Curriculum Vitae

Professor of Chemistry/Biochemistry
State University of New York College at Oneonta
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Education: BS in Chemistry, Tunghai University,
MS in Physical Chemistry, Cornell University,
Ph.D. in Chemical Physics, Cornell University.

Experience:

1967-1968	NSF Postdoctoral fellow at Cornell University
1968-present	Professor, SUNY Oneonta
1975-1976	Visiting Investigator and NIH Fellow at Sloan-Kettering Institute for Cancer Research
1978, 1979 and 1981 summer	Research Fellow, Harvard University
1980, 1986 summer	National Academy of Science Exchange Scholar at the Hungarian Academy of Sciences
1983 Spring 1985 summer	Visiting professor at the James Franck Institute of The University of Chicago
1987 Summer	Faculty Research fellow, Argonne National Lab.
1991 Spring	Invited Lecturers of Peking and Tsinghua Universities
1988, 1990, 1992 1993 Summer	Visiting Scientist, DMSE- MIT
1992 - present	Distinguished Visiting Professor, Shanghai University
1999 Winter	Distinguished Alumni Lectureship, Tunghai University
2000 Winter	Invited Lecturers at Peking and Tsinghua Universities
2001 – 2003	Chairman, Chemistry Department, SUNY at Oneonta
2005 spring	Visiting professor at Tsinghua University
2008 Summer	Visiting professor at Tsinghua University
2010 Summer	Visiting professor at Tsinghua, Beijing University of

	Chemical Technology
2010 Summer	Visiting professor at Research Center of Nano Science and Technology, Shanghai University
2010-present	Distinguished visiting professor at BUCT
2010- present	Distinguished visiting professor at the Research Center of Nano Science and Technology, Shanghai University
2012- Fall	Visiting professor at the Department of Materials Science and Engineering, Tsinghua University, Beijing.

Member of Honor & Professional Societies:

- American Physical Society
- American Chemical Society
- Materials Research Society,
- Chinese American Chemical Society
- Distinguished Alumni Lectureship of Tunghai University.
- Consultant for the Department of Chemical and Materials Science and Engineering, Tunghai University
- Associate editor of "Frontiers of Environmental Science & Engineering since 2005.

Summary of Research:

1. Gas Phase Electron diffraction, X-ray Crystallography
2. Laser Spectroscopy Studies of Molecular Structures
3. Corrosion Studies of Metal Matrix Composite/alloy at Low/ High Temperature
4. Studies of Ceramic Glass from Fly Ash
5. Waste Utilization and Treatment
6. Nano-therapeutic device and drug delivery studies
7. Photovoltaic cell studies
8. Creation of website for "energy and energy sustainability": http://www.oneonta.edu/development/energy/

Courses Taught:

Graduate: Chemical Kinetics, Chemical Thermodynamics, Statistical Mechanics, Quantum Mechanics

Undergraduate: General Chemistry, Physical Chemistry, Advanced Physical Chemistry, Heat Transfer, Material/Energy Balances.

Publications:

1. Joseph F. Chiang and S.H. Bauer, J. Am. Chem. Soc., 88, 420 (1966).
2. Joseph F. Chiang, C.F. Wilcox, Jr., and S.H. Bauer, J. Am. Chem. Soc., 90, 3149 (1968).
3. Joseph F. Chiang, C.F. Wilcox, Jr., and S.H. Bauer, Bull. Am. Phys. Soc., 13, 832 (1968).
4. Joseph F. Chiang and S. H. Bauer, Trans. Faraday Soc., 64, 224 (1968).

