

THE REGION OF EXTREMELY LOW TEMPERATURE.*

NOW that the war is over, we may turn back and follow, as we used to do, one of the attractive paths of science and examine what has been accomplished in investigation of low temperature phenomena. That there has been a great stimulation of certain lines of scientific effort due to the war is well known to all, and in most laboratories war problems have displaced all others. The scientific men of Canada, however, have been called upon but very little to give their time and peculiar powers to the solution of the problems of warfare. Notwithstanding this, even in Canada, productive investigation has diminished. Almost nowhere has the work of investigation in pure science not been interrupted. In the Universities of Holland, however, the continuity has not been broken, and while even in these institutions, laboratory assistants were drafted in 1915-16, owing to the fact that the Universities are state controlled, it was not difficult to secure leave of absence for men deemed indispensable to the work of the laboratories. The people of Holland are proud of their universities and are generous with them, and a productive scholar is given every encouragement.

At Leiden is one of the most famous laboratories of the world, both because of its peculiar history and the line of its activity. The universities of that little country are so closely related that one may think of them almost as a single institution. By a sort of understanding, the physics laboratory of each pursues its own definite line of research. For example, at Amsterdam, Zeemann and his colleagues are interested in problems in radiation and work on them almost exclusively, while at Leiden, Kamerlingh Onnes and his staff are engaged in the study of the fundamental properties of matter, and in particular of certain substances, the so-called permanent gases.

*A lecture delivered before the Queen's Alumni Conference, December 11, 1918.