

**BIOGRAPHICAL SKETCH**

Provide the following information for the key personnel in the order listed for Form Page 2.  
Follow the sample format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME		POSITION TITLE	
Sucheta, Artur		Computer Programmer	
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Jagiellonian University, Krakow, Poland	M.Sc.	1983	Chemistry
Univ. of Connecticut, Storrs, CT	Ph.D.	1991	Chemistry

**A. Positions and Honors****Professional Experience**

08/2002-present	Research Assistant Professor, Dartmouth Medical School, NH
04/2001-07/2002	Sr. Research Scientist, Luna Innovations, Blacksburg, VA
12/1999-01/2001	Research Scientist, Roche Diagnostics, Indianapolis, IN
08/1998-11/1999	Research Assistant Professor, Dartmouth Medical School, NH
06/1993-08/1998	Assistant Research Chemist, U. of California, Santa Cruz, CA
07/1990-05/1993	Postgraduate Researcher, U. of California, Irvine, CA
08/1984-06/1990	Graduate Assistant, U. of Connecticut, CT

**Honors and Awards**

1989	U. of Connecticut Res. Foundation Dissertation Fellowship
1985	Charles E. Waring Award

**B. Peer Reviewed Publications**

- Sucheta, A. and Rusling J.F. Removal of Parameter Correlation in Nonlinear Regression. Lifetimes of Aryl Halide Anion Radicals from Potential-Step Chronocoulometry *Journal of Physical Chemistry*, 1989, 93, 5796-5802.
- Iwunze, M.O.; Sucheta, A. and Rusling, J.F. Bicontinuous Microemulsions as Media for Electrochemical Studies *Analytical Chemistry*, 1990, 62, 644-649.
- Sucheta, A. and Rusling J.F. Effect of Background Charge on Estimating Diffusion Coefficients by Chronocoulometry at Glassy Carbon Electrodes *Electroanalysis*, 1991, 3, 735-739.
- Sucheta, A.; Haque, I. and Rusling, J.F. Dechlorination of 9-Chloroanthracene in an Adsorbed Film of Cationic Surfactant on an Electrode *Langmuir*, 1992, 8, 1633-1636.
- Butt, J.N.; Sucheta, A.; Armstrong, F.A.; Breton, J.; Thomson, A.J. and Hatchikian, E.C. Binding of Thallium(I) to a [3Fe-4S] Cluster: Evidence of Rapid and Reversible Formation of [Tl3Fe-4S]<sup>2+</sup> and [Tl3Fe-4S]<sup>1+</sup> Centers in a Ferredoxin *Journal of the American Chemical Society*, 1991, 113, 8948-8950.
- Sucheta, A.; Ackrell, B.A.C.; Cochran, B. and Armstrong, F.A. Diode-like Behaviour of a Mitochondrial Electron-transport Enzyme *Nature* 1992, 356, 361-362.
- Armstrong, F.A.; Butt, J.N. and Sucheta, A. Voltammetric Studies of Redox-active Centers in Metalloproteins Adsorbed on an Electrode in *Methods of Enzymology* Vol. 227, Metallobiochemistry, Part D, Riordan, J.F. and Vallee, B.L. (Eds.), 1993.
- Sucheta, A; Weiner, J.; Cammack, R. and Armstrong, F.A. Reversible Electrochemistry of Fumarate Reductase Immobilized on an Electrode Surface - Direct Observation of Redox Centers and Catalytic Activity by Voltammetric Methods *Biochemistry*, 1993, 32, 5455-5465.
- Butt, J.N.; Sucheta, A.; Armstrong, F.A.; Breton, J.; Thomson, A.J. and Hatchikian, E.C. Voltammetric Characterization of Rapid and Reversible Binding of an Exogenous Thiolate Ligand at a [4Fe-4S] Cluster in Ferredoxin III from *Desulfovibrio africanus* *Journal of the American Chemical Society*, 1993, 115, 1413-1421.

