

tions in the areas of astronomy where we have demonstrated scientific excellence in the past or for which we have particular geographic advantage.

As a politician I must confess that there must be few votes to be gained from the pioneering work being done in Australia in chemistry of the Galaxy, but as an individual I am fascinated and intrigued by the significance of the new molecules discovered in interstellar space. The cooperation between the Division of Radiophysics of CSIRO and the Chemistry Department of Monash University in this work represents an interdisciplinary approach that is becoming so much a part of modern astronomy.

In Australia we have been interested in several active areas of astronomy, in quasars and their cosmological significance, in the nature of pulsars and in the physics of the Sun, including the basic nature of solar flares, high energy phenomena in the solar corona and in the behaviour and time changes of structures of all sizes in the solar atmosphere.

Mr President on behalf of the Government of Australia I wish the Assembly great success and after the words of the poet Milton shall now leave you "to model Heaven and calculate the stars; how they will wield the mighty frame, how build, unbuild, contrive".

Dr Wood expressed his thanks to Minister Morrison, and invited the Right Honourable, the Lord Mayor of Sydney, Alderman David Griffin, C.B.E., to address the gathering.

ADDRESS BY THE LORD MAYOR OF SYDNEY, ALDERMAN D. GRIFFIN, C.B.E.

'Mr Chairman, Mr Minister, Ladies and Gentlemen,

It is a signal honour – perhaps in this company I should say an honour of the first magnitude – to welcome to Sydney for the first time members of the International Astronomical Union. Australia is no stranger to unions; already we have many – too many perhaps – and some may be asking why in heaven is the Lord Mayor welcoming still another. We welcome you, Mr President, partly because your union is closer to heaven than most, but mainly because yours is a most special union: You work not in your own interest, but in the interest of mankind. You strive not for better conditions, but for greater knowledge. Your studies throughout all ages of history reveal man at the highest point of his intellectual achievement. You are, it seems to me, the poets of science since you use your love romance to lead you to the truth. Sydney is honoured to be your host in this your first sally into the Southern Hemisphere.

Having thus established your credentials permit me to say a word about mine. The fact is that as Lord Mayor I am something of an old time astronomer myself. I am no heretic, I run no risk of being burnt at the stake, I hold fast to one demonstrably accurate astronomical proposition, namely that Sydney is the centre of the Earth. All other countries and peoples revolve around Sydney. The Lord Mayor is the centre of Sydney, therefore the Lord Mayor is at the centre of the centre of the Earth. It is an awfully pleasant place in which to be. Some minor figures have occasionally been ill-mannered enough to challenge this proposition. They are a doubting lot!

But perhaps I have over-simplified it a little. The Lord Mayor has other extraordinary qualities. Let me, for example, explain his position in relation to energy and radiation. One starts with the simple proposition that a Lord Mayor gives off energy in the form of radiation – indeed I hope I am giving off some energy in the form of radiation at this very minute – yet, and here is the mystery, my mass is not diminishing. Einstein, by applying the Lorentz transformations, equated the relation between mass and radiation. Yet for all his genius he arrived at a wrong conclusion. His principle simply does not work when applied to a Lord Mayor. For Einstein postulated, if I remember correctly, that if a body gives off energy in the form of radiation its mass diminishes by E/c^2 where c is the velocity of light. True, Lord Mayors sometimes have to move pretty quickly but under no circumstances does their mass diminish. On the contrary, a Lord Mayor finds his mass increasing (He wishes it didn't) in direct proportion to the amount of radiation he gives off. Nevertheless, and with all its attendant risks, I am radiating to you all to-night the warmest of welcomes to Sydney!

I realise however, ladies and gentlemen, that you have come to Sydney not only to study Lord Mayors but to apply combined force of your intellects to even more important topics.

I hope however, that your programme will enable you to take some time off from your considerations of the wonders of outer space, to observe more closely the beauties and interest of a particular part of the planet Earth; that part lying at 151°12' east of Greenwich and 33°52' south latitude which the rest of the world knows as Sydney but which we in Sydney know as the most beautiful place on Earth.

But I must stop pretending. At heart the rest of us envy the astronomer. You have as your kingdom the wonder and mystery of the stars. By miracles beyond the range of normal human understanding you are able to project your thoughts to the most distant galaxies and beyond into the infinite night. Above all sciences astronomy – in the eyes of the lay population – stands supreme. For if there be a riddle of the Universe, if great truths touching the origin and purpose of life are to be discovered, it is surely an astronomer who will one day point the way. Was it not Gertrude Stein who on her death bed said to her faithful companion – ‘Alice, what is the answer?’ and on being told ‘Gertrude, you know there is no answer’ replied ‘well, if there is no answer, what is the question?’? When one day we have the answer and having it will at last know the question, it will be an astronomer who, in all probability, will give us both. For all that you and your predecessors have revealed the city of Sydney honours you to-night.’

The Chairman thanked Alderman Griffin for his words and then invited Emeritus Professor W.M. O’Neil, Acting Vice-Chancellor, The University of Sydney, to take the floor.

ADDRESS BY THE ACTING VICE-CHANCELLOR OF THE UNIVERSITY OF SYDNEY,
EMERITUS PROFESSOR W. M. O’NEIL

‘On behalf of The University of Sydney I issue a very warm welcome to the participants in the Fifteenth General Assembly of the International Astronomical Union and I express the wish that their meetings will be comfortable, pleasant and highly rewarding.

International assemblies of this kind are important for several reasons. Though there is a full and fairly rapid exchange of information through the journals and even more rapid exchange through personal correspondence, it is important for scholars in a field to get together for oral exchanges of information, views and interpretation, especially where the material is preliminary and tentative. Another important reason is that an opportunity is provided for older workers to renew acquaintance with one another and for younger workers to make acquaintances which will be useful to them in their later work. It is much easier to write to someone we have met than to someone we have never. Finally international assemblies help to break down parochialism and nationalism: not that astronomy has ever suffered much from this sort of defect.

It seems to me appropriate that astronomers, the practitioners of the oldest empirical science, are holding their first meetings as an International body in Australia in the halls of The University of Sydney. First, it is the oldest of the Australian universities. Second, it is one of the few Australian universities with strong and diverse astronomical research programmes; perhaps as befits a young nation, our main programmes each involve a unique or novel installation. Third, I think Sydney was the first Australian university to have a Professor of Astronomy, a post occupied jointly from 1912 to 1926, with the post of New South Wales Government Astronomer. Fourth, though many Australian universities feature the Southern Cross in their coats of arms, Sydney has a reference to the constellations in its motto: *Sidere mens eadem mutato*, though the constellations be changed the spirit is the same, a reference to our hope to preserve northern intellectual interests, traditions and values under southern skies.

Let me say just a little about the age of astronomy, much greater, of course, than that of The University of Sydney and about its origins. It seems to have begun with star watching and recording for two main purposes. The first was quite practical, namely timekeeping. It was quite important to keep track of the days and to have some convention for deciding when they began and ended. The Moon with its phases marked out a convenient period of 29 or 30 days, and with its quarters sub-