Resume Roya Zandi 3120 Sawtelle Blvd. #201

Los Angeles, Ca. 90066 Phone: (310) 313-3205 royaz@physics.ucla.edu

EXPERIENCE:

July 2004 -present Postdoctoral scholar, Mentor: Professor Howard Reiss, Department of Chemistry and Biochemistry, University of California, Los Angeles (UCLA).

September 2002 – present Postdoctoral visitor, Mentor: Professor M. Kardar, Department of Physics, Massachusetts Institute of Technology (MIT).

January 2002-July 2004 U.C. President's postdoctoral fellow Mentor: Professor William M. Gelbart. Department of Chemistry and Biochemistry, UCLA.

Spring 1997 - Fall 2001 Research Assistant in Theoretical Solid State Physics, Mentor: Professor Joseph Rudnick, Department of Physics, UCLA.

Spring 1996-Spring 1999 Teaching Assistant in the Physics Department at UCLA.

Summer 1997 Research Assistant in developing the UCLA physics department web site on "Contributions of 20th Century Women to Physics," Under the direction of Professor Nina Byers.

Spring 1993-Spring 1996 Computer Programmer at Akimian Medical Offices, Beverly Hills.

EDUCATION:

Ph. D. Physics, UCLA. Doctoral Thesis with Professor Joseph Rudnick, entitled: "Polyelectrolytes and Nucleosomes". December 2001

B.S. Degree-Physics, *summa cum laude*, California State University Northridge (CSUN). December 1992

PUBLICATION:

Roya Zandi and David Reguera, "Mechanical properties of viral capsids", preprint, (2004).

Michael Slutsky, Roya Zandi, Yacov Kantor and Mehran Kardar, "Apex exponents for polymer--probe interactions", Submitted to Phys. Rev. Lett. (2004), cond-mat/0409055.

Roya Zandi, David Reguera, Robijn Bruinsma, William Gelbart and Joseph Rudnick, "Origin of icosaheral symmetry in viruses", Proceedings of the National Academy of Sciences USA, 101, 15549 (2004).

Roya Zandi, Joseph Rudnick and Mehran Kardar, "Casimir forces, surface fluctuations and thinning of superfluid films", Phys. Rev. Lett. 93, 155302 (2004).

Roya Zandi, Ramin Golestanian, and Joseph Rudnick, "Electromechanical stiffening of rods and tubes", Applied Physics Letters 84, 5467 (2004).

R. Bruinsma, W. Gelbart, D. Reguera, J. Rudnick, and R. Zandi, "Viral self-assembly as a thermodynamic process", Phys. Rev. Lett., 90, 248101 (2003)

Roya Zandi, Yacov Kantor and Mehran Kardar, "Entropic competition between knots and slip-links," ARI, Bull. ITU, 53, 6 (2003). (cond-mat/0306587)

Roya Zandi, David Reguera, Joseph Rudnick and William M. Gelbart, "What drives the translocation of stiff chains?", Proceedings of the National Academy of Sciences USA, 100, 8649 (2003)

Roya Zandi, Joseph Rudnick and Ramin Golestanian, "Anomalous bending of a Polyelectrolyte", Physical Review E 67, 061805 (2003)

Roya Zandi, Joseph Rudnick and Ramin Golestanian "Probing Polyelectrolyte elasticity using radial distribution function", Physical Review E 67, 021803 (2003)

Roya Zandi, Joseph Rudnick and Ramin Golestanian "Radial distribution of Polyelectrolytes", European Physical Journal E 9, 41 (2002)

Roya Zandi, Joseph Rudnick, "Constraints, histones, and the 30-nm spiral", Physical Review E, 64, 51918 (2001).

AWARDS/HONORS:

- UC President's Postdoctoral Fellowship 2002-2004
- Dissertation Year Fellowship, UCLA 2000-2001
- Research Mentorship Fellowship, UCLA 1999-2000,
- Outstanding Teaching Award, Physics Department, UCLA 1997-1998.

- Outstanding Scholarly and Research Work Award, Physics Department, UCLA Fall 1996-1997,

- Physics Department Fellowship, UCLA 1995-1996,
- Graduate Opportunity Fellowship, UCLA 1995-1996,
- Outstanding Senior Award, Physics Department, CSUN FALL 1992.
- Outstanding Junior Award, School of Science and Mathematics, CSUN, Spring 1991.
- Outstanding Achievement in Writing Award, English Department, CSUN, 1991.
- Honored at the Honors Convocation, "A Heritage in Excellence",

Received medals for outstanding student, CSUN, Spring 1991, 1992.