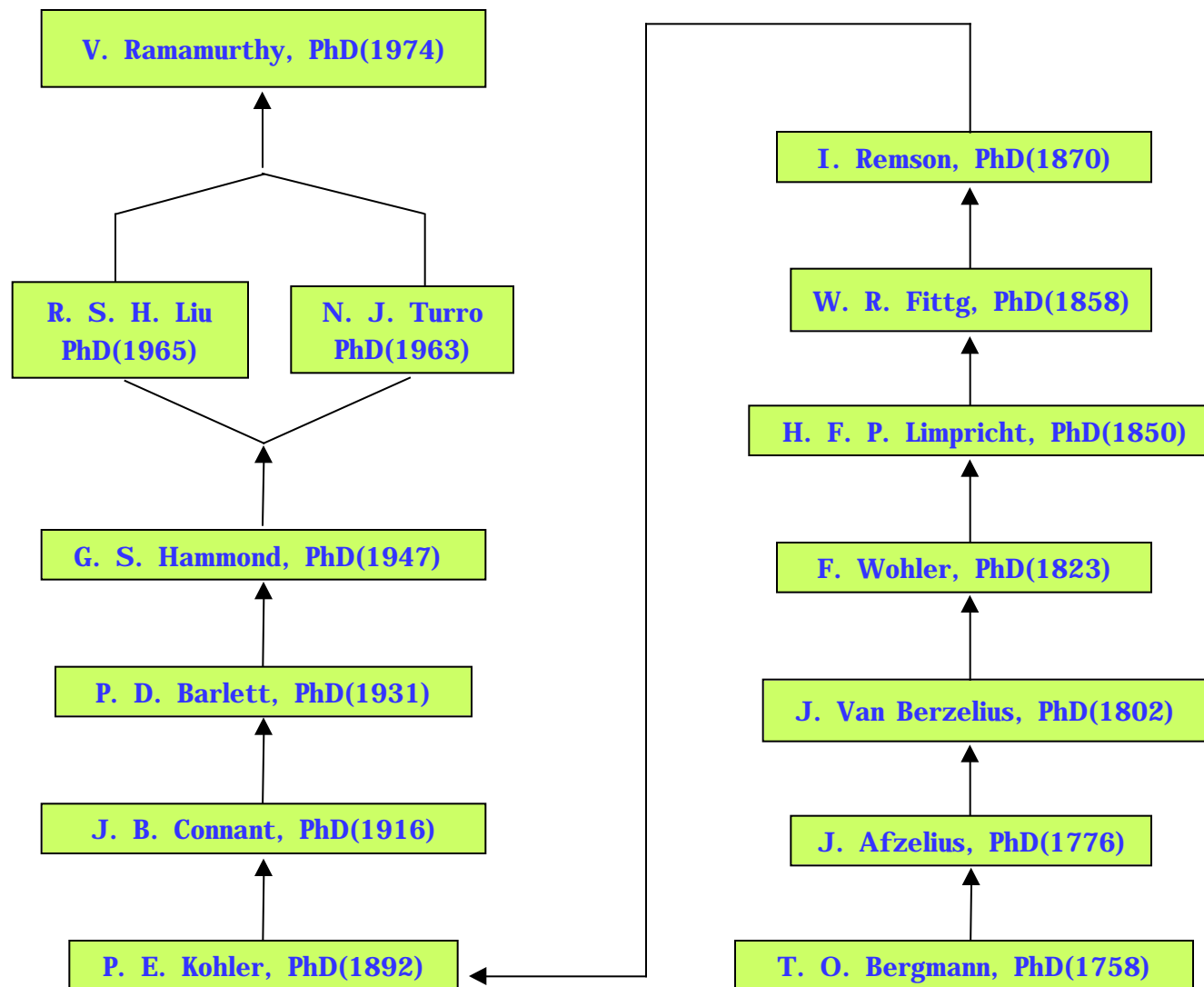


## *V. Ramamurthy's Group Genealogy*



We thank Prof. N. J. Turro for providing us with the information



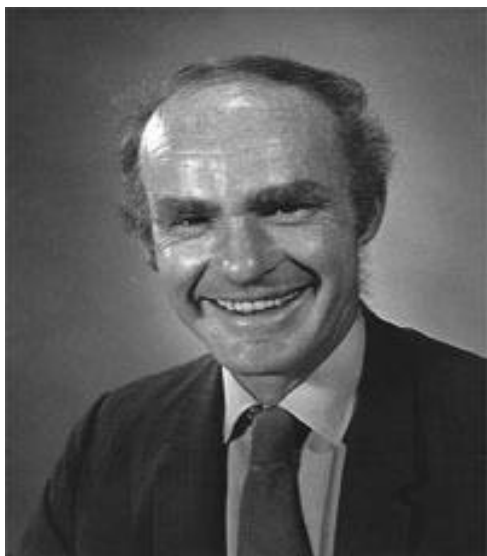
**LIU, ROBERT S. H.  
(1938- )  
PhD, CALTECH, 1965**

**Robert S. H. Liu's early important contribution while being at the Central Research Development of The Dupont Company is to identify the importance of upper excited triplet states in energy transfer processes. While at Hawaii he has been a leader in the general area of 'vision photochemistry'. Currently he is busy identifying the importance of the 'hula twist' mechanism that he postulated in late 80s in several photobiological systems. Liu is an outstanding teacher and a lively and entertaining lecturer.**



**TURRO, NICHOLAS J**  
**(1938- )**  
**PhD, CALTECH, 1963**

Turro is a cutting-edge researcher who is leading advances in the use of photochemistry and spectroscopy to reveal the structure and dynamics of supramolecular systems. He is the William P. Schweitzer professor of chemistry at Columbia University. He is a member of National Academy of Science and is the author of the standard textbook in the field of photochemistry, *Modern Molecular Photochemistry* and over 700 scientific papers. Turro has recently received the NSF's Director's Award for Distinguished Teaching Scholars.



