## SENIOR PHYSICISTS ENGINEERS

Our rapidly expanding research program has challenging positions open for experienced and well-qualified individuals in:

Chemical Physics—To engage in a wide variety of programs involving the use of high resolution and broadline nuclear spin resonance and electron spin resonance supplemented with more conventional analytical techniques such as electron microscopy and diffraction, X-ray fluorescence and diffraction for basic studies of molecular structure and physical properties of materials. The research includes work in such fields as biomedicine, solid and liquid state physics, radiation physics, and chemistry. Candidates should have an M.S. or Ph.D. degree. Training and experience desirable to include experience in spin resonance phenomena.

Electron Research Engineering and Physics—Programs include research and development in transistor, vacuum tube, and magnetic circuit design. An excellent opportunity is afforded to participate in research teams working in many areas of physics and electrical engineering. Positions open for personnel with B.S. to Ph.D. degrees in Electrical Engineering or Physics, at various levels of experience.

Engineering Analysis—Mechanical Research Engineering—Research programs in vibration analysis and control, fluid dynamics, acoustics, special purpose analogs, systems analysis for pneumatic and hydraulic systems, and special instrumentation and test method development are being undertaken. B.S. or M.S. in Physics, Applied Mathematics or Mechanical Engineering required. Experience in the above fields desirable but not essential.

Southwest Research Institute offers you the opportunity to separate your research from the distraction of present day production problems. San Antonio provides an ideal location for the research which will create your future. The opportunity to engage in new and intriguing problems in diversified fields accelerates the rate of professional growth. Salaries are commensurate with the individual's training and experience.

Please send resume and salary requirements to:

R. C. Mays, Director of Personnel Southwest Research Institute 8500 Culebra Road San Antonio 6, Texas sylvania State College (now Pennsylvania State University), and as a Huntingdon fellow went to Cornell University where he received his PhD in 1914. Early in his career he served as an instructor at Cornell and at Penn State. In 1914 he became a physicist in the General Electric Research Laboratory in Schenectady, where he remained until his return to teaching twelve years later. At that time he accepted an appointment at Penn State as professor of physical chemistry and industrial research. In 1931, Penn State named him as research professor of physics and chemistry, a position which he held until his retirement in 1949.

He was a fellow of the American Physical Society and a member and past president (1930–33) of the Society of Rheology. He had also served as an assistant editor (1933–36) and as editor (1936–41) of the Society of Rheology.

Adolf Gustav Smekal, head of the Physical Institute of the University of Graz, Austria, died in March 1959 at the age of 64. An Austrian by birth, Prof. Smekal studied in Vienna, Graz, and Berlin, and during the period 1928–45 he was Ordentlicher Professor at Halle. He spent the following four years at the Technische Hochschule in Darmstadt, and in 1949 was appointed to the post at Graz, which he held until his death.

Prof. Smekal was best known for his researches in solid-state physics (mainly in plastics and glasses), but he perhaps achieved widest recognition for his theoretical prediction in 1923 of the Raman effect, which, in German-language texts, is often referred to as the "Smekal-Raman effect". He was a member of the Austrian Academy of Sciences, the Leopold Academy at Halle, and a corresponding member of the Academy of Sciences and Literature in Mainz.

Sir Henry Tizard, prominent British physicist, chemist, and authority on the aeronautical sciences, died on October 9 at his home in Hampshire. He was 74 years of age. A student at Magdalen College of Oxford University before World War I, he took firstclass honors in natural science and following his graduation in 1908 became a science teacher, but decided after having served in the war to devote his career to research. As rector of the Imperial College of Science and Technology during the 1930's, Sir Henry concentrated on building an effective scientific organization under the Air Ministry, and during World War II he was largely responsible for the development of Britain's air defenses, especially in the use of radar. He also pressed for the development of the jet engine and contributed to the wartime British atomic energy program.

Sir Henry returned to Magdalen College in 1942 as its president, serving in that capacity for four years prior to his retirement. A fellow of the Royal Society and member of many other organizations, he was awarded the American Medal of Merit and received a gold medal from the Franklin Institute of Philadelphia.