

CURRICULUM VITAE

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EDUCATION: M.Sc. in Chemistry, University of Warsaw, Poland, 1974
Ph.D. in Chemistry, University of Warsaw, Poland, 1979
Ph.D. Thesis entitled: "Computer Modeling of Radical Polymerization in Solution"
Habilitation Thesis (1988) entitled: "Phase Transitions in Polymeric Systems.
Applications of the Monte Carlo Method"

RESEARCH: Theoretical Chemistry. Theory of polymers and biopolymers. Phase transitions in polymeric systems. Dynamics of polymer melts and solutions. Theory of protein folding. Theory of protein structure and function. Computer simulations of complex biopolymer systems. Structural bioinformatics. Computational biology. Molecular docking in drug design,

PROFESSIONAL EXPERIENCE:

- 1998 – Head of Laboratory of Theory of Biopolymers, Department of Chemistry, University of Warsaw, Poland
2004 – 2005 Adjunct Professor, L. H. Baker Center for Bioinformatics and Biological Statistics, Iowa State University, Ames, Iowa
2002 – 2003 Professor, State University of New York at Buffalo, Center of Excellence in Bioinformatics, Buffalo, State of New York.
1999 – 2002 Professor, Donald Danforth Plant Science Center, Saint Louis, Missouri
1993 – 1999 Associate Professor of The Scripps Research Institute, Department of Molecular Biology, La Jolla, California.
1991 – 1993 Adjunct Member of The Scripps Research Institute, Department of Molecular Biology, La Jolla, California.
1990 – 1991 Visiting Research Associate, The Scripps Research Institute, Department of Molecular Biology, La Jolla, California.
1989 – 1991 Director of Computational Chemistry Laboratory, Department of Chemistry, University of Warsaw, Poland.
1985 – 1989 Visiting Associate Professor, Department of Chemistry, Washington University, St. Louis, Missouri.
1989 – Professor of Chemistry, Department of Chemistry, University of Warsaw, Poland.
1979 – 1989 Assistant Professor of Chemistry (Adiunkt), University of Warsaw, Poland.
1974 – 1979 Research Assistant, Department of Chemistry, University of Warsaw, Poland.

HONORS AND AWARDS:

- 2011 – Gold Cross of Merit awarded by the President of Poland.
2009 – Prize of Foundation for Polish Science in life science and medicine.
2008 – Jan Zawidzki medal of Polish Chemical Society.
1995 – International Scholar's Award of the Howard Hughes Medical Institute (1995-2000).
1994 – Swietoslawski Award for The Best Science Done in 1984-1989, University of Warsaw, Poland.
1992 – Prize of Polish Ministry of Higher Education for Outstanding Work in Chemistry.
1990 – Prize of Polish Ministry of Higher Education for the best Habilitation Thesis.
1984 – Polish Academy of Sciences Prize for Most Outstanding Work in Chemistry.
1979 – Prize of Polish Ministry of Higher Education for the outstanding Ph.D. Thesis.

PATENTS:

1. USA Patent No. 5265030 issued 11/23/1993 "System and method for determining three-dimensional structure of proteins" Andrzej Kolinski and Jeffrey Skolnick, inventors.
2. WO Patent (World Intellectual Property Organization) No. 1998053407, issued 12/17/1998 "Prediction of relative binding motifs of biologically active peptides and peptide mimetics" Jeffrey Skolnick, Mariusz Milik and Andrzej Kolinski, inventors.
3. USA Patent No. 5933819 issued 8/3/1999 "Prediction of relative binding motifs of biologically active peptides and peptide mimetics" Jeffrey Skolnick, Mariusz Milik and Andrzej Kolinski, inventors.
4. WO Patent No. 2000045334 issued 8/4/2000 "Protein modeling tools" Jeffrey Skolnick and Andrzej Kolinski, inventors.
5. EP Patent (European Patent Office) No. 1021771 issued 7/29/2000 "Prediction of relative binding motifs of biologically active peptides and peptide mimetics" Jeffrey Skolnick, Mariusz Milik and Andrzej Kolinski, inventors.
6. USA Patent No. 9982488 issued 10/17/2001 "Protein modeling tools" Jeffrey Skolnick and Andrzej Kolinski, inventors.
7. EP Patent No. 1163639 issued 12/17/2001 "Protein modeling tools" Jeffrey Skolnick and Andrzej Kolinski, inventors.

