

for each substance the minimum daily ration which will protect the experimental animal. A committee on accessory food factors, with Professor Hopkins as chairman and Dr. H. Chick as secretary, has been sitting during the year, and has prepared a monograph to meet the needs of the general scientific and medical reader.

SCIENCE IN AUSTRALIA

THE newly founded Commonwealth Institute of Science and Industry, Melbourne, has begun the publication of a monthly journal entitled *Science and Industry*. The editorial foreword says:

No competent scientific investigator need fear the coming of the institute. It will not attempt to do work that others are doing already. There is more than sufficient work for all. No one needs to look round for a job. They are everywhere at hand. While there is still dust in Sydney's streets, or smoke issuing from the chimney stacks at the factories at Footscray, while there is waste timber being eternally burnt around the saw-mills of the west, while the molasses expressed from the sugar-cane of the north still finds its way down to the sea, who can deny the width of the field for scientific investigation? While the rich lands of Queensland are continually being given over to the prickly pear, and arable areas of Victoria to St. John's wort, while artesian water ceases to flow, or the bores to corrode, while stock die of strange diseases in the night, and their young perish before birth, while there are still mineral treasures that have not yet been exploited by the prospector, while air transport is still with us an undeveloped means of locomotion, while a thousand and one articles of daily use are still being imported from foreign lands that could easily be manufactured by our own people, who will say that there is no room for science?

Hitherto in Australia, and in most other English-speaking countries, the scientist is only now beginning to get back some of his own. In the past there has been observable a certain suspicion of science. The primary producer used to regard the man of science as a dreamer or at best a theorist. They talked of Collins-street farming. The scientific man, on his part, had little respect for those who allowed their actions to be hampered by the ideas of their grandparents. But gradually it was seen by producers that the man of science

had something to teach them if they were only prepared to listen, and if he was willing to express his thoughts in every-day language. The man on the land no longer despises science as he did a quarter of a century ago—at least, the more progressive do not. The manufacturers are not precisely in the same plight. With some few and notable exceptions, they have been inclined to ignore the lessons of science. The scientists themselves are somewhat to blame for this, or, at any rate, they have themselves to thank. Business men have one test of value, and that is cost. Scientists who love their science place it above money. Much of the most valuable scientific work done in the world has been done for a pittance. The reward of the investigator was not necessarily expressed in the augmentation of his banking account. Business men could not understand this. Services that could be had cheaply were nasty. If they were valuable, they would be much sought after in the market. So argued these men of affairs, and this was the basis of those advertisements asking for the services of fully-qualified chemists at £200 a year or less. These bad old days must end if science is to come into her own. In the field of science the laborer is worthy of his hire.

The institute is the youngest department of the commonwealth government. It is not yet old and effete, with a large number of its officers eagerly looking for the retiring age. It represents the young commonwealth, youthful and virile, and realizes, as it has been expressed, that "the frontier of knowledge is the starting point of research."

SIGMA XI AT SYRACUSE UNIVERSITY

THE Society of Sigma Xi at Syracuse University has elected as officers for the ensuing year the following: *President*, Edward D. Roe, Jr.; *Vice-president*, C. C. Adams; *Secretary*, Geo. T. Hargitt; *Treasurer*, Henry F. A. Meler. During the past year the following scientific program has been presented by members of the society:

November 18. Edwin F. McCarthy. Occurrence of knots and spiral in Adirondack red spruce.

Carl J. Drake. Notes on *Nezara viridula*, a serious plant pest in the south.

December 13. R. S. Boehner. Gas warfare.

E. N. Pattee. The outlook for chemical industries in the United States.

January 10. T. C. Hopkins. Exploring and