

X

CURRICULUM VITAE

NAME: Nicasio P. Marullo

PRESENT POSITION: Professor of Chemistry

ADDRESS: Department of Chemistry  
Clemson University  
Clemson, S. C. 29631

EDUCATION AND TRAINING:

Queens College, NYC, B.S. Chemistry, 1952  
Polytechnic Institute of New York, Ph.D. 1961  
(Major, Organic; Minor, Polymer Chemistry)  
California Institute of Technology, NIH Postdoctoral Fellow -  
9/60-8/61  
(Physical Organic Chemistry, Nuclear Magnetic Resonances  
Spectroscopy)  
Princeton University, NSF Visiting Senior Scientist, 5/69-1/70  
(Physical Organic Chemistry, Molecular Orbital Calculations)  
Pasteur Institute, Strasbourg, Fr., NSF Visiting Senior  
Scientist 1/70-8-70  
(Physical Organic Chemistry, Molecular Orbital Calculations)  
NASA Research Lab., Hampton, VA., NASA Fellow 6/78-8-78  
(Polymer Chemistry, Epoxy resins for aerospace vehicles)  
Naval Research Lab., Washington, DC, Visiting Senior Scientist,  
1/80-1/81  
(Polymer Chemistry, matrix materials for high performanc  
laminates)

EXPERIENCE: Professor of Chemistry 1973 - present  
Associate Professor, 1965-73  
Assistant Professor, 1961-65  
(all at Clemson University)  
NIH Postdoctoral Fellow, California Inst. of Tech,  
9/60-8/61

EMPLOYMENT AND PROFESSIONAL ACTIVITIES:

Employed since September 1961 by Clemson University. Promoted to rank of Professor of Chemistry in 1973. Has directed the research of five students awarded the Ph.D. degree in chemistry and ten students awarded the Master's degree. Research efforts in the areas of physical organic and polymer chemistry have been funded by the National Institutes of Health, National Science Foundation, Petroleum Research Fund of the American Chemical Society, Department of the Interior, Army Research Office, and Naval Research Laboratory. Has published a number of papers in scientific journals and one patent. A consultant for the Naval Research Lab., Washington, DC on polymeric phthalocyanines and for the Tamper Division of Canadian Iron on rigid polyurethane foams. Since November 1980, has presented

seminars at the Chemical Society of Washington, and the U. S. Naval Research Laboratory; presented papers at meetings of the Mid Atlantic Region of the American Chemical Society, the South Carolina Academy of Sciences and two papers at the National meeting of the American Chemical Society; published two papers and authored two chapters of a book titled "Cyclopolymers and Polymers with a Ring Chain Structure". Also consulted for Mobay Chemical Corporation; Tampar Division of Canadian Iron; and Lithium Corporation of America.

#### GRADUATE STUDENTS:

Five students awarded Ph.D. and ten students awarded M.S.

#### PUBLICATIONS:

S. Zamenhof, G. Griboff and N. Marullo, "Resistance of Deoxyribonucleic Acids to Physical and Chemical Factors", Biochim., et Biophys. Acta 13, 459 (1954).

C. G. Overberger, N. P. Marullo and R. G. Hiskey, "Stereochemistry of the Decomposition of Optically active N-Nitroso and N-Amino  $\alpha,\alpha'$ -Dimethyldibenzylamine", J. Am. Chem. Soc., 81, 1517 (1959)

C. G. Overberger, N. P. Marullo and R. G. Hiskey, "Stereochemistry of the Decomposition of N-Nitroso and N-Amino  $\alpha,\alpha'$ -Dimethyldibenzylamine", J. Am. Chem. Soc., 83, 1374 (1961).

C. G. Overberger and N. P. Marullo, "Decomposition of Unsymmetrical Nitrosamines", J. Am. Chem. Soc., 83, 1379 (1961).

N. P. Marullo, C. D. Smith and J. F. Terapane, "Stereochemistry and Kinetics of Imidate Pyrolysis", Tetrahedron Lett., No. 50, 6279 (1966).

N. P. Marullo and R. A. Lloyd, "Precipitation of Sodium Chloride from Aqueous Solution by Compound Formation with an Organic Amine", J. Am. Chem. Soc., 88, 1076 (1966).

