

# Students Who Do Not — Fear Hard Work

## RECENT INVESTIGATIONS OF ATOMIC PHYSICS

Lecture By Professor Kerr Grant

At the University of Adelaide last night, Professor Kerr Grant, professor of physics at the University, gave the final of his three lectures on "The Transmutation of the Elements." He described the various methods of converting one species of atom into another by means of atomic bombardment of atoms, and the discovery of new kinds of radio-active elements by transmutation.

Dealing with the problem of transmutation of nuclei, and especially of the artificial production of unstable or radio-active species, he said that there were three main families of radio-active elements known as the uranium-radium family, the actinium family, and the thorium family, comprising about 15 members. Each element of that family was produced from the element next above it in the series by a process of nuclear change termed disintegration.

### Sides Of Alpha Rays

Professor Kerr Grant showed slides depicting the sides of alpha rays. He said the production of radio-active atoms by ion-bombardment opened the door to results on a scale of practical interest. An interesting property of radio-sodium was that the product of its decay was ordinary magnesium which was non-radio-active, and in every way harmless to life. Unlike radium it might therefore safely be used for medicinal purposes. In the three lectures he had given he had endeavored to convey some idea of the results on a scale of practical interest.

An interesting property of radio-sodium was that the product of its decay was ordinary magnesium which was non-radio-active, and in every way harmless to life. Unlike radium it might therefore safely be used for medicinal purposes. In the three lectures he had given he had endeavored to convey some idea of the results on a scale of practical interest.

Next week's University public lecture will be given by Professor J. R. Wilton, the professor of mathematics, on "Dante's Divine Comedy."

## 50 YEARS WORK OF GEOGRAPHICAL SOCIETY

### Development Of State Traced

The growth and development of South Australia was traced at a meeting of the Royal Geographical Society last night, when the fiftieth anniversary of the society was celebrated. His Excellency the Governor and Lady Dugan were among those who attended.

The president (Mr. F. L. Parker) said that the society still had two of its founders, namely Langdon Bonthon and Mr. F. S. Wallis. Mr. Parker, in an address on geographical progress, said that for 50 years the society had promoted the study of geography, and had assisted exploration and the preparation of maps and plans. All that modern studies on social, economic, and scientific subjects of national importance were now founded on geography. It was absolutely essential that geographical and economic policies should rest on a sound geographical basis, and that our students should understand geographical factors which were influencing world economic progress and our own geographical conditions.

Dr. A. Grenfell Price, master of St. Mark's College, said that there were great geographical problems in the founding of South Australia—the choice

of the State as the site of the Wakefield experiment in colonisation, the choice of Adelaide as the site for the first settlement, the choice of Adelaide and Port Adelaide, and the survey and occupation of country lands. South Australia, developed by the farmers and pastoralists, who learnt to understand the country's resources, and the choice of the figures in solving the four great geographical problems were Flinders, Sturt, and the first Governor. Flinders owed an immense debt to Colonel Light, who was given a task of tremendous difficulty and responsibility, to be fulfilled in a few months. Yet in the few months allotted, he discovered not merely the best location for the first settlement, but the one which would give the infant settlement a chance to overcome the pangs of its birth. The choice of the region was purely an individual effort, and a personal triumph.

Dr. Price said that, throughout the difficult period, the behavior of the colony of free immigrants in political matters, was almost exemplary. The great mass of journals and letters from the colony, and the unanimous witness to dangers and disasters courageously borne.

### Population Statistics

In an address on "South Australia's Growth and Development," Mr. James Penner, Superintendent of Technical Education, said that since the foundation of the colony, South Australia had been born in South Australia, and had 380,000 people had come here to live, of whom 200,000 were of European descent, 200,000 South Australia, and 200,000 had emigrated. In addition, statistics showed that since the foundation of the colony, 500,000 people had died, a total loss of 500,000, leaving the present population of rather that estimated at 1,000,000 people. Statistics showed that there were 546 people in South Australia at the end of 1934.

The ten-year period, covering the 'sixties, was not a very prosperous period for South Australia, he said, but the 1870-1880 decade was a time of strong growth, in population and advancing frontiers of settlement. The 1880-1890 decade witnessed the swing of the pendulum of prosperity and depression, a period of depression and emigration. The next decade was again one of difficulty. In this period there was there any growth by immigration. For the other eight years this State was a net exporter of population to other States and countries. The 1912-1920 decade, which was, on the whole, one of the most difficult to value of all the periods of the State's history. It included the years of the war, and the years of the 1914, the period of demobilisation and the post-war years, with their extraordinary fluctuations of value and value of money. The 1922-1930 period was one of convalescence after the ravages of the war, and the recovery was very slow, often in doubt, and generally unpleasant or painful.

The 1930-1934 period, he added, was almost wholly in the city, in Port Pirie, along the Murray River and in the northern portion of Eyre Peninsula. Almost the whole of the 10 inch line rain zone was a fair to good quality occupied, but there were still large areas of over 10 inch rainfall which were present. The map emphasized the high importance to South Australia of the four northern barriers, the gulls, the mountains, the rivers, and the sea. The features were something more than barriers; they were bringers of good, and they were the source of our water supplies. Those four geographical features had most profoundly influenced the growth and development of the State.

### FIFTY YEARS AGO

From "The Advertiser," July 11, 1885

At an influential meeting held in the Adelaide Town Hall on the evening of the 10th inst., a resolution was decided to form a South Australian associated branch of the Geographical Society. The Chief Justice, in a most able way, the chairman, enlarged upon the advantages of such a society, and ours would derive from the systematic study of geographical and territorial history of the country. The speaker, Sir Henry Ayers followed with a speech of a similar purport. The following gentlemen controlled their names as subscribers. It was resolved that all who pay the subscription for the year ending of the present year will be ranked among the founders of the society.

