

History of the Department of Physics at UWA

Issue No. 1: “In the Beginning”

Presented by John L. Robins

Introduction.

Those of us who are current or past students or staff of this Department of Physics (recently renamed as a School) are privileged. The Department has an interesting history of which we all can be proud but as this history dates back over 92 years many of the details have already been lost. My intention now is to begin to gather together those written records that do exist for I truly believe that a knowledge of history is not only interesting for its own sake but also has particular value for those who are, every day, adding their own contribution to this history. The deeds of today are the history of tomorrow.

I am well aware how busy we all are and so my intention is to distribute the historical facts and anecdotes that I unearth as a series of brief reports which I hope you will have time to read as they appear. Eventually they may be gathered into a more conventional History of the Department.

I will begin with an account of the first days of our University. The combined Department of Mathematics and Physics was one of the original five departments created in this university and Professor A.D. Ross was the inaugural Professor of Mathematics and Physics. He gave the first lecture in the University and the conditions under which it was given, and indeed the conditions prevailing for the first many years, should make us all very grateful for the situation we enjoy today. Please read on.

Sources.

The article that follows was published in the “The Western Mail”, Vol. 50, No. 2,593, on October 31, 1935 on the occasion of the opening of a new Physics and Chemistry Building at Crawley – about which I will report more in the future.

The photos are taken from “Campus at Crawley” by Fred Alexander (1953).

The Western Mail article:

CHEMISTRY AND PHYSICS

Early Vicissitudes.

At the inauguration of the University in 1912, Dr. A. D. Ross of the University of Glasgow and Dr. N. T. M. Wilsmore of the University of London, were selected for the chairs of Mathematics and Physics and of Chemistry. The two professors travelled out together from Europe and arrived in Perth on February 25, 1913. At that time the temporary building to house the University in St. George's-terrace [sic] was only partly erected, and while it had been intended to commence classes early in March, the date of opening of the session had ultimately to be put back to March 31. The first lecture in the new University was given at 9 a.m. on that day by Professor Ross to the combined classes of Mathematics I and II. At a recent graduation ceremony [early 1930's] held in the Winthrop Hall at Crawley, Professor

Ross recounted some of the difficulties which the teaching staff of the University had to face in these early days. He told how he and Professor Dakin [Biology] had called in at the University on the Sunday evening prior to the opening day and found the lecture room which they were to use at 9 o'clock and 10 o'clock the next morning ankle deep in wood shavings left by the workmen. They set to work with brooms, cleared out the place, and arranged the chairs for the classes for the morning lectures.



Professor A. D. Ross



Professor N. T. M. Wilsmore

Lecturing Under Difficulties.

In the early part of 1913 the University building comprised only seven rooms. The mathematical lectures were given in a room used also for English, French, German, Philosophy, and History and Economics. The room used for the Physics class measured only 16 feet by 10. As the class was attended by all the science and engineering students and also one or two arts students, accommodation difficulties were serious. The order of procedure was for the students to go in first, each with his chair; the professor followed and drew into the doorway a blackboard on an easel. At the end of the lecture the procession retired in reverse order - easel and blackboard, professor and students. Seven other rooms were added to the building during 1913. While the additions were being made, conditions for lecturers in the daytime became even worse, for it is difficult to maintain the attention of students while workmen are engaged in hammering an iron roof. On one occasion when the din became so terrific as to prevent his voice being heard, Professor Ross intimated to his students the termination of the meeting of the class by writing on the blackboard, "The lecture has already stopped." The addition of further rooms to the University in 1913 relieved conditions to some little extent, as did the transfer of the engineering department to Crawley House in March, 1914. With the rearrangement of classrooms, a room measuring about 24 feet square was set aside for the joint use of the departments of chemistry and of mathematics and physics. Naturally laboratory classes were out of the question, and arrangements had to be made for the students to obtain their practical work in these subjects at the Perth Technical School. Little improvement was possible until in 1917 the Government transferred several additional buildings to the Irwin-street Site and gave a grant of over £2,000 for fittings. The Chemistry Department obtained a lecture room in one of these buildings, while the building formerly used as the Labour Bureau was adapted for use as chemical laboratories. The Physics Department enclosed the narrow verandah along the St. George's-terrace frontage of the original building, and this verandah, less than seven feet wide, did service as a physics laboratory for nearly 16 years.



IRWIN STREET, 1913. The first jarrah building facing St George's Terrace at the corner of Irwin Street, which comprised the whole University in the early years.

With the removal to the new site at Crawley of the departments of Biology and Geology, and later of the Faculty of Arts, conditions became less congested for the departments of chemistry and physics. But the old buildings were badly suited to experimental science. The wooden structures, vibrating incessantly to the heavy traffic in Hay-street and St. George's-terrace, made accurate weighing impossible, whilst the magnetic disturbance from passing trams upset all serious galvanometer work. Nor were living conditions any better. Class rooms and laboratories were intensely cold on winter mornings, while at the beginning and end of the session the air often reeked from varnish and resin exuded from the roasted furniture. In the height of the summer conditions in the buildings were ultra-tropical, and school pupils would have been in despair of their chances at School Certificate examinations had they known that their papers were examined by the University staff amidst such torrid heat. It is related that on one hot day a member of the teaching staff apologised to his class for the apparent emptiness of a bottle exhibited on the lecture bench. "Normally," he said, "you would have seen the liquid of which I have been speaking, but at this temperature the substance is a gas!"

It is difficult to realise how depressing must have been the conditions under which staff and students worked during these many years. Probably the professors of chemistry and physics would not have come to Australia had they known that nearly 23 years would elapse before they were installed in permanent quarters. Possibly they had come to regard the wooden buildings as permanent in a very unpleasant sense. Yet excellent work was performed under these conditions, and students trained there as chemists and physicists have gone out into the world and attained positions of high eminence. Certainly the science graduates of the University of Western Australia have proved their ability to hold their own with those of other universities.

Presenter's Postscript. The original "Irwin Street Building", shown in the photograph above, has been relocated to a site beside James Oval on the Crawley campus and is currently home to Convocation – the UWA Graduates Association and the University Cricket Club.