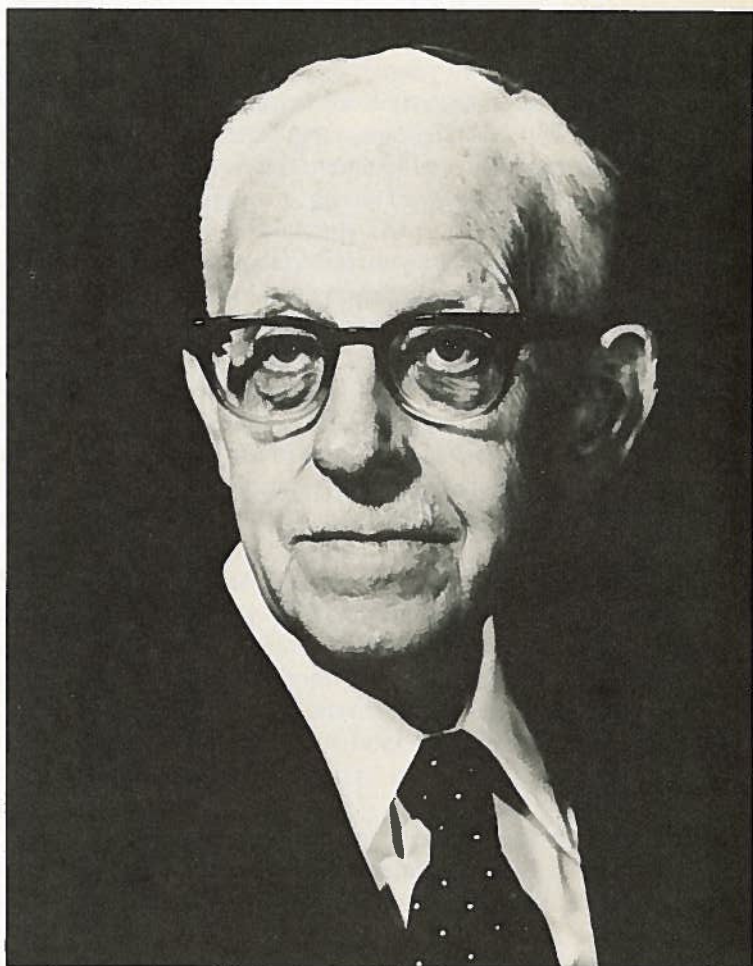


D. R. HAY

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**Garnet Alexander Woonton**  
1906–1980



GARNET ALEXANDER WOONTON was a restless academic, in the noblest sense of the word. His progression through a varied and highly productive life has influenced the lives of countless scientists, in Canada and throughout the world. At eighteen, he earned his first degree at the University of Western Ontario in commerce and economics and won a prize in philosophy. Following four years with the Bell Telephone Company as a technical assistant, he decided to return to the University of Western Ontario to become a physicist. By 1931 he had completed graduate studies and was awarded the M.A. degree. That was at the depth of the Great Depression. He worked in the physics department at the University of Western Ontario as a demonstrator and at the Medical School as a research fellow in physiology for the next eight years, during which time he published the first of what became a long succession of scientific papers. He then joined the faculty of the physics department, and with Dr R.C. Dearle, head of the department, he carried out important wartime research on radar electronics and antenna design. Towards the end of wartime, he was instrumental in setting up a local branch of the Institute of Radio Engineers, jointly between the physics department and the Clinton RCAF Radar School. The excitement of those meetings and the enthusiasm of the undergraduate physics classes in preparing for the annual banquet have not been equalled since.

Gar worked tirelessly with others at the end of wartime in founding the Canadian Association of Professional Physicists, the forerunner of the Canadian Association of Physicists. Later he served as president of the Association, and for a number of years was editor of the *Canadian Journal of Physics*. His work in professional societies extended abroad, when he was chairman of Commission 7 of the Union Radio Scientifique Internationale from 1952 to 1958, and international vice-president from 1958 to 1961.

In 1947, Gar and Dr Dearle set up the radio physics course with other colleagues at the University of Western Ontario. That course began at an opportune time since it immediately attracted a large number of mature students, many of whom were returning war veterans. The third-year class of some thirty students has left indelible memories with the writer. Many of the graduates later became senior scientists and administrators in Canadian industry, government, and academic institutions.

McGill University enticed Gar away from Western in 1948, to set up the Eaton Electronics Research Laboratory in Montreal. He was a distinguished scholar, first as the Lady Eaton Professor and later the MacDonald Professor of Physics. During his first year, while the Eaton Laboratory was being constructed, he worked with several graduate students and research assistants in a small building (his 'Walden Laboratory') on the side of Mount Royal. With the completion of the Eaton

Laboratory, the scope of his research began to broaden and the number of graduate students working under his careful supervision increased substantially. In characteristic manner, he decided to change his field of expertise after the first five years, and launched wholeheartedly into solid state physics. He continued to follow this plan of change for the rest of his academic career. In the mid-1950s a radar warning system for Canada grew out of his efforts at the Eaton Laboratory.

Many other facets of Gar's amazing drive appeared at that time. His day as laboratory director extended from 7:30 A.M. to 6:00 P.M., often continuing into the evening. He expected his staff to be there with him also on Saturday mornings. During the first half hour of the day, he engaged the building concierge in French conversation while both worked in his office. A few years after the laboratory was established, he added the chairmanship of the physics department to his responsibilities, an undertaking that continued for the next thirteen years. Since he had no intention of giving up any part of his research interests, he began arriving at the laboratory at 5:30 A.M. to dispose of the new administrative matters before his real day began. Perhaps one may gain the impression that his was an unbalanced life as a dedicated scientist. In fact, that is far from correct; when the occasion permitted, he enjoyed discussing the works of novelists and mystery writers or the problems of the current political scene.

In 1968-9, Gar spent a well-earned sabbatical year at Grenoble. Upon his return to Canada, Laval University invited him to Quebec to become the first director of the Centre de Recherches sur les Atomes et les Molécules, in the Faculty of Science. During his stay at CRAM, Gar became an atomic physicist, making measurements of free radical properties using microwave techniques. The Quebec government invited him to prepare a brief on research centres at the time of his retirement from the post in 1973.

Following a visit to France and Spain in 1973, Gar returned to Canada to begin the next episode of his remarkable career. Fortunately for us at Western, he moved back to London in the summer of 1974, where he accepted an honorary professorship in the Department of Physics at the University of Western Ontario.

At last he was free from the demands and frustrations of academic administration! Here he delved into the concepts of symmetry in physics, the theory of relativity, and high energy physics, each of which excited his boundless enthusiasm. Many of us will remember his relaxed but stimulating conversations over coffee or in the hallways. Occasionally, he probed deeply into our philosophy; always, he was constructive and helpful; never did he have an unkind word for anyone. We began to miss his daily visits in January 1980. During a short stay in hospital, he passed away on 24 March.

He has left behind an enriched country, in both of its official languages. Many honours have been bestowed upon him during his outstanding career. He became a Fellow of the Royal Society of Canada in 1950, and a Fellow of the Institute of Radio Engineers in 1952. the University of Western Ontario awarded him an honorary Doctorate in Science in 1955. He was Professeur Invité at Laval University from 1973 to 1976. In 1977, he was granted professor emeritus status at McGill University.

Our sincerest sympathy goes to his beloved and devoted wife, Isabel, and to his daughter Elizabeth in Montreal.