# CENTENARY DATES FIXED

## State Celebrations To Begin In September PLANS TAKE FORM

According to present plans, the State's section of the Centenary celebrations next year will open with the Royal Show in September, when, it is understood, the society will offer special prizes and include special features.

On a Sunday about this date a national thanksgiving service will be arranged, in which all denominations are invited to take part. The Roman Catholic authorities state that they propose to have a special Commemoration, probably in November. The Girl Guides' Association has stated that it will arrange a floral festival, introducing new items, and on a larger scale than previous years. It is also proposed to organise a Game Jamboe of a type to attract overseas and interstate visitors. October 9 to 16 has been set aside for the floral festival.

It is also expected that a racing carnival will take place in October. The Government is also planning for November is under consideration.

In December there will be a week's national celebration, including Dominion Day. The city demonstration will then close, and dates in January and February will be fixed for the year before then, will be fixed for celebrations in such country towns as are attended by tourists, have historical associations, and can arrange carnivals. The centenary committee is assisting with publicity, and is arranging for cheap fares. A programme committee has been formed for the planning of the year. Ritchie, the President of the Legislative Council (Sir David Gordon), the Lord Mayor (Mr. ...), and representatives of the press.

The Victoria League has been given approval to arrange a ball, the date of which is still undecided. The floral festival committee, with Lady Bonnyton as chairman, has made arrangements for the planting of necessary flowers, plants and shrubs, and has planned a scheme of decorations. The committee is also reported in detail what and when to plant. A women's sub-committee has undertaken the task of securing cup-bearers of business houses along the approved route to obtain their assistance in the carrying of the banner. The music committee, under Alderman E. W. Holden, has drawn up a programme to be performed by the State's massed music, both of choirs and bands.

The Women's Centenary Council has stated that the memorial to pioneer country men had not yet been definitely decided. The committee is also compiling a women's Centenary souvenir book, to produce a pageant, and to hold a women's congress extending over four days.

The State organising director of the Centenary, Mr. ... (Mr. ... Rylan) said yesterday that at a meeting of the executive committee, the Acting Premier, Mr. ... had stated that the Government was co-operating with the committee in every way. The committee is also planning an Exhibition a success, and that at his request his Excellency the Governor-General had been invited to visit the Victoria of India and the Governor-General of New Zealand and the Union of South Africa. The co-operation Letters had also been sent to the Commander-in-Chief of the Indian Army, and the Governor-General of New Zealand. Canada had practically decided to arrange an exhibition, and the committee is also in consideration by the New Zealand Government. Communications had been sent to the Governor-General of New Zealand, asking them to forward on loan or as a gift, photographs and exhibits such as the centenary of the Dominion of the various countries. It was hoped to secure sufficient exhibits to make an Empire exhibition to be both educational and attractive. A statement was made about the work of the committee, and it had been assured of the co-operation of the shipping companies. He was doing all he could to promote the centenary, and was also trying to arrange, through the British Government, for one of the South Australia, British, and the South Australia.

ONE of the brightest spots of the past few years in our economic structure is the way in which university students have risen superior to difficulties, and, with the co-operation of employers, both Government and private, have won their big chance.

Recently "The News" mentioned the case of Mr. ... of Rose Park, a bachelor of engineering, who accepted a job as a laborer before he was appointed to undertake research in forestry. There are others who have shown an equal disregard of the class of job which is so long as it might prove a means to an end.

If the Public Service Commissioner (Mr. Hunkin) could be induced to open his records to the public, striking facts would be revealed. It is known that it is his policy—with the full concurrence of the Government—to assist students wherever possible.

One avenue in which Government departments are rendering invaluable aid to students is that of providing practical work during vacation periods. An engineering student must possess 12 months' practical experience before qualifying for a degree. This need not be continuous, ready to step into any job during their vacations, usually complete this requirement during their course.

This move serves a twofold purpose. It enables the student to gain practical experience, and to step into any job during their vacations, usually complete this requirement during their course.

True, they cannot all be assured of executive positions, but there is a greater percentage absorbed than was the case some years ago. There was a time when promising youths were trained in the South Australian Public Service, and migrated to other parts where greater inducements were offered. That does not apply to the same extent today.

For some positions the Government has had to draw on the other States, but as time goes on it is hoped there will be a qualified deputy able to step into any executive job that becomes vacant. In a recent case where South Australia found it necessary to secure an officer outside the State as Conservator of Forests, it was able to induce a former South Australian University graduate in Mr. G. J. Rodger to return.

America is not the only place where students are content to work for a living and to pay for their university training. Adelaide has its quota of young men who are prepared to work at anything from laboring upwards.

In the Government service today are a number of students, who through the changed circumstances of their parents, contemplated abandoning their studies until given a minor position in one of the departments. The salary in most of these cases is very small, but it is something towards the cost of their education. More than a practical and theoretical knowledge are gained, and initiative is developed.

There are budding architects, engineers, lawyers, scientists—in fact, students of the commonest professions willing to engage in the commonest tasks in the hope of getting the big chance. The Public Service Commissioner is taking a fatherly interest in them. There is nothing wrong with South Australian youth when it is prepared to roll up its sleeves and work at anything to achieve its ambition.

## Communist Speaker At University

A number of Adelaide University students took part in a discussion which followed an address given in the Lady ... Hall yesterday by a Communist party in South Australia. Mr. Moyle was invited to speak at the meeting. Adelaide University Politics Club after lunch with several Communist members of the club and other members of the club who attended the meeting. Some students who were curious of the course of the address, with Communist members of the club, with Communist members of the club.