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**DATE AND PLACE OF BIRTH:** 3 December 1941, Binghamton, New York, USA

**EDUCATION:** Ph.D., Chemistry, Syracuse University, 1968

B.S., Chemistry, Carnegie Mellon University, 1964

**DISSERTATION:** A Study of the Electronic and Magnetic Properties of Some First Row

Transition Metal Complexes

**RESEARCH INTERESTS:**

1. The study of the electronic, magnetic, and Mössbauer spectral properties of magnetically

coupled transition metal complexes at ambient and high pressure.

2. Mössbauer spectroscopy of iron, tin, antimony, and europium organometallic compounds.

3. Mössbauer-effect and x-ray absorption spectroscopic and neutron and x-ray diffraction

studies of transition metal complexes, hard permanent magnetic materials, nano-structured

materials, and thermoelectric materials.

**ACADEMIC EXPERIENCE**:

Assistant Professor of Chemistry, University of Missouri-Rolla, September 1968.

Associate Professor of Chemistry, University of Missouri-Rolla, September 1974.

Professor of Chemistry, University of Missouri-Rolla, August 1982.

Emeritus Professor of Chemistry, University of Missouri-Rolla, December 2019.

National Institutes of Health Doctoral Research Fellow, Syracuse University, 1966-68.

Visiting Research Associate, Nuclear Physics Division, Atomic Energy Research Establishment,

Harwell, England, May-June 1976, May-June 1977, May-June 1978; June, August 1979;

May-August 1980; May-June 1981.

NATO Visiting Professor of Chemistry, Instituto di Chimica e Technologia dei

Radioelementi del CNR, University of Padova, Padova, Italy, June-August 1983.

Science and Engineering Research Council Research Fellow, Department of Physics,

University of Liverpool, Liverpool, England, 1983-1984.

Visiting Professor of Chemistry, Dipartimento di Chimica Inorganica, Metallorganica

ed Analitica, Universita degli Studi di Padova, Padova, Italy, 1986-1988.

Visiting Professor of Chemistry, Department of Inorganic, Analytical and Applied Chemistry,

University of Geneva, Geneva, Switzerland, June-August 1988.

J. William Fulbright Scholar, Université de Liège, Sart-Tilman, Belgium, September 1993-

February 1994.

Chaire Francqui Interuniversitaire au titre étranger, the International Francqui Chair,

Université de Liège, Belgium, 2002-2003.

Recipient of the 2018 IBAME Science Award from the International Board on the Applications of

the Mössbauer Effect.

**PROFESSIONAL AFFILIATIONS**:

American Chemical Society

Fellow of the American Association for the Advancement of Science, 2025

Fellow, The Royal Society of Chemistry

Phi Lambda Upsilon

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**REFEREED PUBLISHED PAPERS**:

1. W. A. Baker, Jr. and G. J. Long, “Infrared Spectra of Some Magnetically Anomalous Iron(II)

Complexes,” *J. Chem. Soc., Chem. Commun.*, 368 (1965).

2. W. M. Reiff, G. J. Long, and W. A. Baker, Jr., “On the Nature of the Spin States in Some

Binuclear Iron(III) Complexes,” *J. Am. Chem. Soc.*, **90**, 6347 (1968).

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Chromium(II) Complexes,” *Inorg. Chem.*, **8**, 2529 (1969).

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“Preparation, Electronic Properties, and Structure of a Binuclear Iron(III) Complex Containing

A Four-Membered Iron-Oxygen Ring,” *J. Am. Chem. Soc.*, **92**, 5233 (1970).

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for Fe(quinoline)2Cl2,” *J. Inorg. Nucl. Chem.*, **33**, 1196 (1971).

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Properties of Bis(pyridine)dichloroiron(II),” *Inorg. Chem.*, **10**, 1406 (1971).

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High-Spin Iron(II) Complexes,” *J. Chem. Soc.*, *A*, 2956 (1971).

8. J. R. Teague, C. M. Yagnik, G. J. Long, R. Gerson, and L. D. Lafleur, “Mössbauer Effect and

Lattice Parameter for Silicon Doped with Antimony,” *Solid State Commun.*, **9**, 1695 (1971).

