pedagogical Review," V. Lubchenko*, *Adv. Phys*., **2015**, *64*, 283-443.
8. "On the Mechanism of Activated Transport in Glassy Liquids," V. Lubchenko* and P. Rabochiy, *J. Phys. Chem. B,* **2014**, *118*, 13744−13759.
9. "Self-Consistent Elastic Continuum Theory Of Degenerate, Equilibrium Aperiodic Solids," D. Bevzenko and V. Lubchenko*, *J. Chem. Phys.* **2014**, *141*, 174502. (22 pp)
10. "Microscopically Based Calculations Of The Free Energy Barrier And Dynamic Length Scale In Supercooled Liquids: The Comparative Role Of Configurational Entropy And Elasticity," P. Rabochiy, P. G. Wolynes, and V. Lubchenko*, *J. Phys. Chem. B* **2013**, *117*, 15204-15219.
11. "Molecular Binoculars: How to Spatially Resolve Environmental Fluctuations by Following Two

or More Single-Molecule Spectral Trails at a Time," V. Lubchenko* and R. J. Silbey, *J. Phys. Chem. B* **2013**, *117*, 12734-12741.

12. "Microscopic Calculation of the Free Energy Cost for Activated Transport in Glass-Forming Liquids," P. Rabochiy and V. Lubchenko*, *J. Chem. Phys*. **2013**, *138*, 12A534.
13. "Liquid State Elasticity And The Onset Of Activated Transport In Glass Formers," P. Rabochiy and V. Lubchenko*, *J. Phys. Chem. B* **2012**, *116*, 5729.
14. "Ostwald-Like Ripening of the Anomalous Mesoscopic Clusters in Protein Solutions," Y. Li, V. Lubchenko, M. Vorontsova, L. Filobelo, and P. G. Vekilov*, *J. Phys. Chem. B* **2012**, *116*, 10657-10664.
15. "Anisotropy Of The Coulomb Interaction Between Folded Proteins: Consequences For Mesoscopic Aggregation Of Lysozyme," H.-Y. Chen, V. Lankevich, P. G. Vekilov, and V. Lubchenko*, *Biophys. J.* **2012**, *102*, 1934.
16. "Universality Of The Onset Of Activated Transport In Lennard-Jones Liquids With Tunable Coordination: Implications For The Effects Of Pressure And Directional Bonding On The Crossover To Activated Transport, Configurational Entropy And Fragility Of Glassforming Liquids," P. Rabochiy and V. Lubchenko*, *J. Chem. Phys*. **2012**, *136*, 084504.
17. "Quantum Phenomena in Structural Glasses: The Intrinsic Origin of Electronic and Cryogenic Anomalies," V. Lubchenko*, *J. Phys. Chem. Lett.* **2012**, *3*, 1.
18. "Control of the nucleation of sickle cell hemoglobin polymers by free hematin," V. Uzunova, W. C. Pan, V. Lubchenko, P. G. Vekilov*, *Faraday Discussions* **2012**, *159*, 87.
19. "The Use of Dynamic Light Scattering and Brownian Microscopy to Characterize Protein Aggregation," Y. Li, V. Lubchenko, P. G. Vekilov*, *Rev. Sci. Inst.* **2011**, *82*, 053106.
20. "Electronic Structure And The Glass Transition In Pnictide And Chalcogenide Semiconductor Alloys. I: The Formation Of The *pp*σ-Network," A. Zhugayevych and V. Lubchenko*, *J. Chem. Phys.* **2010**, *133*, 234503.
21. "Electronic Structure And The Glass Transition In Pnictide And Chalcogenide Semiconductor Alloys. II: The Intrinsic Electronic Midgap States," A. Zhugayevych and V. Lubchenko*, *J. Chem. Phys.* **2010**, *133*, 234504.
22. "Origin Of Anomalous Mesoscopic Phases In Protein Solutions," W. Pan, P. G. Vekilov, and V. Lubchenko*, *J. Phys. Chem. B.* **2010**, *114*, 7620. COVER ARTICLE.
23. "An Intrinsic Formation Mechanism For Midgap Electronic States In Semiconductor Glasses,"

