Curriculum Vitae –Sefika Banu Ozkan

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EDUCATION

Ph.D. in **Chemical Enginering , 1997-2001**
Bogazici University**,** Istanbul, Turkey
Thesis: ”Analysis of Folding Kinetics for Simplified Models.”

M.S. in **Chemical Engineering , 1995-1997.**
Bogazici University, Istanbul Turkey
Thesis:”Identification of Native Conformations of Proteins Using a Low Resolution Model”

B.S. Honors in **Chemical Engineering, 1991-1995.**
Bogazici University, Istanbul, Turkey

RESEARCH POSITION

- **2003-2006 Postdoctoral Fellow** Department of Pharmaceutical Chemistry University of California San Francisco
  Adviser: Ken A. Dill
- **2001-2003 Research Associate** Department of Computational Biology University of Pittsburg Medical School
  Adviser: Hagai Meirovitch
- **2001 Summer Visiting Researcher** Department of Computational Biology University of Pittsburg Medical School
  Adviser: Ivet Bahar

- **1999-2001 Visiting Scholar** Department of Pharmaceutical Chemistry University of California San Francisco
  Adviser: Ken A. Dill
- **Summer 1996 Visiting Scholar** Stevens Institute of Technology Department of Chemical and Polymer Engineering
  Adviser : Dilhan Kalyon

AWARDS

- Best Ph.D thesis Prize, awarded by Bogazici University, 2001
- Integrated Ph.D Program Fellowship from Scientific and Technical Research Council (TUBITAK) of Turkey, 1999 - 2002

TEACHING EXPERIENCE

- **Fall Quarter 2005 Lab Instructor University of California San Francisco Department of Pharmaceutical Chemistry**

  Teaching instructor for Chem111 Thermodynamics Lab.

- **1995-2001 Teaching Assistant, Bogazici University , Department of Chemical Engineering**

  Teaching assistant of the undergraduate and graduate classes, labs covering physical chemistry, unit operations, modeling of biopolymer and polymers.

PUBLICATIONS

1. Ozkan SB, Wu A G. , Chodera JD, Dill KA " Protein Folding by Zipping and Assembly" in press Proc. Natl. Acad. Sci. USA

2. Ghosh K, Ozkan SB, , Dill KA "The Ultimate Speed Limit of Protein Folding is Conformational Searching" under review J. Am. Chem. Soc.

3. Chodera, JD, Wu A, Ozkan SB and Dill KA, "Are Molecular Mechanics Forcefields Capable of Protein Structure Prediction" under review J. Chem. Theory Comput.

4. Ozkan SB and Meirovitch H, 'Conformation Search of Peptides and Proteins:" The Monte Carlo Minimization with Adaptive Bias Applied to Hepta-Peptide Deltorphin', *Journal of Computational Chemistry* (2004), 25:565-572.

5. Ozkan SB, Kirca S and Haliloglu T,"Unfolding Events of Chymotrypsin Inhibitor 2 Revealed by off-lattice Monte Carlo Simulations and their Consistency from Structure-Based Analysis of Conformations", *Polymers* (2004), 45 :581-595.

6. Ozkan SB and Meirovitch H, "Efficient Conformational Search Method for Peptides and Proteins: Monte Carlo Minimization with an Adaptive Bias"*, Journal of Physical Chemistry* (2003), 107: 9128-9131.

7. Ozkan SB, Dill KA and Bahar I, "Computing the Transition State Populations in Simple Protein Models", *Biopolymers* (2003), 68: 35-46.

8. Ozkan SB, Dill KA and Bahar I, "Fast-Folding Protein Kinetics, Hidden Intermediates and the Sequential Stabilization Model", *Protein Science* (2002), 11:1958-1970

9. Ozkan SB, Bahar I and Dill KA, "Nonclassical ϕ-values in Protein Folding Kinetics", *Nature Structural Biology* (2001) 98: 765-767, (2001).

10. Ozkan B and Bahar I, " Recognition of Native Structure from a Complete Enumaration of Low Resolution Conformation with Constraints*" Proteins Structure Function and Genetics* (1998), 32: 211-222.