5. Joseph F. Chiang, C.F. Wilcox, Jr., and S. H. Bauer, Tetrahedron, 25, 369 (1969).
6. Joseph F. Chiang and S.H. Bauer, J. Am. Chem. Soc., 91, 1898 (1969).
7. Joseph F. Chiang and S.H. Bauer, Studies of Conjugated Hydrocarbon I: The Structure of Dimethylfulvene, J. Am. Chem. Soc., 92, 261 (1970).
8. Joseph F. Chiang and S.H. Bauer, The Structure of Bicyclo[1,1,1]pentane, J. Am. Chem. Soc., 92, 1614 (1970).
9. Joseph F. Chiang and D.R. Whitman, LCAO-MO-SCF Calculation of B2O3, Theoret. Chim. Acta, 17, 155 (1970).
10. Joseph F. Chiang, The Molecular Structure of Cyclopropene, J. Chin. Chem. Soc., 17, 65 (1970).
11. Joseph F. Chiang and W.A. Bernett, The Molecular Structure of Perfluorocyclopropane as Determined by Electron Diffractions, Tetrahedron, 27, 975 (1971).
12. Joseph F. Chiang, The Molecular Structure of Bicyclo[2,1,1]hexane, J. Am. Chem. Soc., 93, 5044 (1971).
13. Joseph F. Chiang and D.R. Whitman, The Electronic Structures of Bicyclo[1,1,1]pentene and Bicyclo[1,1,0]butane, J. Am. Chem. Soc., 94, 1126 (1972).
14. Joseph F. Chiang, D.L. Zebelman, and S.H. Bauer, Structure of Strained Polycyclics: Bond Distances and Angles in Tricyclo[3,3,0,02,6]oct-3-ene and in Bicyclo[2,1,1]hexene-2. Tetrahedron, 28, 2727 (1972).
15. Joseph F. Chiang, Martin T. Kratus, A.L. Andreassen, and S.H. Bauer, Structure of Bicyclo[2,1,1]pentene Determined by Electron Diffraction, J. Chem. Soc., Faraday Transaction II, 68, 1274 (1972).
16. Joseph F. Chiang and Martin T. Kratus, Acta Cryst., A28, S306, (1972).
17. Joseph F. Chiang, The Molecular Structure of ZnCl4 and HfCl4, Tunghai University Bulletin, April 1973.
18. Joseph F. Chiang and C.F. Wilcox, Jr., Studies of Conjugated Ring Hydrocarbons II: The Structure of Spiro[2,4]-hepta4,6-diene, J. Am. Chem. Soc. 95, 2885 (1973).
19. Joseph F. Chiang, The Molecular Structure of Pyridine-N-Oxide, J. of Chem. Phys., 61, 1280 (1974).
20. Joseph F. Chiang and Raymond L. Chiang, The Average Structure of 2.3-Diazabicyclo[2.2,1]hepta-2-ene and 2,3-Diazabicyclo[2.2,2]oct-2-ene, J. Mol Structure, 26, 175 (1978).
21. Joseph F. Chiang, R. Chiang, K.C. Lu, Chung-Mei Sung and M.D. Harmony, The Molecular Structure of Norbornene as Determined by Electron Diffraction and Microwave Spectroscopy, J. Mol. Struct., 41, 67 (1977).
22. Joseph F. Chiang and Martin T. Kratus, The Structure of Formamide as Determined by Electron Diffraction, Taiwan Science, 31, 1 (1977).
23. Joseph F. Chiang and K.C. Lu, The Molecular Structure of Tetra-fluoro-1.3-dithietane as Determined by Electron Diffraction, J. Phys. Chem., 81, 1682 (1977).
24. Joseph F. Chiang and K.C.Lu, Molecular Structure of 1,2,4-triazole, J. Mol. Struct., 41, 223 (1977).
25. Joseph F. Chiang and K.C. Lu, A Revised Structure of Bicyclo-[2.1,1]Hexene-2, Tetrahedron, 34, 867 (1978).