A. Zhugayevych and V. Lubchenko*, *J. Chem. Phys.* **2010**, *132*, 044508.

24. "Stress Distribution And The Fragility Of Supercooled Melts," D. Bevzenko and V. Lubchenko*, *J. Phys. Chem B*. **2009**, *113*, 16337.
25. "Shear Thinning In Deeply Supercooled Liquids," V. Lubchenko*, *Proc. Natl. Acad. Sci.* **2009**, *106*, 11506.
26. "Competing Interactions Create Functionality Through Frustration," V. Lubchenko*, *Proc. Natl. Acad. Sci.* **2008**, *105*, 10635.
27. "Charge And Momentum Transfer In Supercooled Melts: Why Should Their Relaxation Times Differ?" V. Lubchenko*, *J. Chem Phys.* **2007**, *126*, 174503.
28. "Spectral Diffusion and Drift: Single Chromophore and *En Masse*," V. Lubchenko* and R. J. Silbey*, *J. Chem. Phys.* **2007**, *126,* 064701.
29. "The Microscopic Quantum Theory of Low Temperature Amorphous Solids," V. Lubchenko* and P. G. Wolynes*, *Adv. Chem. Phys.* **2007**, *136,* 95-205.
30. "Theory of Structural Glasses and Supercooled Liquids," V. Lubchenko* and P. G. Wolynes*, *Annu. Rev. Phys. Chem.* **2007**, *58,* 235.
31. "A Universal Criterion of Melting," V. Lubchenko*, *J. Phys. Chem. B* **2006**, *110*, 18779.
32. "Quantitative Theory of Structural Relaxation in Supercooled Liquids and Folded Proteins," V. Lubchenko*, *J. Non-Cryst. Solids*. **2006**, *352*, 4400.

**PEER-REVIEWED PUBLICATIONS FROM GRADUATE & POSTDOCTORAL STUDIES**

33. "Electrodynamics of Amorphous Media at Low Temperatures," V. Lubchenko*, R. J. Silbey and P. G. Wolynes, *Mol. Phys.* **2006**, *104,* 1325.
34. "The Mosaic Energy Landscapes of Liquids and the Control of Protein Conformational Dynamics by Glass-forming Solvents," V. Lubchenko*, P. G. Wolynes, and H. Frauenfelder, *J. Phys. Chem. B* **2005**, *109,* 7488.
35. "Control of Chemical Equilibrium by Noise," V. Lubchenko and R. J. Silbey*, *J. Phys. Chem. B* **2004**, *108*, 19852.
36. "Interrupted Escape and the Emergence of Exponential Relaxation," V. Lubchenko* and R. J. Silbey*, *J. Chem. Phys.* **2004**, *121*, 5958.
37. "Theory of Aging in Structural Glasses," V. Lubchenko* and P. G. Wolynes*, *J. Chem. Phys.* **2004**, *121,* 2852.

38. "Barrier Softening Near The Onset Of Non-Activated Transport In Supercooled Liquids: Implications For Establishing Detailed Connection Between Thermodynamic And Kinetic Anomalies In Supercooled Liquids," V. Lubchenko* and P. G. Wolynes*, *J. Chem. Phys.* **2003**, *119,* 9088.
39. "The Origin of the Boson Peak and Thermal Conductivity Plateau in Low Temperature Glasses," V. Lubchenko* and P. G. Wolynes*, *Proc. Natl. Acad. Sci.,* **2003**, *100*, 1515.
40. "Intrinsic Quantum Excitations of Amorphous Solids," V. Lubchenko* and P. G. Wolynes*, *Phys. Rev. Lett.* **2001**, *87,* 195901.
41. "Long Range Electron Transfer Driven by Two Lasers: Induced Irradiance," Yu. Dakhnovskii*, V. Lubchenko*, and R. Coalson*, *J. Chem. Phys.* **1998**, *109*, 691.
42. "Multiphoton Absorption by Metal-Metal Long Distance Charge Transfer Complexes in Polar Solvents," Yu. Dakhnovskii*, V. Lubchenko*, and R. Coalson*, *J. Chem. Phys.* **1996**, *105*, 9441.
43. "The Effect of Charged Impurities on a Glass Transition in a Polar Medium – Response," Yu. Dakhnovskii* and V. Lubchenko*, **1996**, *105*, 8981.
44. "Light Absorption in Strongly Irradiated Long Range Polar Electron Transfer Systems," Yu. Dakhnovskii*, V. Lubchenko* and R. Coalson*, *Phys. Rev. Lett.* **1996***, 77*, 2917.
45. "False Tunneling" and Multirelaxation Time Nonexponential Kinetics of Electron Transfer in Glasses," Yu. Dakhnovskii*, V. Lubchenko*, and P. G. Wolynes*, *J. Chem. Phys.* **1996**, *104*, 1875.
46. "The Effect of Charged Impurities on a Glass Transition in a Polar Medium," Yu. Dakhnovskii* and V. Lubchenko*, *J. Chem. Phys.* **1996**, *104*, 664.

