

GENEALOGY DATABASE ENTRY

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Adams, Roger

1889 - 1971

DEGREE: PhD

DATE: 1912

PLACE: Harvard

TEACHER/RESEARCH ADVISOR: Torrey/Richards

studied the stereochemistry of molecules, esp. substituted biphenyls, in which rotation about a single bond is restricted - these studies constituted one of the most extensive systematic investigations of steric effects in organic molecules; synthesized compounds with two points of restricted rotation and demonstrated their existence in the predicted number of stereoisomers; studied the synthesis and reactivity of naturally occurring anthraquinones, alkaloids, and quinone imides, introduced *l*-menthoxyacetal chloride and amine bisulfites as resolving agents; devised the Adams' simplification of the Gattermann aldehyde synthesis; discovered Adams' catalyst for the low pressure catalytic hydrogenation of organic compounds; established structures and devised a total synthesis of tetrahydrocannabinol, chaulmoogric acid (used for the treatment of leprosy), and gossypol (a toxic component in cottonseed oil); discovered the sternutator (sneeze-inducer) phenarsazine chloride called *Adamsite* which was used in World War I; founded the *Organic Syntheses* series.

FOOTNOTE: Adams started his PhD research project with Torrey, but when Torrey died in 1910, Adams completed this project with the advice of several of the other professors at Harvard. He then worked with Richards on an analysis project in order to complete his thesis work.

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