26. K.C.Lu, Raymond Chiang and Joseph F. Chiang,The Molecular Structures of Monosubstituted Cl-cyclohexenes by Gas Phase Electron Diffraction, J. Mol. Struct., 64, 229 (1980).
27. Joseph F. Chiang, Jung-Mei Song, S.H. Bauer and Stephen Ocken, The Molecular Structure of p-cyanophenol, to be submitted to J. Phys. Chem.
28. Joseph F. Chiang and J.M. Song, Structures of 4-methyl-, 4-chloro-and 4-nitro-pyridine-N-oxides, J. Mol. Struct., 96, 151 (1982).
29. J.F. Chiang, Molecular Structure of 3-Bromothietane-1,1-Dioxide, Acta Cryst., C39, 737 (1983).
30. A. Brossi, P.N. Sharma, K. Takahasi, J.F. Chiang, I.L. Karle and G. Seibert, Tetramethoprim and Pentamethoprim: Synthesis, Antibacterial Properties and X-ray Structure, Helvetica Chimica Acta. 60, 795 7 (1983).
31. I.L. Karle, J.L. Flippen-Anderson, J.F. Chiang and A.L. Lowrey, The Conformation of Five, Tetra-and Pentamethoxylated phenyl Derivatives: Weberine Analogs and Polymethoprims, Acta Cryst., B40, 500-506 (1984).
32. J.F. Chiang and R.L. Chiang, The Structure of Pyrrole and Imidazole, to be submitted to J. Mol. Struct.
33. J. Burnvoll, J.F. Chiang and I. Hargittai, Acta Cryst., C42, 94- (1986).
34. Joseph F. Chiang,, Anodic Oxidation of Metallic Super-conducting Precursor in The Proceedings of the Third Annual Conference on Superconductivity and Applications, November, 1989, Plenum Publishing Co. (New York).
35. Joseph F. Chiang, Superconductors in Collected Essays (1988-1989) of the Oneonta Faculty Convivium, 1989 (Oneonta, New York).
36. M.A. Buonnano, R.M. Latanision, L.H. Hihara and J.F. Chiang, Corrosion of Graphite Aluminum Metal Matrix Composites, Environmental Effects on Advanced Materials, Edited by R.H. Jones and R.E. Ricker, Pp. 267-282(1991).
37. Joseph F. Chiang, You-Wu Xu and P.C. Chen, A New Ceramic Glass: Conversion of Fly Ash to a High Density and Anti-Corrosive Ceramic. 211th National ACS Meeting, March 24, 1996. Paper # 631, Inorganic Chemistry Division.
38. Joseph F. Chiang, You-Wu Xu and P. C. Chen, Process for Producing Ceramic Glass Composition: US Patent #: 5,369,062, November 29, 1994.
39. Joseph F. Chiang, You-Wu Xu and P. C. Chen, Ceramic Glass Composition: US Patent #: 5,508,236, April 15, 1996.
40. Joseph F. Chiang, Ceramic Glass from Fly Ash, International Conference on Materials for Advanced Technology, Paper #I3-03, July 2, 2001, Singapore.
41. Joseph F. Chiang, Vitrification of Phosphogypsum, International Conference on Materials for Advanced Technology, Paper #I8-04, July 3, 2001, Singapore
42. Joseph Chiang, “Micro- and Nano-Therapeutics”, In NANO2005, Beijing, China, June 10-12, 2005. Abstract #4O-27-891,
43. Joseph Chiang,“English: A Globalized Language in Science and Technology” in “Imagining Globalization, Language, Identities, and Boundaries”, Palgrave-MacMliian, 2009.
44. Joseph Chiang: Chapter of “Biological Requirements for Nano-therapeutic Applications” In “Nanoparticulate Drug Delivery Systems” edited by Yashwant Pathak, et.al. Taylor & Francis, 2007.

45. Corey Lemley and Joseph Chiang, “Solar Cell From Unconventional Materials”, Student Research Show at State University of New York, Oneonta, March12, 2008.
46. Joseph Chiang, “Ceramic Glass from Flying Ash”, presented at the 23rd International Conference on Solid Waste Treatment and Technology, March 30 to April 2, 2008, Philadelphia, PA.
47. Shouhong Xue, Chuanbao Cao, Mei Li, Ximin Xu and Joseph Chiang,” Direct Current Electro-Deposition of Ternary $Fe_{48}Co_{36}Ni_{16}$ Alloy Nanorod Arrays”, presented at the Fall Materials Research Society Meeting, December 3, 2008, Boston, MA.
48. Joseph Chiang, edited, “Current Research and Development in Solar Cells” to be published by Tsinghua University Press and Springer, 2010.
49. Shouhong Xue, Chuanbao Cao, Mei Li, Ximin Xu, and Joseph Chiang, “Direct Current Electro-Deposition of Ternary $Fe_{48}Co_{36}Ni_{16}$ Alloy Nanorod Arrays, MRS eproceedings 1148-PP06-03,(2009)
50. D. Z. Zhang, Tingting Yan, Liyi Shi, Hongrui Li and Joseph Chiang, Template-free synthesis, characterizations, growth mechanisms and Photoluminescence of $Eu(OH)_3$ and Eu_2O_3 nanospindles, J. Alloys and Compounds, 506, 446-455(2010).
51. Xiaoming Sun, Xiuju Ma, Lu Bai, Junfeng Liu, Zheng Chang, Xue Duan, and Joseph F. Chiang,” Simultaneous Phase and Morphology Manipulation of CdS Using O2 Inspired by Nanoseparation”, to be submitted to J. Am. Chem. Soc. 2010.