

Natural Gas Engineering

By K. J. SONNEY

Fellow of the American Gas Association

IMAGE IS NOT AVAILABLE
ONLINE DUE TO COPYRIGHT
RESTRICTIONS.

A paper copy of this
issue is available at
call number LH 1 .06S6
in Bizzell Memorial
Library.

THE school of natural gas engineering has had an unusually successful year. In recent years, due to the great expansion of the industry, there has been an increased demand for men especially trained in natural gas work to fill executive positions. As a result of this demand for technically trained men the University instituted the course of natural gas engineering; this course trains men for the production, transmission, distribution, and utilization of natural gas. The graduates of this course are thus fitted for work in privately and municipally owned gas companies, and in the natural gas departments of oil companies.

During the year past, several pieces of equipment have been added to the laboratory. A slow combustion gas analysis apparatus has been provided which permits a rapid and inexpensive method of determining the constituents of natural gas. Some of the latest types of high pressure regulators have been installed and are being tested, additional meters and a new meter prover have also been added. The laboratory has been thus expanded and rearranged. Mr. Cromer, instructor in the natural-gas lift laboratories, has also redesigned the gas lift laboratory. Some special gas lift equipment is being installed under his direction which will make additional tests possible, and greatly facilitate the carrying out of present tests. This equipment will be in operation for instructional purposes by the first of June. Thus the laboratory equipment and courses are being expanded to keep step with the latest developments.

The Gas Industry has placed its stamp of approval on the school of natural gas engineering here at Oklahoma. Each year the school is the sponsor of the Southwestern Gas Measurement Short Course, which is the only course of its kind supported by the industry, and to which the gas and oil companies throughout the Southwest send their employees in increasingly large numbers. The Natural Gas Department of the American Gas Association has established a fellowship in gas engineering at Oklahoma, a mark of approval of which but one other school in this country can boast. Each year the association sends a student to

this University to take graduate work in natural gas engineering, with the requirements that will represent an important piece of research pertinent to some problem of the industry. I was fortunate enough to be the holder of this fellowship last year and was again appointed this year. My research problem is *An Investigation of the Freezing of Natural Gas Regulators*. This research is being carried on under the direction of Dr. Huntington and Mr. Cromer. A temperature survey of large quantities of gas expanding thru various shapes and sizes of plates, chokes, and regulator openings is being made, with the object of correlating these measurements with those taken from actual regulator installation in the field and laboratory. A major part of the experimental work is being done in the Fitts field. A great deal of special test equipment has been designed, tested, and built in the laboratories and shops of the engineering department, and data is being taken from equipment installed on one of the largest gas wells in the Fitts field. It is expected that this data will provide some clearer understanding of the causes and possible remedies for the difficulties caused by freezing.

Mr. C. A. Breiting, president of the Southwestern Utility Company, assumed chairmanship of a committee to place undergraduate students in natural gas engineering for summer employment, and most of the boys were placed with the various companies operating throughout the Southwest. During the summer they gain some valuable experience, as well as satisfactory compensation for their labor. This cooperative system often assists the student in finding a permanent position after graduation. Students graduated from this school have obtained satisfactory positions in the industry and from all reports received they are getting along in an excellent manner.

Thus with expanding facilities for study and research, a closer connection with the industry, and an increasingly successful placement of both graduates and undergraduates, the school of gas engineering has had a very successful year and looks forward to an increasingly useful and popular place in the University curriculum.