PUBLICATIONS:

1. A. Orszagh, A. Kolinski, P. Romiszowski, "Computer Modeling of Radiation-Induced in-Source Solid-State Polymerizations", *Polymer* **20**:113 (1979).
2. A. Orszagh, J. Les, A. Kolinski, "Monte Carlo Method for Statistical Thermodynamics of Polymer Chains", *Acta Physica Polonica A***58**: 369-375 (1980).
3. B. Kowalski, T. Kasprzycka-Guttman, A. Kolinski, "Molar Excess Enthalpies and Volumes of Mixtures of 2,4,6-trimethylopyridyne with some Aliphatic Alcohols", *Polish J. Chem.* **54**:1995 (1980).
4. A. Orszagh, A. Kolinski, J. Duda, "Monte Carlo Study of Concentrated Polymer Solutions", *Acta Physica Polonica A***59**:839 (1981).
5. P. Romiszowski, A. Kolinski, "Monte Carlo Simulation of Radiation-Induced Solid State Polymerization", *Polymer* **23**:1226 (1982).
6. A. Kolinski, A. Sikorski, "Monte Carlo Study of Star-Branched Polymers on the Tetrahedral Lattice. I. Conformation of the Macromolecule", *J. Polym. Sci. Polym. Chem. Ed.* **20**:3147-3154 (1982).
7. W. Pawlowski, A. Kolinski, "Water Contents and Calculation of Equilibrium Constraints in Benzene Phase on System Water - Benzene - (-OH, -COOH, -NH₂, -NO₂, - C1) Benzene Derivative", *Polish J. Chem.* **56**:1169-1173 (1982).
8. A. Sikorski, A. Kolinski, "Monte Carlo Study of Star-Branched Polymers on the Tetrahedral Lattice. II. Statistical Thermodynamics of Single Macromolecules", *J. Polym. Sci. Polym. Chem. Ed.* **22**: 97-106 (1984).
9. A. Kolinski, P. Romiszowski, "Monte Carlo Study of Dynamics of the Multichain Polymer System on the Tetrahedral Lattice", *J. Chem. Phys.* **79**:1523-1526 (1984).
10. A. Kolinski, "On the Entropy of the Multichain Athermal Lattice Systems", *J. Polym. Sci. Polym. Lett. Ed.* **22**:407-411 (1984).
11. A. Kolinski, "Some Properties of Rigid Cores with Flexible Tails-Monte Carlo Simulation of 2-dimensional Lattice Systems", *Chem. Phys. Letters* **116**:160-164 (1985).
12. A. Kolinski, J. Skolnick and R. Yaris, "Monte Carlo Dynamics of Diamond Lattice Multichain System", Proceedings of the 1985 La Jolla Workshop on Polymer Flow Interaction. *AIP Conference Proceedings*, No. **137** (Y. Rabin, ed.), 1985, 241.
13. A. Kolinski, J. Skolnick, and R. Yaris, "On the Short Time Dynamics of Dense Polymeric Systems and the Origin of the Glass Transition: A Model System", *J. Chem. Phys.* **84**:1922-1931 (1986).
14. A. Kolinski, J. Skolnick and R. Yaris, "Monte Carlo Study of Local Orientational Order in a Semiflexible Polymer Melt Model", *Macromolecules* **19**:2550-2560 (1986).
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16. A. Kolinski, J. Skolnick and R. Yaris, "Monte Carlo Simulations on an Equilibrium Globular Protein Folding Model", *Proc. Natl. Acad. Sci., USA* **83**:7267-7271 (1986).

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