**HAMMOND, GEORGE SIMMS**  
**(1921- )**  
**PhD, HARVARD, 1947**

George S. Hammond is widely and rightly considered as one of the “father s of modern mechanistic organic photochemistry”. In the late 1950’s he initiated as series of investigations of photochemical reactions in solution the exposed the rich information that was available about excited states through the judicious integration of spectroscopy and physical organic chemistry. Hammond was also a leader in many other areas of organic chemistry such as carbonium ion chemistry and free radical chemistry. The “Hammond Postulate” is a key concept in reaction mechanisms. His photochemical research group at Caltech spawned many leaders in the field of organic photochemistry. For more on George Hammond see: <http://chem.pdx.edu/~wamserc/Hammond/> For a tribute to Professor Hammond on the occasion of his 80th birthday [click here](#)



**BARTLETT, PAUL DOUGHTY**  
**(1907-1999)**  
**PhD, HARVARD, 1931**

Paul D. Bartlett is widely and rightly recognized as one of the “the fathers of modern physical organic chemistry.” His investigations of reaction intermediates, kinetics and reaction mechanisms set the style for future generations of physical organic chemists. Many of his investigations of carbonium ions, free radicals, biradicals peroxide decomposition and cycloaddition reactions remain classic exemplars of systematic correlations of molecular structure and chemical reactivity.



**CONANT, JAMES BRYANT**  
**(1893-1978)**  
**PhD, HARVARD, 1916**

**He investigated the mechanism of mustard gas synthesis and SN2 reactions; discovered the presence of copper in hemocyanin and showed that the prosthetic group was non-porphyrinic and contains sulfur. He also studied high pressure polymerization of olefins and was first to clearly distinguish kinetic and thermodynamic controls.**



**KOHLER, ELMER PETER**  
**(1865-1938)**  
**PhD, JOHNS HOPKINS, 1892**

Kohler discovered 1,4 addition to alpha, beta unsaturated ketones; carried out comprehensive studies of tautomerism, isomerism, and configuration of unsaturated compounds. He also discovered alpha disulfones, alpha-ketosulfones, and isoxazoline oxides. Additionally, the first to resolve allene into optical isomers and prepared the first darylmethyl free radical.



**REMSEN, IRA  
(1846-1927)  
PhD, GOTTINGEN, 1870**

Remsen is known for defining rules governing the oxidation of aromatic sidechains and the protective effect of ortho substituents. He also was the first to synthesize saccharin and attempted the first reaction that tried to prove the existence of a reactive intermediate by a trapping experiment. He also wrote several influential organic chemistry textbooks





**FITTING, WILHELM RUDOLPH**  
**(1835-1910)**  
**PhD, GOTTINGEN, 1858**

In addition to jointly discovering the Wurtz-Fittig reaction for synthesis of alkylbenzenes, Fittig discovered a large number of organic compounds such as pinacol and biphenyl. He identified and synthesized the first lactones, isolated phenanthrene from tar and did in depth investigations into the structures of naphthalene and fluorene.



**LIMPRICHT, HEINRICH FRANZ PETER**  
**(1827-1909)**  
**PhD, GOTTINGEN, 1850**

Limpricht was one of the early organic chemists who studied a wide range of organic compounds ranging from amino acids to chlorine substituted aromatics to pyrrole. He developed many new syntheses for aliphatic acids, alcohols, and aldehydes. Included in his accomplishments are the syntheses of anthracene and diphenylacetylene



**WOHLER, FRIEDRICH**  
**(1800-1882)**  
**PhD, HEIDELBERG, 1823**

Initially a medical student studying under Gmelin, Wohler was sent to pursue chemistry in depth with Berzelius at Heidelberg. He successfully synthesized urea from ammonium cyanate demonstrating the relationship between organic and inorganic chemistry and introduced the concept of intramolecular rearrangement of atoms. In his studies he discovered Al, Be, and Y and formulated the compound-radical theory.



Von BERZELIUS, JOHNS JACOB  
(1779-1848)  
PhD, UPPSALA, 1802

Berzelius made contributions of great importance to the field of chemistry. He was the first person to use the term “organic chemistry” and began to define the subject as we know it by writing one of the first Organic Chemistry textbooks. He discovered Ce, Se, Si, and Th and suggested the use of one and two letter symbols to represent all elements. He generated the first accurate list of atomic weights and invented the mercury cathode. He proposed many explanations and gave names to phenomena such as electronegativity, catalysis and polymerization. During the first half of the 19th century Berzelius was considered the leading chemical authority.



**AFZELIUS, JOHANN**  
**(1753-1837)**  
**PhD, UPPSALA, 1776**

Following in the footsteps of Bergman, Afzelius continued to develop methods of quantitative analysis of inorganic compounds. He also spent time studying oxalic and formic acid, the latter he isolated from ants



**BERGMAN, TOBERN OLOF**  
**(1735-1784)**  
**PhD, UPPSALA, 1758**

Bergman made great contributions to the field of inorganic chemistry. He founded current methods of quantitative inorganic analysis, specifically for determining Ca, Pb, and sulfuric acid. He introduced the binomial nomenclature system for salts and drew up comprehensive tables of chemical affinities. In addition to his chemistry, Bergman made contributions in the fields of physics and geology, being the first person to classify rocks based on their chemical composition.