

Collection overview

German-born agricultural chemist, professor of Chemistry at the University of Massachusetts Amherst when it was known as Massachusetts Agricultural College, and President of the Association of Official Agricultural Chemists and the American Chemical Society who made several important contributions in nineteenth century chemistry and held at least four patents. Includes correspondence (mostly professional), some with presidents of Massachusetts Agricultural College, William Smith Clark (1826-1886) and Henry Hill Goodell (1839-1905). Also contains handwritten drafts of addresses and articles, his dissertation, printed versions of published writings, handwritten lecture notes, class records, proposed college curricula, notes taken by students, handwritten research notes, newsclippings and offprints utilized in research, and biographical materials.

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Agricultural education Mass Agricultural College (1863-1931)

Science and technology | UMass faculty

Background on Charles Anthony Goessmann

Charles Anthony Goessmann was born in Naumberg, Hessen Cassel, Germany on June 13, 1827. He received his early education at the Latin School in Fritzlar, and then entered the University of Goettingen in 1850. There he studied chemistry, botany, physics, geology, and mineralogy, and received his PhD in 1853. From 1852 to 1857 he occupied the position of assistant in the Royal Chemical University Laboratory, and in 1855 was appointed Privat Docent, and lectured in chemistry and pharmacy.

In 1857 Goessmann left Goettingen, visited a number of universities and manufacturing establishments in Germany, Austria, France, and England, and then journeyed to the United States. In America, he accepted the position of chemist and subsequently manager of the Eastwich Brothers Sugar Refinery of Philadelphia. After leaving Philadelphia, he studied sugar refining methods in Cuba, and then accepted the position of chemist with the Onondaga Salt Company of Syracuse, New York. There he investigated improvements in the manufacture of salt, and served as professor of chemistry and physics at the Rensselaer Polytechnic Institute at Troy.

In 1868 W. S. Clark, the President of the Massachusetts Agricultural College, invited him to fill the position of

Professor of Chemistry. He accepted and remained in that position until his retirement in 1907. While serving at the Agricultural College he was elected Chemist to the Massachusetts State Board of Agriculture, as well as State Inspector of Fertilizers in 1873 and subsequently an analyst to the State Board of Health. In 1882 he was appointed Director of the Massachusetts State Agricultural Experiment Station, an office he filled throughout its twelve year existence. In addition to these positions he was a member of several leading scientific societies including: the Association of Official Agricultural Chemists, an organization of which he was the first president; the American Chemical Society, which he served as president and vice-president; the German Society of Naturalists and Physicians; the American Association for the Advancement of Science; the Massachusetts Horticultural Society; and the Massachusetts Meteorological Society. Upon his retirement in 1907 he served as Professor Emeritus until his death in 1910.

His scientific research includes several important contributions in nineteenth century chemistry. His early investigations include the discovery of new organic acids, and a new mode of producing organic alkaloids and amino compounds. His later investigations include research in the cultivation of sugar cane on the island of Cuba and the state of Louisiana, the development of the sorghum and sugar beet as sugar-producing plants for home consumption, the chemistry of brines and the character of the salt resources of the United States and Canada, and the influence of special systems of feeding plants for industrial purposes. The papers indicate that he also held at least four patents.

Scope of collection

The papers of Charles A. Goessmann document his distinguished career as an agricultural chemist, author, and professor of chemistry. They consist of biographical materials, correspondence (mostly professional), handwritten drafts of addresses and articles, published reports, lecture notes, class records, proposed college curricula, notes taken by students, and handwritten research notes. Also included are materials that Goessmann collected in Germany before immigrating to America, his dissertation written at the University of Goettingen (1853), and a scrapbook containing newsclippings related to research. The largest part of the papers were generated between 1880 and 1900, the years Dr. Goessmann was most active at the Massachusetts Agricultural College and the period that he served as State Inspector of Fertilizers.

The papers are arranged in five series, including Biographical Materials, Correspondence, Writings, Course Materials, and Research Materials.

Arrangement

This collection is organized into five series:

- Series 1. Biographical Materials, 1850-1917
- Series 2. Correspondence, 1850-1910
- Series 3. Writings, 1853-1897
- Series 4. Course Materials, 1870-1903
- Series 5. Research Materials, 1853-1907, n.d.

Series descriptions

Series 1. Biographical Materials

1850-1917

3 boxes, 1 linear foot

This series contains various biographical materials and personal items of Charles Anthony Goessmann, including a biography by Dr. Tuckerman published in 1917, a testimonial volume, biographical sketches, patents, newsclippings, and miscellaneous items collected by him. Also included is the correspondence of Dr. Frederick Tuckerman concerning the preparation and publication of the Goessmann biography.

Included in the biographical information are two short printed biographical sketches written by Dr. Tuckerman, dated 1911 and 1925, a biographical sketch and report on his accomplishments with the Massachusetts Agricultural Experiment Station by J. B. Lindsey and a description of his involvement in agricultural chemistry by M. J. Ahern. There is also a paper on his work with the Salt Company of Onondaga in Syracuse by S. Francis Howard. In addition, Goessmann wrote several short sketches for various publications. These contain a considerable amount of information on his life in Germany as well as his family background.

There are two volumes on the life of Dr. Goessmann, a testimonial and a biography. The testimonial contains obituaries, a newsclipping on the memorial service, a memorial service program, and biographical sketches by J. B. Lindsey and Dr. Frederick Tuckerman. The biography, published in 1917, is by Dr. Frederick Tuckerman.