N. P. Marullo and E. H. Wagener, "Isomerization of Rat s of Iminocarbonates", J. Am. Chem. Soc., 88, 5034 (1966).

G. T. Cochran, J. F. Allen and N. P. Marullo, "Hexacoordinated Amine Compounds of Silver(I) and Thallium(I)", Inorg. Chimica Acta, 1, 109 (1967).

N. P. Marullo, C. B. Mayfield and E. H. Wagener, "Restricted Rotation about the N-N Single Bond. Linear Correlation of Rate with Substituent", J. Am. Chem. Soc., 90, 510 (1968).

UCC 079901

N. P. Marullo and J. Alford, "7-Substituted 2,3-Diazabibicyclo [2.2.1]heptane Derivatives. Synthesis of a Stable Ketone Hydrate", J. Org. Chem., 33, 2368 (1968).

N. P. Marullo and E. H. Wagener, "Structural Organic Chemistry by NMR Isomerization of Compounds Containing the Carbon-Nitrogen Double Bond", Tetrahedron Lett., 1969 (2555).

N. P. Marullo, A. Bodine, J. L. Eggers and A. Sobti, "7-Substituted 2,3-Diazabicyclo [2.2.1]heptane Derivatives", Tetrahedron Lett., 1969, 3939.

N. P. Marullo, J. F. Allen, G. T. Cochran and R. A. Lloyd, "Solid Coordination Compounds of Alkali Metal Salts with a Neutral Aromatic Amine. Molecular Structure and Bonding", Inorg. Chem., 13, 115 (1974).

N. P. Marullo and B. Munsch, "Calculation of the Inversion Barrier of Ammonia with Small Optimized GTF Basis Sets", J. Mol. Structure, 27, 271 (1975).

R. Ting, T. Keller, N. Marullo, T. Price and C. Poranski, "Properties of Cured Diether Linked Phthalonitrile Resins", Sampe, Q. 121 (1981).

N. Marullo and A. W. Snow, "Polymerization of Bis-Phthalonitriles", Polymer Preprints, 22, 48 (1981).

R. Ting, T. Keller, N. Marullo, T. Price and C. Poranski, "Properties of Cured Diether Linked Phthalonitrile Resins", Polymer Preprints, 22, 50 (1981).

N. P. Marullo and A. W. Snow, "Polymerization of Bisphthalonitriles. Metal Free Phthalocyanine Formation", Amer. Chem. Soc Symposium Series, 195, 325 (1982).

N. P. Marullo "Mechanism of the Decomposition of Imidoyl Halides", U. S. Gov. Res. Develop. Rep., 68, 58 (1968).

N. P. Marullo, "Coordination of Compounds of Alkali Metal Halides and Racemic Diaryl Diamines", U. S. Pat., 3,461,166 (1969).

Arthur W. Snow, James R. Griffith and N. P. Marullo, "Syntheses and Characterization of Heteroatom-Bridged Metal-Free Phthalocyanine Network Polymers and Model Compounds", Macromolecules, American Chemical Society, 1614-1624, (1984).

UCC 079902

**CONFERENCE PRESENTATIONS:**

Speaker at Symposium on Cyclopolymerization and Polymers with Chain-Ring Structures, Atlanta, GA April, 1981

**FUNDED GRANTS:**

Research Corporation, 1962-63, \$3,100  
NIH, 1962-65, \$23,000  
PRF, 1963-66, \$18,000  
Army Research Office - Durham, 1963-67, \$19,500  
Office of Saline Water, 1966-68, \$39,840  
NSF Science Faculty Fellowship, 1969-70, \$15,450  
NSF URP, 1981, \$23,000  
NSF URP, 1980, \$19,000  
Naval Research Laboratory, Washington, 1980, \$35,000

**AWARDS:**

NIH Postdoctoral Fellowship for study at Cal Inst of Tech  
NSF Senior Science Faculty Award  
Princeton University, Visiting Senior Scientist, 5/69 to 1/70  
Pasteur Institute, Strasbourg, France, Visiting Senior Scientist 1970  
NASA Research Fellowship, 6/78-8/78  
Intergovernmental Personnel Act Award  
Visiting Senior Scientist, Naval Research Lab 1/80-1/81

UCC 079903