

Lou Hughes, Ph.D.

EDUCATION

1971 Ph.D., Physical Biochemistry, Cornell University, Ithaca, NY

1953 M.S., Physical Chemistry, Cornell University

1951 B.S., University of Minnesota, Minneapolis, MN, High Distinction Honors

Supplementary Education:

Cambridge University, fall 1967 Genetics instruction

Oxford University, Spring 1980, Crystal structure and related computational techniques

PROFESSIONAL EXPERIENCE

1986- Research Professor of Chemistry, American University, Washington, DC, and
1983-86 Adjunct Professor, American University

1984-85 Professional Assistant to NSF Chemistry Division Director,
(concurrent with AU academic appointment)

1980-1982 IPA to NIH; as Visiting Chemistry Faculty from Ithaca College/Research
Scientist at NIH- NICHD/DPB at the NMR facility of the Laboratory of
Chemical Physics, Bethesda, MD.

1983- NIH Guest Researcher Appointment, National Institutes of Health, NMR
Facility, LCP NIDDK, Bethesda MD

1964-1982 Assistant Professor of Chemistry, Ithaca College, Ithaca, NY

1966-1968 Visiting Fellow, Department of Engineering Physics, concurrent with IC
faculty appointment

1960-1964 Lecturer in Chemistry, Department of Chemistry Immaculata College, PA

1953-1958 Research Chemist, Rohm and Haas Company, Philadelphia, PA

GRANTS, AWARDS AND HONORS

NIH AREA GRANT IR15 GM42200 01, Metal Complex Binding to DNA Sequences
ACS Petroleum Research Fund grant on stereospecific polymerization and polymer
single crystals

SmithKline & French funding for research and an Introduction to research course

U.S. Government IPA award for faculty/NIH

NIH Training Grant award to complete Ph.D

Ithaca College Preceptor appointment

Ithaca College, Three faculty awards for teaching and research

Visiting Fellow appointment at Cornell University to learn electron microscopy

New York Academy of Sciences

Sigma Xi, Cornell University

Phi Beta Kappa, University of Minnesota

SELECTED PUBLICATIONS

Gooden V.; Cai H.; Dasgupta T.; Gordon N.; Hughes L. J.; Sadler G. "The Synthesis and
Characterization of Monomeric Complexes of Ru(bpy)₂ with Dihydroxyanthraquinones"
Inorganica Chimica Acta **255**, 105-1100 (1997).

Kanthimathi, T.; Hughes, L.; Subramanian, S. "The Solution Structure of TRH a IH-NMR Reinvestigation" *Magnetic Resonance in Chemistry* **34**, 83 (1996).

Hughes, L. J.; Cohen, J.S.; Szabo, A.; Niu, C-H.; and Maturra, S. "C-13 NMR Studies of the Molecular Dynamics of Selectively Enriched Ribonuclease Complexes" *Biochemistry* **23**, 4390 (1984).

Cohen, J. S.; Hughes, L. J.; Wooten, J. B. "Observations of Amino Acid Side Chains in Proteins by NMR Methods," Chapter 4 in *Magnetic Resonance in Biology*, Cohen, J. S., ed.: John Wiley and Sons, New York, 1984; pp 130-247.

Hughes, L. J.; Stezowski, J. J.; Hughes, R. E. "Chemical-Structural Properties of Tetracycline Derivatives. 7. Evidence for the Coexistence of the Zwitterionic and Non-Ionized Forms of the Free Base in Solution" *J. Am. Chem. Soc.* **101**, 7655 (1980).

Hughes, L. J.; Andreatta, R. H.; Scheraga, H. A.; "Helix-Coil Stability Constants for the Naturally Occurring Amino Acids in Water.V. Serine Parameters from Random Poly(hydroxy butylglutamine-co-L-Serine)" *Macromolecules* **5**, 187 (1972).