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and Mössbauer Spectral Properties of Several Trinuclear Iron(III) Carboxylate Complexes,”

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10. G. J. Long and J. R. Ferraro, “A Study of the Pressure Induced Irreversible Conversion of

Distorted Tetrahedral Dichloro-trans-2-(2'-quinolyl)methylene-3-quinuclidinonenickel(II),

[Ni(Qnqn)Cl2], into Binuclear Square Pyramidal, [Ni(Qnqn)Cl2]2,” *J. Chem. Soc.*, *Chem.*

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11. G. J. Long, L. J. Basile, and J. R. Ferraro, “A Semimicro-Sampling Technique for Resonance

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12. R. C. Dickinson and G. J. Long, “Transition Metal Chemistry of Quinuclidinone-Containing

Ligands. II. Spectral and Magnetic Properties of Some Transition Metal Complexes Containing

2-(N-Morpholinylmethyl)-3-quinuclidinone and Related Ligands,” *Inorg. Chem.*, **13**, 262 (1974).

13. G. J. Long and D. L. Coffen, “Transition Metal Chemistry of Quinuclidinone-Containing

Ligands. III. Electronic and Structural Properties of Several Transition Metal Complexes

Containing trans-2-(2'-Quinolyl)methylene-3-quinuclidinone,” *Inorg. Chem.*, **13**, 270 (1974).

14. G. J. Long and E. O. Schlemper, “Transition Metal Chemistry of Quinuclidinone-Containing

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nickel(II), a Five-Coordinate Binuclear Complex,” *Inorg. Chem.*, **13**, 279 (1974).

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Containing Ligands. VII. Cobalt(II) and Nickel(II) Thiocyanate Complexes of 2-(N-Morpholinyl-

methyl)-3-quinuclidinone,”*J. Inorg. Nucl. Chem.*, **36**, 1235 (1974).

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phenanthroline)iron(II) Perchlorate and Related Complexes,” *Inorg. Chem.*, **13**, 2150 (1974).

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ne]cobalt(II),” *J. Chem. Soc*., *Dalton Trans.*, 96 (1975).

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Transition-Metal Chemistry of Quinuclidinone-Containing Ligands. Part VI. A Study of

the Thermal Properties of Several Complexes with trans-2-(2'-Quinolyl)methylene-

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Fe(pyridine)2(NCS)2, and Ni(pyridine)2Cl2,” *Solid State Commun.*, **16**, 159 (1975).

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Three Cobalt(II) Pseudohalide Compounds Containing *l*-Sparteine,” *Inorg. Chem.*, **16**, 704

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Linear Chain Systems: Metamagnetism of Single Crystal Co(pyridine)2Cl2,” *J. Chem. Phys.*,

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Complexes,” *Inorg. Chem.*, **17**, 2702 (1978).

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and Tetrakis(pyridine)iron(II) Complexes,” *Inorg. Chem*., **17**, 3401 (1978).

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Iron(II) Halide Complexes Containing l-Sparteine,” *Inorg. Chim. Acta*, **30**, 221 (1978).

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Two Iron(III) Schiff-Base Complexes,” *J. Physique, Colloque C2*, **40**, 358 (1979).

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glycine and 5'-Phosphopyridoxylideneglycine,” *Inorg. Chim. Acta*, **36**, 155 (1979).

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yl)borate]iron(II),” *J. Chem. Soc.*, *Chem. Commun.*, 1003 (1979).

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of Hexaaquadihydroxobis(1,1,1-trifluoro-2,4,6-heptanetrionato)trinickel(II), a Linear Trinuclear

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to Some Descriptive Solid State Chemistry,” *J. Chem. Ed.*, **59**, 948 (1982).

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[(CH3)3C2B4H4]FeII(low-spin)FeII(high-spin)L [L = 2THF or (OCH3)2C2H2], an Oxidative

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Thickness,” *Mössbauer Effect Reference and Data Journal*, **6**, 42 (1983).

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Single Crystal X-ray Structural Study of *trans*-Bis(4-acetylpyridine)diaquobis(isothiocyanato)-

iron(II),” *Inorg. Chem.*, **22**, 507 (1983).

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and (PPN)[Fe2Co(CO)9CCO],” *J. Am. Chem. Soc.*, **107**, 5297 (1985).

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Organoiron-Copper Clusters,” *Hyperfine Inter.*, **28**, 793 (1986).

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Ordering in the Y6(Fe*x*Mn1-*x*)23 Solid Solutions,” *Hyperfine Inter.*, **28**, 593 (1986).

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