## BOOKS, CHAPTERS, AND OTHER PUBLICATIONS

47. "Tribute to Peter Wolynes," W. A. Eaton, M. Gruebele, V. Lubchenko, and J. N. Onuchic, *J. Phys. Chem. B* **2013**, *117*, 12669-12671.
48. "Theories of Structural Glass Dynamics: Mosaics, Jamming, and All That," V. Lubchenko and P. G. Wolynes, pp. 341–379 in "Structural Glasses and Supercooled Liquids: Theory, Experiment, and Applications." Eds: P. G. Wolynes and V. Lubchenko, **2012**, Wiley & Sons, Hoboken, NJ.

## INVITED PRESENTATIONS WHILE AT THE UNIVERSITY OF HOUSTON

1. Symposium "Aggregation of Biological Molecules; " Southwest Regional Meeting of the ACS; Galveston, TX; November, **2016**.

2. "Physics of Liquid Matter. Modern Problems; " Kyiv, Ukraine; May, **2016**.
3. Rice University, Physics Colloquium; Houston, TX; February, **2016**.
4. Tulane University, Physics Colloquium; New Orleans, LA; January **2016**.
5. Francqui Symposium on Aggregation of biological molecules: how physical chemistry illuminates physiology and pathophysiology; VUB, Brussels, Belgium; June, **2015**.
6. Center for Advanced Computation and Data Systems, University of Houston, Inaugural talk; Houston, TX; March **2015**.
7. Workshop "Unifying Concepts in Glass Physics VI"; Aspen, CO; February **2015**.
8. CIBR (Computational and Integrative Biomedical Research) Center; Baylor College of Medicine; Houston, TX; April **2014**.
9. American Chemical Society, Southwest Regional Meeting; Waco, TX; November **2013**.
10. Industrial Designers Society of America; Design Odyssey Conference; Houston, TX; November **2013**.
11. University of Maryland, Physical Chemistry Colloquium; College Park, MD; October **2013**.
12. University of Maryland, Statistical Mechanics Seminar; College Park, MD; October **2013**.
13. American Physical Society Meeting, "Precursors to the Folding and Aggregation of Biological Molecules," Boston, MA; February **2012**.
14. Materials Research Society Meeting, Symposium "Nucleation and Growth of Biological and Biomimetic Materials," Boston, MA; December **2011**.
15. Telluride Workshop "Nonequilibrium Phenomena, Nonadiabatic Dynamics and Spectroscopy;" July **2011**.
16. Telluride Workshop "Spontaneous Coherence and Collective Dynamics," July **2011**.
17. University of California San Diego; February **2011**.
18. Louisiana State University; Baton Rouge, LA; Materials Science Colloquium broadcast to consortium with Tulane U, U New Orleans, Louisiana Tech; December **2010**.
19. The 13th International Conference on the Crystallisation of Biological Macromolecules (ICCBM13); Trinity College, Dublin, Ireland; September **2010**.
20. Telluride Workshop "Characterizing Landscapes: From Biomolecules to Cellular Networks;" June **2010**.
21. University of California Davis, Biophysics Colloquium; April **2010**.
22. University of Houston, Physics Colloquium; February **2010**.
23. University of California Irvine, Physical Chemistry Seminar; November **2009**.
24. University of Southern California, Physical Chemistry Seminar; November **2009**.
25. W.M. Keck Center for Interdisciplinary Bioscience Training; Houston, TX; November **2009**.
26. University of Wisconsin Madison, Theoretical Chemistry; October **2009**.
27. University of Maryland, Physical Chemistry Seminar; January **2009**.
28. Boston University; Boston, MA; December **2008**.
29. ACS National Meeting; Philadelphia, PA; September **2008**.

