

MCGILL UNIVERSITY
DEPARTMENT OF PHYSICS

In the coming session there will be twelve Graduate Students doing research work in the Macdonald Physics Building: six of these are working for their Ph.D. and six for their M.Sc. This is the largest number of research students that the Department has had, even in the palmy days of Sir Ernest Rutherford.

Among recent publications may be noted the paper to the Royal Society of Canada by Dr. D. A. Keys on the "Ionization due to an Electric Current in a Partially Filled Hydrogen Tube", a report on "Recent Advances in Wireless Propagation" in the Journal of the Franklin Institute by Dr. A. Sé Eve, a letter to "Nature" by Dr. E. S. Bieler on the "Band Spectra of Lead", in which he proves ~~that~~ that the bands are due to a molecule of lead and hydrogen and not to a molecule consisting of two atoms of lead. Dr. Foster who has just set up magnificent apparatus for the measurement of Stark effect, has sent a communication to "Nature" on some of his recent results. Miss Douglas has communicated quite recently to the "Atlantic Monthly" and to "Discovery" papers on the most recent advances in Astrophysics. These articles are expressed in very clear language and yet give the conclusions of very abstruse reasoning in Astrophysics. Miss Douglas has been working in the Yerkes Observatory during the summer vacation.

Professor H. E. Reilley has continued his work on the ageing and temperature coefficients of Weston Cells, a piece of work which has been continually in operation for more than twenty years. Dr. E. S. Bieler is working on the Hall effect in the Alkali Metals. Mr. E. E. Watson has an appointment as physicist during the summer at the Biological Station at St. Andrew's. Mr. F. R. Terroux has communicated to the Franklin Institute a paper on the method of photographing the fluorescent screens outside cathode oscillographs. The Professor of Applied Mechanics, Mr. E. Brown, has collaborated with Dr. D. A. Keys on the application of the piezo-electric method to the pressures on the blades of turbines. Mr. M. S. Home has begun to get results by a novel method of the dielectric constants of liquids and the effect of temperature upon them. Mr. H. B. Hachey is developing a new method, due to Dr. Shaw, of the separation of the effects due to radiation and convection under normal conditions in the atmosphere.

The replacement of apparatus lost in the fire of last December is approaching completion and most recent apparatus made by Hilger of London is now available for precision work of a high order.

It will be seen that the prospects of the Department are good and that considerable work has been carried out during the vacation. This statement is added because there seems to be an impression that as soon as the undergraduates leave the University there is a cessation of work, which is far from being the case.

A. S. Keys