

PROBLEM — You are designing a diathermy unit. Included in the electrical circuit are variable elements which must be adjusted during operation. The control knobs must be located where they will be convenient to the operator. The variable elements themselves must be located in the cabinet where they will be easy to mount, to wire and to service. How would you do it?

THE SIMPLE ANSWER — Use an S.S. White remote control type flexible shaft to couple each variable element to its control knob. This simple arrangement makes it possible to place the elements and their controls anywhere you want them. And you will find, too, that operation with these shafts is as smooth and sensitive as a direct connection, because S.S. White remote control flexible shafts are designed and built especially for this type of duty.

This is just one of hundreds of remote control and power drive problems to which S.S.White flexible shafts provide a simple answer. That's why every engineer should be familiar with the range and scope of these "Metal Muscles"* for mechanical bodies.

*Trademark Reg. U. S. Pat. Off. and elsewhere

Here's how one well known electronic equipment manufacturer did it. The flexible shaft (arrow) connects control knob at top to a variable element at the bottom rear.

WRITE FOR BULLETIN 4501



SCIENCE IN THE NEWS

Low Temperature Laboratory

COLUMBIA UNIVERSITY'S Physics Department is about to start full operation of a laboratory where researchers will be able to study the properties and reactions of matter at extremely low temperatures.

Physicists have already produced temperatures as low as within one degree of absolute zero (459 below zero Fahrenheit). The low temperatures are produced by liquefying helium, with the aid of a machine known as the Collins helium cryostat.

Future studies will include examinations of the electrical and magnetic properties of metals and the dielectric or non-conducting properties of liquid helium.

Laboratory of Physical Chemistry

HARVARD UNIVERSITY last month announced the establishment of an independent laboratory to make fundamental studies of body tissues and fluids, in a search for general principles applying to all living matter. Chiefly an administrative refinement of existing facilities, the new unit will be known as the University Laboratory of Physical Chemistry, related to Medicine and Public Health. It will center its research on proteins.

Conservation Course

STARTING NEXT FALL Yale University's Division of Sciences will establish a program of research and instruction in the field of conservation of natural resources. Limited to graduate students, the courses will require two years of study and research, leading to the degree of M.S. in Conservation.

Atomic Diaster Control

THE UNIVERSITY OF CALIFORNIA recently released details of a hitherto undisclosed graduate course for training experts in atomic disaster control. Students of the initial classes consist of 27 officers of the armed services—ranging from colonel to lieutenant—and one public health expert. Half of these will finish the course this June, at which time they will have completed two years of intensive study at Berkeley plus one summer session at the AEC's Oak Ridge plant.

Upon graduation the students will be given the degree of Master of Bioradiology and will be assigned to work under military commanders of vital areas in the country.

The course has never been announced, and is not yet in the UC catalogue—but the university says this is not because there's been anything hush-hush about it; it's just that it doesn't belong to any one department.

Institute of Microbiology

RUTGERS UNIVERSITY last month dedicated the first unit of its new Institute of Microbiology. The \$65,000 building will serve temporarily as a virus research center, though work is to start soon on a \$1,000,000 building for this purpose. Funds come from the Rutgers Research and Endowment Foundation, which, in turn, gets most of *its* funds from royalties from the manufacture of streptomycin — which was discovered by Rutgers' famous microbiologist, Dr. Selman A. Waksman.

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