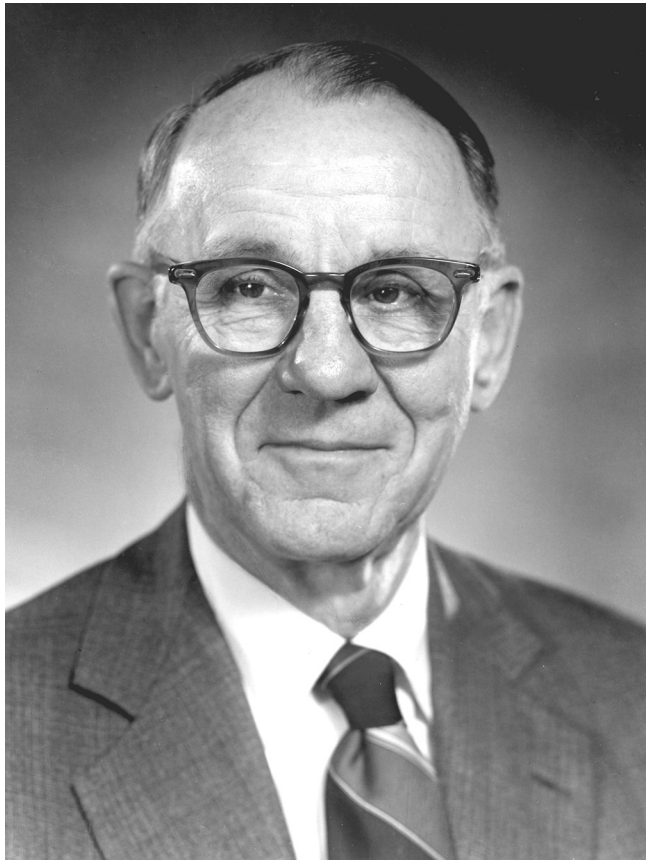

Dale R. Corson

DALE R. CORSON

1914–2012

Elected in 1981

"For leadership in evaluation of engineering enterprises vital to the national welfare; contributor to vital military electronic developments; leadership in engineering education."

BY FRANK H.T. RHODES and J. ROBERT COOKE
SUBMITTED BY THE NAE HOME SECRETARY

DALE RAYMOND CORSON (April 5, 1914–March 31, 2012) lived an exemplary life. His scientific achievements won him rare dual recognition in the form of the Arthur M. Beuche Award from the National Academy of Engineering and the Public Welfare Medal from the National Academy of Sciences. His bright mind, coupled with his reputation for humility and personal integrity, enabled him to deal with complex, politically charged matters, and these characteristics were vital to his success when he became president of Cornell University during a period of unprecedented campus turbulence. His habit of carefully recording details in his notebook during his physics experiments carried over to his leadership roles. When Dale made a commitment he kept it, down to the last detail.

As a child in rural Kansas, Dale was attracted to physics as both an intellectual pursuit and a career. He pursued that vision through the grim years of the Great Depression, earning degrees at the College of Emporia (AB), University of Kansas (MA), and University of California at Berkeley (PhD). As a postdoctoral fellow at Berkeley he participated in the creation and use of a particle accelerator. Within two years of his PhD, he and associates Ken MacKenzie and Emilio Segrè had placed a new element, astatine (At), on the periodic table.

As World War II engulfed Europe, Ernest Lawrence summoned Dale to join the MIT Radiation Lab to work on a top secret military project, development of airborne radar systems. Dale worked on operational deployment of radar technology, which played a crucial role in winning the war. He was assigned to continue that work as a military advisor in the newly built Pentagon. From there he went to Los Alamos, where he led the creation of Sandia National Laboratory, now one of the largest of the US national laboratories. After the launch of Sputnik, he served on the National Advisory Committee on Aeronautics, which recommended the creation of NASA.

Dale was among a group of physicists, including Hans Bethe and Robert Wilson, to join the Cornell faculty after WWII. His first assignment was the design and early operation of the 300-MeV synchrotron, Cornell's first post-WWII electron accelerator. It was one of the first synchrotrons to operate successfully and a precursor to Cornell's famous Wilson Synchrotron Laboratory.

