

GENEALOGY DATABASE ENTRY

©Vera V. Mainz and Gregory S. Girolami 1998

Conant, James Bryant

1893 - 1978

DEGREE: PhD

DATE: 1916

PLACE: Harvard

TEACHER/RESEARCH ADVISOR: Kohler/Richards

investigated mechanism of mustard gas synthesis and S_N2 reactions; discovered presence of copper in hemocyanin and showed that the prosthetic group was non-porphyrinic but contains sulfur; deduced that chlorophyll is a reduced porphyrin ring; showed that hemoglobin contains Fe(II) and methemoglobin contains Fe(III); pioneered study of superacid solutions; studied high pressure polymerization of olefins; first to clearly distinguish kinetic and thermodynamic controls and the relationship between equilibrium constants and reaction rates; determined pK_a's of weak acids such a cyclopentadiene; synthesized di-tert-butyl-tetraphenylethane; ambassador to post-war Germany; critic of American educational system.

FOOTNOTE: Conant obtained a double PhD thesis: two years at "half-time" with Kohler and one year at full-time with Richards.

1. *Biog. Mem. Nat. Acad. Sci.* **1983**, *54*, 90-124.
2. *Org. Synth.* **1978**, *58*, vii-xi.
3. *Chem. Brit.* **1979**, 251-252.
4. *Nature* **1978**, *273*, 793-795.
5. *Dictionary of Scientific Biography*; Charles Scribner's Sons: 1970-1990; vol. 17, p175-178.
6. *J. Chem. Ed.* **1972**, *49*, 411-412.
7. *Biog. Mem. Fell. Roy. Soc.* **1979**, *25*, 209-232.
8. Conant, J. B. *My Several Lives*; Harper & Row: 1970.