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**Dr. Joanne Starr Malkus**, at 37 a full professor of meteorology at the University of California, has won fame for pioneering in the use of specially instrumented aircraft for studying clouds, storms and hurricanes.

**Dr. Elsie Quartermain**, an authority on ecology (the study of the relationship of plants and animals to their environments), has made a specialty of analyzing the pine forests of the South, and her research into the effect of shade on pines has revolutionized lumbering methods there. She heads the Department of Bacteriology, Botany and Zoology at Vanderbilt University.

**Dr. Grace Hopper** of the Remington-Rand Corp. was a student at Vassar when she decided mathematics was her forte. She has since gone on to pioneer in automatic electronic computer programming, and her theories permit computers to "teach" themselves complicated tasks in American industry.

**Dr. Chien Shiung Wu** of Columbia University left her native China to study physics in the United States. Regarded as one of the foremost experimental physicists of the century, she became the first woman ever to receive an honorary doctorate of physics from Princeton University. She is the mother of a teen-age son.

**Dr. Dorothy Hood**, head of toxicology for the Haskell Laboratory for Toxicology and Industrial Medicine, is in charge of testing all the products of the DuPont company before they are introduced to the public.

**Dr. Eleanora Bliss Knopf** of Stanford University, who specializes in structural geology, has contributed both to the mining industry and to theories on the causes of earthquakes.

**Mrs. Rita Sagalyn**, an atmospheric physicist, is renowned for her work with Aerobee-Hi research rockets at Hanscom Field, Mass.

**Dr. Gladys Anderson Emerson**, professor of nutrition at the University of California, started out wanting to be an actress in 1921. When she was cast as an imbecile in Shakespeare's "As You Like It," her acting ambition collapsed. She took up the study of nutrition instead, and today is famed as a biochemist credited with many discoveries of the effects of vitamin deficiencies on the human body.

**Dr. Ethel Browne Harvey**, of Woods Hole (Mass.) Oceanographic Institute, widowed mother of two sons, has been a biologist most of her life. For the last 30 years, she has been analyzing animal cell structures, part of which work involves studying sea-urchin eggs measuring only  $74/1000$ ths of a millimeter in diameter.

**Dr. Libbie H. Hyman**, zoologist of the American Museum of Natural History, who began her career informally as a child watcher of butterflies, is recognized as this country's leading authority on invertebrate organisms. She has been preparing for 30 years a treatise called "The Invertebrates" (five volumes completed) which will be the most comprehensive work of its kind in English.

**Dr. Mary Sears**, Woods Hole oceanographer, has devoted her life to studies of the sea and its effect on land masses. Dr. Sears, incidentally, regards this science as highly suitable for women. She points out that in Russia 50 per cent of all oceanographers are women, while the ratio in the United States is but 1 per cent.

The women described on these pages give only an inkling of woman's potential in science and technology. Let a woman have the final say, as women usually do—Lillian M. Johnson, president of the National Association of Women's Deans and Counselors and Dean of Women of the University of Cincinnati:

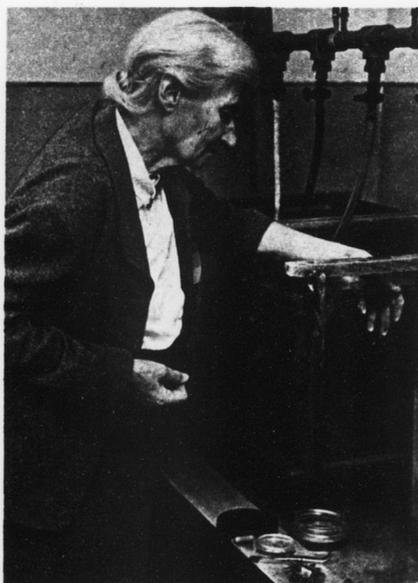
"American women have never been parasites. In pioneer times, they performed their fair share of essential work. The challenge of our day is to break the bonds of ignorance and assure freedom for all, and women must play a leading role in this struggle.

"Science more than ever holds the key to our future. All women who possess the ability to make a contribution in scientific fields need to be motivated and educated to fill their responsibility."

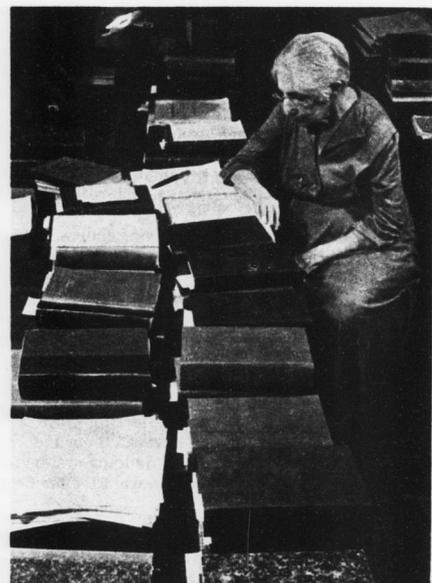
SUNDAY GROUP PHOTOS

STAR PHOTOS BY ELWOOD BAKER

DR. GLADYS A. EMERSON  
Vitamins and the human body



DR. ETHEL BROWNE HARVEY  
Inundated by sea research



DR. LIBBIE HYMAN  
Invertebrates are a lifetime's work

DR. MARY SEARS  
Studies living cells at Woods Hole

