

GENEALOGY DATABASE ENTRY

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Kolbe, Adolph Wilhelm Hermann

1818 - 1884

DEGREE: PhD

DATE: 1843

PLACE: Marburg

TEACHER/RESEARCH ADVISOR: Wöhler/Bunsen

pioneer in the development of structural formulas for organic compounds; carried out the second "total synthesis" of an organic compound (acetic acid) from truly inorganic precursors; introduced the term "synthesis" into chemical usage; synthesized salicylic acid and showed its value as a preservative; discovered trichloromethanesulfonic acid and nitromethane; discovered hydrolysis of nitriles to carboxylic acids; predicted existence of secondary and tertiary alcohols; synthesized taurine, malonic acid, and potassium formate; determined the composition of lactic acid, alanine, and glyocol; first to apply electrolysis to organic synthesis and showed that electrolysis of carboxylic acids effects decarboxylation; identified carbonyl as a functional group.

FOOTNOTE: Kolbe studied for three years (1838-42) with Wöhler, and then served as Bunsen's assistant at Marburg. After one year in Marburg, Kolbe obtained his PhD for work originally begun under Wöhler's direction. Kolbe remained as Bunsen's assistant for a total of three years (1842-45).

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5. Asimov, I. *Asimov's Biographical Encyclopedia of Science and Technology (2nd Ed.)*; Doubleday: 1982; p397-398.
6. *Chem. News* **1884**, 50, 282-283.
7. *J. Prakt. Chem.* **1884**, 30, 417-466.
8. *Chem. Ber.* **1884**, 17, 2809-2812.
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