Dale became a full professor in 1952 and in 1956 chair of the physics department, with the support and confidence of both the nuclear and theoretical physicists and the low-temperature/solid state group. Three years later he became dean of engineering. Such rapid advancement can make people imperious, but Dale stayed true to his sensible Midwestern roots. He was aware, for example, that some college faculty members questioned whether he even qualified as a "real" engineer—and he conceded the point. "There was no logic at all to my choice as the dean of the Engineering College," he said. "I was a last minute substitute after the prime candidate, whom I had helped recruit, withdrew."

Dale became university provost in 1963, during the administration of James Perkins, and in that capacity he addressed a wide range of issues, from the library system to the Arecibo telescope in Puerto Rico. He also gathered the biological science programs, which were widely dispersed among multiple colleges, to form the Division of Biological Sciences, thereby fostering greater synergy among the departments at Cornell.

President Perkins assigned Dale the task of increasing diversity at Cornell. Against a backdrop of volatile national political debates over issues such as the Vietnam War and civil rights, Cornell rapidly increased its enrollment of students of color. These students brought with them a commitment to making their voices heard in the academic community and a sense of urgency about doing it—and they encountered faculty and other groups just as committed to changing the campus more gradually by consensus and leadership. The rapidly heating climate led to the takeover in 1969 of Cornell's student union by African American students. President Perkins resigned shortly afterward.

The task of settling the differences and restoring peace fell to Dale, first as interim president and then as president. He is widely credited with holding the campus together with his calm and capable leadership. In later years Dale would reflect on that period with wry good humor: "I was never actually inaugurated. Instead there was an investiture at commencement following my first year in office.… There were demonstrations and disruptions and two attempts to take over the microphone. [Professor] Morris Bishop made international news when he bent the [ceremonial university mace] jabbing the protestors in the ribs. Those were the days!"

It was Cornell's good fortune that the new president was a universally trusted leader. Dale patiently consulted with all sides and made it clear that he understood what was said. John Marcham, editor of the Cornell Alumni News, observed in July 1977 that Dale "was known…as someone who could figure out the real end result and price of carrying out a flowery educational principle. Not only had he thought it out in his head, but he probably also made note of it in the little notebook he always seemed to have with him. As a consequence, when he said something was possible, members of the university community knew it was in fact possible.… [F]actions that distrusted one another would allow his administration the time to knit back together the fabric of a torn institution."

Dale served Cornell as president from 1969 to 1977. During his tenure he was acutely aware of the need to balance the university's budget, even in a period of high inflation. The

record shows that it was he who insisted on dispensing with a formal inauguration in favor of a much less costly investiture. Perhaps because of his own appreciation of the value of access to higher education, he worked hard to keep Cornell financially affordable.

He also nurtured fundamental programmatic changes, working with William Gordon to create Cornell's Center for Radio Physics and Space Research, with Don Greenberg to enter the emerging field of computer graphics, and with Henri Sack, Robert Sproull, and James Krumhansl to form what is now the Cornell Center for Materials Research, a highly successful and widely copied model for university-based multidisciplinary research. In addition, Dale provided institutional support for Africana studies, water resources, women's studies, and the humanities in general.

Dale retired from the presidency in 1977 but agreed to stay on as chancellor, much to the delight of his successor. The Cornell Medical College, located in New York City, was experiencing financial and administrative difficulties, and Dale concentrated on sorting them out, freeing the new president to focus on the Ithaca campus. Also during those two years he prepared a thoughtful analysis of long-term issues facing higher education.

From 1982 to 1994 he served on several National Academy / National Research Council committees. He was inaugural chair of the Government-University-Industry Research Roundtable, which promoted communication among national leaders, and he helped organize a workshop on international higher education exchanges between the United States and Japan. In the early 1980s he headed a panel on Scientific Communication and National Security that averted restrictions on the publication of unclassified university research. NAS President Frank Press said of Dale's service, "The nation is in your debt."

Dale enjoyed excellent health and was mentally alert to the end of his nearly 98 years, facts that he attributed to good family genetics. He was married to Nellie Griswold Corson for more than 73 years and together they raised four talented and accomplished children. In their senior years Dale and Nellie

lived in Kendal at Ithaca, a continuing care facility that Dale had helped to establish and which is adorned by many of his professional-quality photographs. Dale also continued to meet with colleagues from the campus, staying closely in touch with the university to which he devoted his life.