10. Ackrell, B.A.C., Armstrong, F.A., Cochran, B., Sucheta, A. and Yu, T. Classification of Fumarate Reductases and Succinate Dehydrogenases Based upon Their Contrasting Behaviour in the Benzyl Viologen/Fumarate Assay *FEBS Letters* 1993, 326, 92-94.
11. Armstrong, F.A., Sucheta, A., Ackrell, B.A.C. and Weiner, J.H. Reversible and Gated Electrocatalysis by Electron-Transport Enzymes Adsorbed on Electrodes *Proceedings of 183rd Meeting of the Electrochemical Society, Inc., Honolulu, HI*, 1993.
12. Butt J.N., Sucheta, A., Martin L.L., Shen B.H., Burgess, B., Armstrong, F.A. and Stephens, P. Voltammetric Study of Proton-Gated Electron Transfer in a Mutant Ferredoxin - Altering Aspartate to Asparagine Blocks Oxidation of the [3Fe-4S] Cluster of *Azotobacter vinelandii* Ferredoxin-I *Journal of the American Chemical Society*, 1993, 115, 12587-12588.
13. Einarsdóttir, Ó., Georgiadis, K.E. and Sucheta, A. Intramolecular Electron Transfer and Conformational Changes in Cytochrome *c* Oxidase *Biochemistry*, 1995, 34, 496-508.
14. MacArthur, R; Sucheta, A; Chong, F. and Einarsdóttir, Ó. Photodissociation of a ( $\mu$ -Peroxo)( $\mu$ -Hydroxo)Bis[Bis(Bipyridyl) Cobalt(III)] Complex — A Tool to Study Fast Biological Reactions Involving O<sub>2</sub> *Proceedings of the National Academy of Sciences USA*, 1995, 92, 8105-8109.
15. Sucheta, A. Correlations Between Parameters and Other Convergence Problems. Error Surfaces. In Rusling, J.F., Kumosinski, T.F. *Nonlinear Computer Modeling of Chemical and Biochemical Data* Academic Press, Inc. 1996.
16. Hirst, J.; Sucheta, A.; Ackrell, B.A.C. and Armstrong, F.A. Electrocatalytic Voltammetry of Succinate Dehydrogenase: Direct Quantification of the Catalytic Properties of a Complex Electron-transport Enzyme *Journal of the American Chemical Society* 1996, 118, 5031-5038.
17. Sucheta, A., Georgiadis, K., and Einarsdóttir, Ó. The Mechanism of Cytochrome *c* Oxidase-Catalyzed Reduction of Dioxygen to Water: Evidence for Peroxy and Ferryl Intermediates at Room Temperature *Biochemistry* 1997, 36, 554-565.
18. Brooks, J.L., Sucheta, A., and Einarsdóttir, Ó. Light-Induced Spectral Changes in Fully Oxidized Cytochrome *c* Oxidase in the Presence of Oxygen *Biochemistry* 1997, 36, 6336-6342.
19. Sucheta, A., Szundi, I., and Einarsdóttir, Ó. Intermediates in the Reaction of Fully Reduced Cytochrome Oxidase with Dioxygen *Biochemistry* 1998, 37, 17905-17914.
20. Paula, S., Sucheta, A., Szundi, I., and Einarsdóttir, Ó. Proton and electron transfer during the reduction of molecular oxygen by fully reduced cytochrome *c* oxidase: a flow-flash investigation using optical multichannel detection. *Biochemistry* 1999, 38:3025-3033.
21. Howe L, Sucheta A, Einarsdottir O, Zhang JZ. Time-resolved studies of the excited-state dynamics of meso-tetra(hydroxyphenyl)chlorin in solution. *Photochem. Photobiol.* 1999, 69, 617-623.
22. Einarsdóttir, Ó., Szundi, I., Van Eps, N, and Sucheta, A., J. P(M) and P(R) forms of Cytochrome *c* Oxidase have Different Spectral Properties. *J. Inorg. Biochem.* 2002, 91, 87-93.
23. Walczak, T., Lesniewski, P., Salikhov, I., Sucheta, A., Szybinski, K. and Swartz, H.M., L-Band EPR Spectrometer for the Use In Vivo and in the Studies of Aqueous Biological Samples. *Rev. Sci. Instr.* Submitted 2004
24. Lesniewski, P., Sucheta, A., and Swartz, H.M. UFH Multiquantum Spectrometer. *Rev. Sci. Instr.* Submitted 2004.
25. Walczak, T., Lesniewski, P., Grinberg, O.Y., Sucheta, A. and Swartz, H.M. Implantable Resonators – A New Direction for In Vivo Application of EPR Spectroscopy. *In Preparation* 2004.