30. ACS Southwest Regional Meeting; Houston, TX; November **2007**.
31. Texas Southern University, Physical Chemistry Seminar; October **2007**.
32. Florida State University, Physical Chemistry Seminar; October **2007**.
33. University of Nevada Reno, Chemistry Colloquium; October **2007**.
34. Gordon Research Conference; South Hadley, MA; June **2007**.
35. Rice University, Chemistry Colloquium; April **2007**.
36. ACS Southwest Regional Meeting; Houston, TX; October **2006**.
37. University of Texas at Austin, Physical Chemistry Colloquium; October **2005**.
38. University of Houston, Physics Colloquium; October **2005**.
39. 5th International Discussion Meeting on Relaxations in Complex Systems; July **2005**; Lille, France.

**INVITED PRESENTATIONS DURING GRADUATE AND POSTDOCTORAL STUDIES**

40. Washington University St. Louis, Physics Colloquium; January **2005**.
41. University of Chicago, James Frank Institute Colloquium; January **2005**.
42. University of Houston, Theoretical Chemistry Seminar; November **2004**.
43. "Glassy States of Matter" Conference at Kavli Institute for Theoretical Physics; Santa Barbara, CA; May **2003**.

**NATIONAL RESEARCH FUNDING**

1. PI: Vassiliy Lubchenko (co-PI: Peter G. Vekilov)
   Sponsor: NSF Molecular and Cellular Biosciences, Grant MCB-1518204
   Title: "Opportunistic complexation and mesoscopic aggregates in protein solutions"
   Amount: $643,003, split between VL and PV
   Duration: 07/15/2015 – 07/14/2018

2. PI: Vassiliy Lubchenko
   Sponsor: NSF Chemistry, Grant Number, Grant CHE-1465125
   Title: "Structure and Electronic Anomalies of Amorphous Chalcogenides"
   Amount: $432,000
   Duration: 04/01/2015 – 03/31/2018

3. PI: Vassiliy Lubchenko (co-PI: Peter G. Vekilov)
   Sponsor: NSF Molecular and Cellular Biosciences, Grant MCB-1244568
   Title: "Kinetically-stabilized mesoscopic protein aggregates"
   Amount: $600,000, split between VL and PV
   Duration: 12/01/2012 – 11/30/2015

4. PI: Vassiliy Lubchenko
   Sponsor: Alfred P. Sloan Foundation
   Amount: $50,000
   Duration: 09/01/2011 – 08/31/2013

5. PI: Vassiliy Lubchenko
   Sponsor: NSF Chemistry, Grant Number, Grant CHE-0956127
   Title: "CAREER Award: Structure and Electronic Anomalies of Vitreous Matter"
   Amount: $554,440
   Duration: 10/01/2010 – 09/30/2015

6. PI: Vassiliy Lubchenko (co-PI: Peter G. Vekilov)
   Sponsor: NSF Molecular and Cellular Biosciences, Grant MCB-0843726
   Title: "Mesoscopic Aggregation of Folded Proteins"
   Amount: $435,000, split between VL and PV
   Duration: 02/01/2009 – 01/31/2012

7. PI: Vassiliy Lubchenko
   Sponsor: Arnold and Mabel Beckman Foundation: Beckman Young Investigator Award
   Title: "Electronic Structure Of Amorphous Matter"
   Amount: $300,000
   Duration: 06/01/2008 – 05/31/2011

8. PI: Vassiliy Lubchenko
   Sponsor: ACS PRF, Type G
   Title: "Charge Transfer in Amorphous Photovoltaics and Energy Storage Media"
   Amount: $50,000
   Duration: 01/01/2008 – 08/31/2010

**TEXAS-BASED RESEARCH FUNDING**

1. PI: Vassiliy Lubchenko
   Sponsor: The Welch Foundation, Grant E-1765
   Title: "Bonding and Structural Degeneracy in Incommensurate Phases and Quasicrystals"
   Amount: $195,000
   Duration: 06/01/2014 – 05/31/2017