In the personal materials are folders of patents, contracts, tickets to various New England agricultural societies, photographs of Goessmann at the Massachusetts Agricultural College, tour books of Germany, information on organizations of which Goessmann was a member and miscellaneous material in German that Goessmann collected in Goettingen. Also collected here are a dissertation by John Hosea Washburn, a graduate student under Goessmann, and a list of foreign graduate students at Goettingen. Patents include inventions of waterproofing materials, methods of preparing waxed paper, and means for making paper impervious to water, grease, and acid. His contracts relate to employment as a supervisor for the Eastwich Brothers Sugar Refinery, and agreements with the Empire Distilling Co.. The organizations on which Goessmann retained information are the State Board of Agriculture and the Massachusetts Fruit Growers Association. Also included is a folder on the International Congress of Chemistry dated July, 1900.

Series 2. Correspondence

1850-1910

1 box, 0.5 linear feet

Arrangement: The letters are arranged chronologically and are in both German and English.

The general correspondence consists of letters to and from Charles Goessmann from 1850 to 1910. The bulk of the material dates from 1868, the year Goessmann came to the Massachusetts Agricultural College, to 1900. Documented here are his extensive activities as Professor of Agricultural Chemistry, his involvement with the administration of the college, and his activities as the State Inspector of Fertilizers. Of particular interest is the correspondence from W. S. Clark, President of the Massachusetts Agricultural College (1867-1879), concerning the appointment of Dr. Goessmann as Professor of Chemistry. There are four letters from Clark dated 3/16/1867, 3/23/1867, 11/22/1867, and 5/13/1868. Also of importance are a large number of letters, largely between the years of 1894 and 1897, from Henry Hill Goodell, Presidentof the College from 1886-1905; two letters dated 8/14/1894 and 1/8/1897 from W. H. Bowker, a member of the first graduating class and later a trustee; a letter from Senator Justin Morrill dated 10/23/1895; and several letters dated between 1892 and 1896 from William R. Sessions, secretary, State Board of Agriculture.

Series 3. Writings

1853-1897

5 boxes, 2.5 linear feet

This series consists of Goessmann's addresses, manuscripts of articles, offprints of articles, his dissertation written at the University of Goettingen (1853), articles and reports in bound volumes, including reports on commercial fertilizers and bulletins by the Agricultural Experiment Station, and books which he both wrote and revised. The material dates from 1853 to 1897, but the bulk is from 1880 to 1895.

Folders containing addresses consist of handwritten drafts prepared by Goessmann for speeches on agricultural chemistry. Most date from 1885 to 1899, but some documents are undated. His articles are also handwritten drafts dating from 1891 to 1896, with one undated. In the folders labeled "Offprints" are published articles on agricultural chemistry, published speeches, and annual reports written by Goessmann as State Inspector of Fertilizers. The four bound volumes are a combination of research papers in agricultural chemistry, reports on experiments performed at the College, annual reports on commercial fertilizers, annual reports of the Agricultural Experiment Station, and the Experiment Station Bulletin. They are dated from 1860 to 1906. Experiment Station Bulletin No. 20, May, 1886, which was not included in the bound volumes, is located in the Offprints.

Dr. Goessmann's books were written and compiled in Goettingen and at Amherst. His work from Goettingen includes a collection of printed articles (1850-1860) written by himself and students, and his inaugural dissertation of 1853. Dr. Goessmann's books from Amherst consist of two volumes of reports on commercial fertilizers from 1873 to 1885. There is also a copy of the book A Manual of Agriculture by George B. Emerson and Charles L. Flint, which Dr. Goessmann revised in 1885.

Series 4. Course Materials

1870-1903

2 boxes, 0.75 linear feet

This series consists of Dr. Goessmann's handwritten lecture notes in agricultural chemistry, class records, proposed college curriculums, and notes taken from his lectures by students. The material is dated from 1870 to 1903, with a significant portion undated.

Dr. Goessmann lectured in a variety of areas. Among those represented in this collection are lectures on Alcohol Radicals, Carbohydrates, Chemical Physics, Introductory Chemistry, Commercial Sources of Plant food, Derivations of Dryad Alcohol Radicals, Foddors, Hydrocarbons, Organic Chemistry, and The Relation of Atmosphere to Plant Life. Student notes included here were taken on Goessmann's Elementary Chemistry course in 1877-1878 by J. L. Hill and in 1878-1879 by S. C. Damon. Class records consists of student rolls, grades, and absence reports of Goessmann's classes in chemistry between 1879 and 1882.

Series 5. Research Materials

1853-1907,

2 boxes, 1 linear foot

Arrangement: Arranged chronologically within subject categories.

This series contains Dr. Goessmann's handwritten research notes, newsclippings related to his research, and offprints utilized in research. This material covers a broad period dating from 1853 to 1907.

Dr. Goessmann retained a considerable number of handwritten research notes. Included in this collection are notes on Fertilizers, Geology, Salt, Tobacco, Beet Sugar, Milk, Peaches, and Sugar. Also included in this section are news-clippings related to Goessmann's research. Most of the material is not dated. Dr. Goessmann's collected offprints consist of printed articles written by others and retained by him in the process of his research. They are dated from 1853 to 1900 with some undated.

Administrative information

Access

The collection is open for research.

Provenance

Acquired from the Chemistry Department in 1974.

Processing Information

Processed by Guy A. McLain Jr., 1983.

Languages:

English, German

Acknowledgments

Encoding funded by the Andrew W. Mellon Foundation.

Copyright and Use (More information)

Cite as: Charles Anthony Goessmann Papers (RG 40/11 Goessmann). Special Collections and University Archives, University of Massachusetts Amherst Libraries.

Search terms

Subjects

- Agricultural chemistry--Massachusetts.
- Chemists--Massachusetts.
- Goessmann, Charles Anthony.
- University of Massachusetts Amherst--Faculty.
- University of Massachusetts Amherst. Department of Chemistry.

Contributors

• Goessmann, Charles Anthony, 1827-1910[main entry]

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