INVITED PRESENTATIONS

1. Shell MS, Ozkan SB, Voelz V, Wu A, Coutsias A, Chodera J, Ritterson R , Cordes S, K. Dill "Physics-Based Protein Folding by Zipping and Assembly" CASP Meeting, November 26th-November 30th 2006, Asilomar, California. (poster presentation)

2. Ozkan SB, Wu AG, Chodera JDC and Dill KA "Using Protein Physics to Guide Protein Structure Prediction", Biophysical Meeting, February18-23, 2006, Salt Lake City, Utah .

3. Ozkan SB, Ghosh K and Dill KA "Using Protein Physics to Guide Protein Structure Prediction", Biophysical Meeting, February18-23, 2006, Salt Lake City, Utah

4. Ozkan SB and Dill KA " Protein Folding Principles" Second Symposium on Proteins Universidad Autonoma Metropolitana Iztapalapa, Octoveber 19-21 Mexico City Mexico (invited speaker)

5. Ozkan SB and Dill KA "Using the Physics of Protein Folding to Guide Protein Folding" Biochemistry Seminars, April 18, 2005 San Francisco State University San Francisco. (invited speaker)

6. Ozkan SB, Ghosh K and Dill KA "Mining the Energy Landscape of Parameters, from Two-State Protein Folding Experiments" 49th Biophysical Society Meeting, Long Beach, February, 2005. (poster presentation)

7. Ozkan SB and Dill KA “Using the Physics of Protein Folding to Guide Conformational Searching” as an invited speaker, 2nd Bioligical Language Conference, November 18-19, 2004 Carnegie Mellon University, Pittstburgh.(invited speaker)

8. Ozkan SB and Dill KA “ Protein Folding by Zipping October 29 Molecular Dynamics Discussion University of California San Francisco, San Francisco

9. Ozkan SB and Dill KA, “Folding of Simple Protein Models :Relating Micro-paths to Macro paths” 48th Annual Biophysical Society Meeting, Baltimore February 2004.(poster presentation)

10. Ozkan SB and Meirovitch H, “Efficient Conformational Search Method for Peptides and Proteins, Science 2002 Meeting in University of Pittsburgh Pittsburgh, September 2002. (poster presentation)

11. Ozkan SB , Folding Kinetics of Proteins, in NIH, Maryland June 2002.(invited speaker)

12. Ozkan SB, Kirca S and Haliloglu T., “Unfolding of Chymotrypsin Inhibitor 2 by Coarsed Grain Simulations”4th International Conference on Molecular Structural Biology, Vienna Austria, September 2001. (poster presentation)

13. Ozkan SB, Dill KA, Bahar I, “"Subcooperative Folding Events Revealed by Complete Analysis of Folding Kinetics for Simplified Model Proteins", in Protein Society Meeting, San Diego, USA, August, 2000.(poster presentation)

14. Ozkan SB and Bahar I, “"Vibrational Dynamics of cAMP Kinases", Computational Biophysics 2000, Nice France, July, 2000.(poster presentation)

15. Ozkan SB, Keskin O, and Bahar I, " Recognition of Native Structure from a Complete Enumaration of Low Resolution Conformation with Constraints”, ", 8th European Congress on Biotechnology, August 1997, Budapest, Hungary. (poster presentation)

16. Ozkan SB and Bahar I, “Vibrationa Dynamics of CAMP Kinase Proteins by Gaussian Network Model” International Chemical Physics III October 1998, Bogazici University, Istanbul, Turkey.(oral presentation)

17. Keskin O, Ozkan SB, and Bahar I, "Side Chain Packing in Protein Structures", 8th European Congress on Biotechnology, August 1997, Budapest, Hungary. (poster presentation)

18. Ozkan SB and Bahar I, " Recognition of Native Structure from a Complete Enumaration of Low Resolution Conformation with Constraints”, Statistical Physics IV , Temmuz 1997, Istanbul Technical University, Istanbul, Turkey.(oral presentation)

COURSE ATTENDED

- October 2001 Artificial Intelligence and Heuristic Methods for Bioinformatics Workshop, San Miniato, Italy
- October 1998, Homology Modeling Course at EMBL, Germany