

Queen's ALUMNI REVIEW

Chemistry at Queen's: a history up to 1949

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SCIENCE, at first under the name of Natural Philosophy, was taught at Queen's from its opening in 1842. The first Professor was James Williamson, a graduate of Edinburgh. Chemistry was not included till 1854, when the founding of a Faculty of Medicine made it necessary. It began as a lecture subject on "The non-metallic elements and their compounds."

In 1858, Dr. George Lawson, a very distinguished scientist of Edinburgh, was made Professor of Chemistry and Natural History. His salary was \$1700 while other full-time professors got only \$1500. He energetically earned the difference. At the end of the first session he had a medallist in Chemistry. No student at Queen's had ever before been given a medal. Moreover, this medal was of "aluminum", a newly developed rare and precious metal costing \$17 an ounce.

In the next session, 1859-1860, in the "New Hall" put up mainly for medicine, today called the Old Medical, Chemistry became the most ambitious subject in the university. Dr. Lawson's syllabus in four finely-printed pages used more space than all the other subjects in Arts, Theology, and Medicine together. It sounds very modern:

The class for Practical Chemistry will be conducted in the Laboratory under the personal superintendence of the Professor ... All necessary apparatus, materials for examination, and reagents are supplied free of expense. The student performs every experiment ... Each pupil receives his instruction independently, and not as a member of a class."

There was Agricultural Chemistry and Medical Chemistry, and for those who wanted them, such vocational subjects as Brewing, Distillation, and Tanning.

Chemistry has been well served at Queen's. In its main line of development, its heads have been Williamson (1842), Lawson (1858), Bell (1863), Dupuis (1868), W. L. Goodwin (1883), Neish (1919), and McRae (1941). Today, besides its head, it has two other full professors: Frost (Physical) and Munro (Colloid), two associate professors: Dorrance (Analytical) and Smith (Physical), and Assistant Professor Moir (Organic). Fellows, demonstrators, assistants, and curators bring the staff to a total of 34.

Two divisions have grown into independent departments. Biochemistry began humbly with only laboratory recognition, but in 1914 A.P. Lothrop was appointed with the title of Assistant Professor of Biological Chemistry. He was succeeded by J. F. Logan in 1925, and in 1937, when the Craine Building was ready, Biochemistry moved into it as a completely independent subject with Associate Professor Logan and R. G. Sinclair as full professor and department head.

Chemical Engineering is the other division to become independent. It made its start with Lawson in 1859; it was fostered by Dupuis and W. L. Goodwin. It grew in importance as the School of Mining, founded in 1893, added other engineering courses. In 1900 John Waddell was appointed to Industrial Chemistry; in 1908 L. F. Goodwin was made Assistant Professor of Chemistry in charge of Chemical Engineering; in 1925 he was made its head as a

separate department. For a year after his death in 1944, George A. Revelle was acting head. In 1945 A. C. Plewes left industry to head the department. He has with him Assistant Professor Marshall.

Chemistry serves Arts, Applied Science. and Medicine; Commerce, Nursing; Physical and Health Education. It has the largest teaching group in the University. Its budget for salaries and supplies calls for \$86,000 a year.

For the first twelve years Queen's lived in rented properties. Then in 1853 it bought Summerhill, now the Principal's house. For five years all teaching was done there-Arts, Theology, and Medicine. There in 1854 Chemistry began in narrow space. There Dr. Lawson went in 1858. But better days were at hand. Next year, the "New Hall," now Old Medical, the first building Queen's erected, was ready. It was mainly for Medicine, but it admitted Chemistry, gave it laboratories, and kept it till 1891.

Then Chemistry moved to Carruthers Hall which had been built for its expanding needs and for some minor uses. For the first time it had almost a whole building to itself and was fairly comfortable there for the next twenty years. By that time, Fleming Hall, which contained Mechanical, Electrical, and Civil Engineering, was overcrowded. It was decided to move Civil to a Carruthers and to build a new and better home for Chemistry.

So Gordon Hall came into being. Forty years ago, it was planned with space to spare. But in time it became small for the increasing numbers and activities. As a temporary remedy, Chemical Engineering was squeezed into Ontario Hall. It is now happily back to share with Chemistry the fine accommodation of the new Gordon Hall laboratories.

The Craine Building, which houses Biochemistry, was made possible in 1937 by a gift \$400,000 from the late Dr. Agnes Craine, a graduate of Queen's in Medicine. Of this amount, \$125,000 was used for the building and the rest for endowment.

The corner stone of Gordon Hall has this inscription:

The corner stone of this building, erected with money granted by the Province of Ontario, was laid by Sir James Whitney, Prime Minister, 27 April, A.D. 1910.

Sir James named the building in honour of Principal Gordon. It was officially opened November 11, 1911; the New Laboratories, November 24, 1949.

Gordon Hall in a time of low prices was built for \$120 000, which was provided by the Province of Ontario in six annual instalments. It has since been expensively changed. The attic was finished. The whole building was fireproofed and improved in 1934 as part of the Unemployment Relief Plan, when the university paid for material and the City of Kingston and the Province of Ontario provided the labour costs. Its present value as estimated for insurance purposes as \$300,000 with a further \$100,000 for contents.