2. PI: Vassiliy Lubchenko
   Sponsor: The Welch Foundation, Grant E-1765

Title: "Predicting the Structure of Complex Inorganic Solids"
Amount: $180,000
Duration: 06/01/2014 – 05/31/2017

3. PI: Vassiliy Lubchenko
Sponsor: The Welch Foundation, Grant E-1765
Title: "New Type of Electronic States in Vitreous Chalcogenides and Pnictides"
Amount: $170,000
Duration: 06/01/2011 – 05/31/2014

**LOCAL RESEARCH FUNDING**

*PI: Vassiliy Lubchenko*

1. Sponsor: University of Houston, New Faculty Program
Title: "Electronic Structure Of Amorphous Semiconductors"
Amount: $6,000
Duration: 02/01/2006 – 08/31/2006

2. Sponsor: University of Houston, Small Grants Program
Title: "Electronic Structure Of Amorphous Semiconductors"
Amount: $3,000
Duration: 12/01/2005 – 08/31/2006

3. Sponsor: University of Houston, GEAR Program
Title: "Electronic Structure Of Amorphous Semiconductors"
Amount: $25,000
Duration: 09/01/2006 – 08/31/2007

4. Sponsor: University of Houston, Small Grants Program
Title: "Microscopic Theory Of Aggregation Of Folded Proteins"
Amount: $3,000
Duration: 02/01/2007 – 08/31/2007

5. Sponsor: University of Houston, Summer Undergraduate Research Fellowship
Amount: $2,300 stipend for Ms. Lindsey Gaidousek + $500 IDC
Duration: 06/01/2007 – 07/31/2007

6. Sponsor: University of Houston, Provost Undergraduate Research Scholarship
   Amount: $900 stipend for Ms. Lindsey Gaidousek
   Duration: 09/01/2007 – 12/31/2007

7. Sponsor: University of Houston, Small Grants Program
   Title: "Dynamics of Driven Complex Fluids and Glasses"
   Amount: $3,000
   Duration: 12/01/2008 – 08/31/2008

8. Sponsor: University of Houston, Summer Undergraduate Research Fellowship
   Amount: $3,500 stipend for Mr. Vinh Ho + $300 IDC
   Duration: 06/01/2013 – 07/31/2013

9. Sponsor: University of Houston, Summer Undergraduate Research Fellowship
   Amount: $3,500 stipend for Ms. Nada Qari
   Duration: 06/01/2015 – 07/31/2015

## SERVICE ACTIVITIES

### *Departmental*

| | |
|---|---|
| 1. Physical Chemistry Search Committee | 2014 |
| 2. Inorganic Chemistry Search Committees | 2013 |
| 3. Graduate Admission Committee | 2008–2013 |
| 4. Undergraduate Curriculum Committee | 2006–present |
| 5. Dissertation/Thesis Committee Member | 2005–present |

### *University*

| | |
|---|---|
| 1. Faculty Senate | 2017-present |
| 2. Committee member, F3 Brown Bag Luncheon | 2016 |
| 3. Judge, 1st Annual Graduate Research and Scholarship Projects Day | 2014 |
| 4. College of NSM Governance Committee | 2012–2014 |
| 5. Dissertation/Thesis Committee Member | 2005–present |
| 6. Reviewer for the GEAR Program | 2008–present |

***External***

1. Organizer, Symposium "Non-equilibrium processes in Chemistry, Physics, and Biology," ACS Southwest Regional Meeting; Galveston, TX — November, 2016
2. Judge, Houston Science and Engineering Fair — March 2013-present
3. Organizer, 9 session Symposium "Dynamics and Jamming in Complex Environments," 244$^{th}$ National ACS Meeting; Philadelphia, PA — August 2012
4. Organizer, Southwest Theoretical Chemistry Conference — Fall 2009
5. Review Panelist for *NSF* — 2012-present
6. Review Board member for *Arnold and Mabel Beckman Foundation* — 2016–present
7. Reviewer for Funding Agencies: — 2008–present
   *Arnold and Mabel Beckman Foundation*
   *NSF*
   *DOE*
   *ACS PRF*
   *Israel Science Foundation*
8. Session Chair and Judge, Texas Section of the APS — Fall 2005
9. Organizer, ACS Southwest Regional Meeting; Houston, Tx — Fall 2006
10. Reviewer of Articles for Journals: — Fall 2003–present
    *Journal of American Chemical Society*
    *Proceedings of the National Academy of Sciences*
    *Nature*
    *Nature Materials*
    *Nature Physics*
    *Nature Communications*
    *Physical Review Letters*
    *Physical Review B*
    *Physical Review E*
    *Journal of Physical Chemistry Letters*
    *Journal of Physical Chemistry B*
    *Europhysics Letters*
    *Journal of Chemical Physics*
    *Journal of Non-Crystalline Solids*
    *Biophysical Journal*
    *PLOS Computational Biology*
    *Journal of Theoretical Biology*

