Women *in* NBS/NIST History

Evans V. Hayward

Over Hayward's 40 year career at NIST, which began in 1950, she became a recognized leader in the high-energy scattering subfield of physics for her contributions to the development of elastic photon scattering as a probe to study the internal structure of atomic nuclei.

Carolyn R. Irish

Carolyn Irish was one of the first women to work in the field of physical metallurgy. She spent the 1950s working at NIST on the development of low-mass high-strength steels primarily for use in aircraft, and also studying failures of aircraft structural metals.

Grace C. McDermut-Mulligan

McDermut-Mulligan retired from NIST in 1952, ending a career that began in 1904 when she became the first female scientist at NIST. At that time, hiring a woman was viewed as an "experiment" by the all-male staff. She specialized in the calibration and testing of precision volumetric equipment, and helped to study and compile density and expansion data on important industrial liquids. Her 48 year career proved to be a successful "experiment" that paved the way for all the female NIST employees who followed her.

1950s

Margarete Ehrlich

Ehrlich earned her doctorate in physics in 1955 while concurrently working in NIST's Radiation Physics division. She studied photographic techniques for radiation dosimetry, established a method to calibrate radiation protection instruments using neutron beams, and researched the measurement of radiation used for cancer treatments. Her work helped to create reliable and practical radiation measurements for personal protection and cancer therapy.

Elizabeth L. King

Elizabeth King began work at NIST in 1952 as an administrative assistant and spent most of her long and well regarded career providing organizational support to the Physics Laboratory. For over twenty years she managed registration and other organizational duties for the annual American Physical Society meetings, keeping track of the paperwork for over 1000 attendees each year; an especially challenging task in an era before personal computers and database software. Her administrative management skills were so prized that she was asked to return from retirement to be the executive assistant to NIST's first Nobel Prize winner. King managed the Nobel winner's numerous travel and speaking engagements, while simultaneously organizing the business side of his research group, which was quickly growing to five times its original staff size.

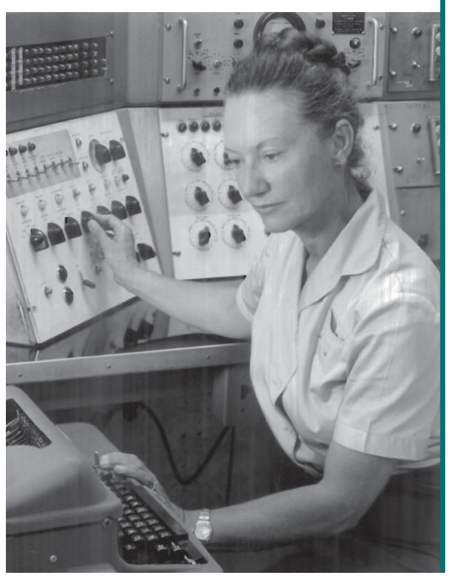
Joan R. Rosenblatt

A mathematician at NIST since 1955, Rosenblatt specialized in non-parametric statistics. She received praise for helping the U.S. Selective Service System set up an impartial and unbiased military draft lottery during a period of intense controversy. Despite working under a very tight deadline, she successfully designed a system that was the first draft lottery to be widely considered fair by those participating in it.

Mary G. Natrella

Natrella served as a mathematical statistician at NIST beginning in 1950. She was an expert in the application of modern statistical techniques to physical science experimentation and engineering testing. She was the principal author of the most highly cited NIST publication, "Experimental Statistics" (NIST Handbook 91), which became the standard text on applying statistical techniques in the physical sciences and engineering.

Ethel C. Marden



Ethel Marden was a mathematician who wrote programs for the Standards Electronic Automatic Computer (SEAC), a first generation computer built and operated by NIST throughout the 1950s. She also taught computer programming courses to other government agencies to enable them to utilize the SEAC for their work. In addition to her role in the early development of computer programming, Marden is credited with leading the drive to implement family-friendly part-time and flex-time work schedules at NIST.

Sharon G. Lias

Lias joined NIST in 1954 as a physical chemist and made early pioneering contributions to the field of ion chemistry. She was the lead author of the definitive work on the thermochemical properties of ions: "Gas-Phase Ion and Neutral Thermochemistry", also known as the GIANT tables. This work has been cited over 4000 times since its publication. She would go on to head the NIST Ion Energetics Data Center, the Standard Reference Data Program, and the Chemical Kinetics and Thermodynamics Division. In these positions Lias dedicated her career to developing chemical property databases for the benefit of the chemistry community.

Ruth H. Cahn

Electronics engineer Ruth Cahn joined NIST in 1951 to design and build hardware components for the Standards Electronic Automatic Computer (SEAC), a first generation computer operated by NIST in the 1950s. Cahn designed error checking and memory circuitry for the computer. Cahn and her colleagues would later receive the Department of Commerce Gold Medal for their pioneering work in computing.

Poster created by the NIST Research Library and the NIST Committee for Women.

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