

Department of Physics, and
 Digital Technology Center,
 University of Minnesota
 116 Church Street SE,
 Minneapolis, MN 55455
 Phone: (612)624-7542

1225 LaSalle Avenue #2007
 Minneapolis, MN 55403

Phone: (612)371-4698

E-mail: grosberg@physics.umn.edu
 Web: <http://webusers.physics.umn.edu/~GROSBERG>

Education: 1982: Doctor of Sciences, Phys. & Math. from Moscow State University;
 1975: Ph.D., Supervisor Prof. Ilya Lifshitz, from Inst. for Phys. Problems;
 1972: M.Sc. from Moscow State University.

Employment: University of Minnesota, Department of Physics: 1999-: Professor.
 MIT, Department of Physics: 1993-99: Visiting scientist.
 Moscow Physical-Technical Institute: 1989-93: Professor of Biophysics.
 Institute of Chemical Physics, Russian Ac. Sci.: 1990-: Head of the Sector;
 1972-90: from Young to Leading Researcher.

Honors: USSR Prize in Physics for Young Scientists, 1982;
 Fellow, American Physical Society, 2003;
 Fellow, Institute of Physics, London, 2004;
 Humboldt Award for Senior US scientists.

Research: *Theoretical physics of biopolymers* (DNA and protein folding and evolution, heteropolymers, phase transitions, knots, statistics of DNA and protein sequences, etc.).
Theory of polymers (phase transitions, polymer networks, polyelectrolytes and polyampholytes, liquid-crystalline ordering, etc.).
Related general questions of biophysics and statistical physics (neural networks, prebiotic evolution, etc.).

Papers: ~ 200 scientific publications (40 in last 5 years), 15 reviews. List of publications is available from <http://webusers.physics.umn.edu/GROSBERG/list.pdf>

Talks: ~ 50 invited talks at conferences, seminars, and colloquia in the last 5 years. List is available.

Books:

- *Statistical Physics of Macromolecules* – Moscow, Nauka, 1989 (*in Russian*)
 – New York, AIP Press, 1994
- *Physics in the World of Polymers* – Moscow, Nauka, 1989 (*in Russian*)
- *Giant Molecules: here, there, and everywhere...* – Academic Press, 1997
- Editor: *I.M.Lifshitz and Cond. Matter Theory* – Phys. Reports, v. 288, Elsevier, 1997.
- Editor: *Theor. & Math. Models in Polym. Res.* – Academic Press, 1998.
- *Lectures on Disordered Polymers* – Cambridge Univ Press (*to be published*)

Students:

A. Zhestkov	PhD 1980	Associate Professor, Physics, Chelyabinsk University.
E. Shakhnovich	PhD 1981	Professor, Chemistry, Harvard University.
S. Nechaev	PhD 1987	Leading Researcher, Landau Inst of Theor Physics, and CR1, Inst de Physique Nucleaire, Orsay
D. Kuznetsov	PhD 1987	Research Associate, Manchester, UK.
E. Kaganova	PhD 1989	Massachusetts General Hospital, Boston, MA.
D. Pakhomov	PhD 1989	Research manager, Pharmaceutical Company, Moscow.
I. Gabashvili	PhD 1991	Computational bioscience researcher, Hewlett-Packard, California.
N. Khroustova	PhD 1994	Leading Researcher, Inst. Biochemical Physics, Moscow.
V. Pande	PhD 1995	Associate Professor, Chemistry, Stanford.
R. Du	PhD 1999	Fellow, UCSF Medical School.
J. Chuang	PhD 2002	Assistant Professor, Biology, Boston College.
G. Estevez	MSc 2002	Grad. student, Univ. Minnesota Chemistry Dept.
D. Ohledorf	MSc 2004	Univ. Minnesota Medical School.
R. Lua	PhD 2005	NIST Researcher
N. Moore	PhD 2006	Assistant Professor of Physics, Winona State

Service:

- *Journal of Physics A: Math. & Gen.*, Editorial Board member
- *Physica A*, associate editor
- *Co-organized meetings* “Coulomb Effects in Biological Physics” (Minneapolis, 2001),
“Biological Physics” (Aspen, 2002),
“Coulomb Effects in Chemical and Biological Physics” (Minneapolis, 2004),
“Physics Inspired by Biology” (Aspen, 2006).
- Referee in much more journals and grant agencies than I would ever want

Teaching:

- 5041 “*Mathematical Methods in Physics*” (2000, 2001, 2003, 2004)
- 4211 “*Introduction to Solid State Physics*” (2001, 2002)
- 4911/5081 “*Introduction to Biopolymer Physics*” (2002, 2003, 2005, 2006)
- 1201 “*Introductory Physics for Life Sciences*” (2004, 2005)

Personal:

Date and place of birth: February 2, 1949; Moscow, USSR.
Marital status: Married, two children.