*Journal of American Ceramic Society*
*Macromolecules*
*ACS Applied Materials & Interfaces*
*Entropy*
*Philosophical Magazine*
*Bioinformatics*
*Journal of Applied Physics*
*Soft Matter*
*Phys Chem Chem Phys*
*Proceedings of Royal Society A*
*Acta Biomaterialia*
*European Physical Journal E*
*Crystals*

11. Promulgating research including NPR (KUHF 88.7), *UH Press Release*, *The Daily Cougar,* and community newspapers — 2008–present

12. Upward Bound Program Instructor, Urbana Illinois — Summer 1999

**RESEARCH ADVISING**

*Ph.D. Graduates*

| | |
|---|---|
| Dr. Dmytro Bevzenko | 2013 |
| Dr. Ho Yin Chan | 2015 |
| Dr. Jon C. Golden | 2016 |

*Ph.D. Candidates*

| | |
|---|---|
| Mr. Yang He | Fall 2016–present |
| Mr. Hamidreza Shahrokhshahi | Fall 2015–present |
| Mr. Roman Dmitriev | Fall 2014–present |
| Mr. Alexei Lukyanov | Spring 2012–present |
| Mr. Dong-Suk Shin | Fall 2007–Fall 2009 |

*Postdoctoral Associates*

| | |
|---|---|
| Dr. Jon C. Golden | Spring 2017–present |
| Dr. Ho Yin Chan | Fall 2015–present |
| Dr. Dmytro Bevzenko | Fall 2013–present |
| Dr. Pyotr Rabochiy | August 2008–May 2015 |

| | |
|---|---|
| Dr. Andriy Zhugaevych | January 2008–April 2011 |

*Undergraduate Students*

| | |
|---|---|
| Ms. Nada Qari | Fall 2014–present |
| Mr. James Nguyen | Fall 2014–present |
| Mr. Joseph Hutchins | Spring 2014–Spring 2015 |
| Mr. Vinh Ho | Spring 2013–Spring 2015 |
| Mr. Vladimir Lankevich | Summer 2009–Spring 2015 |
| Ms. Lindsey Gaidousek | Spring 2007–Summer 2008 |

*High School Students*

| | |
|---|---|
| Mr. Allen Wang (Bellaire HS) | Spring 2016–present |
| Ms. Carolyn Robert (Clear Springs High School) | Spring 2016-present |
| Ms. Pallavi Mundra (The Woodlands College Park Academy of Science and Technology) | Spring 2016-present |
| Mr. Kutub Gandhi (Cinco Ranch High School) | Spring 2015–present |
| Mr. Zivan Vasquez (The Woodlands College Park Academy of Science and Technology) | Spring 2015–present |
| Ms. Annanya (Anna) Chaturvedi (The Woodlands College Park Academy of Science and Technology) | Spring 2015–present |
| Mr. Vasiliy Pobedinsky (St. John's HS, now at UT Austin) | Summer 2014–Summer 2015 |
| Mr. Kevin Wang (Bellaire HS, now at Johns Hopkins U) | Spring 2013–Summer 2015 |
| Mr. Daksh Kapoor (Kempner HS) | Spring 2013–present |
| Ms. Michelle Chao (DeBakey HS, now at M.I.T.) | Fall 2011–Summer 2013 |
| Ms. Hyunjung (Helen) Jung (Westwood HS, Austin TX) | Summer 2011 |
| Mr. J. Andrew Johnson (Westlake HS, Austin TX) | Summer 2010 |