

# GENEALOGY DATABASE ENTRY

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McBain, James William

1882 - 1953

DEGREE: PhD

DATE: 1906

PLACE: Heidelberg

TEACHER/RESEARCH ADVISOR: Bredig

discovered colloidal electrolytes; investigated the physical chemistry of soaps and detergents, esp. their electrical conductance, extent of hydrolysis, diffusion, transport numbers, and thermodynamic properties; studied sorption by charcoal; introduced the concept of the ionic micelle, as well as of neutral micellar units; investigated the properties of surface layers, devising a moving-microtome method coupled with an interferometer to determine the composition of the layers; developed the McBain-Bakr spring balance to measure sorption - his term for adsorption, diffusion, absorption, and solid solutions.

1. *J. Coll. Sci.* **1953**, 8, 375-376.
2. *J. Chem. Soc.* **1956**, 1918-1920.