the author has sought to make a distinction between "education" and "training" and is no doubt partly justified in doing so. The justification is particularly defensible if it is assumed that "the task of American education is infinitely greater, more difficult, and more challenging than that of Soviet education". The tasks of education are, however, universal in character and cannot be very different at different times or in different longitudes. As the author himself accepts, there is, however, no doubt that Soviet education has achieved impressive gains in the quality and quantity of training and to shut one's eyes to these facts is, to say the least, to be under the illusion of

self-complacency. The Soviet system has no doubt implanted into its country's educational machinery certain major strengths as well as major weaknesses but the results achieved do call forth a serious study by all concerned. Mr. Alexander G. Korol has succeeded in outlining the problem in a very thorough and painstaking manner and has included in his book a vast amount of statistical data and carefully collected material, making it an indispensable reading for those who wish to get a picture of education in the Soviet Union.

Bangalore-3, S. November 23, 1958.

S. BHAGAVANTAM.

## SYMPOSIUM ON CHEMOTHERAPY IN BACTERIAL AND VIRAL INFECTIONS

A THREE-DAY SYMPOSIUM on the above subject was held under the auspices of the C.S.I.R. on the 2nd, 3rd and 4th November at the Central Drug Research Institute, Lucknow. The Symposium was inaugurated by Prof. M. S. Thacker who also laid the foundation-stone of the pilot plant building for producing drugs for trials on a larger scale.

There were two popular lectures: one by Dr. V. R. Khanolkar on "The Chemotherapy of Cancer" and the other by Dr. B. Mukerji on "Indian Medicinal Plants in Experimental Tuberculosis".

Dr. V. R. Khanolkar, Col. S. S. Bhatnagar, Dr. Hawkins and Dr. S. S. Bhatia were the sectional Presidents. The papers presented at the Symposium included one on "Plant Antibiotics" by Dr. Chopra which dealt with Mycobacterium tuberculosis, "Perspective of Chemotherapy" by Dr. M. L. Dhar and "The Enzyme" Approach to Chemotherapy" by Dr. C. R. Krishnamurthy which dealt with the role of permease in bacterial chemotherapy. There was an interesting paper by Drs. Sheth and Krishnamurthy of Bombay, dealing with the spectacular clinical improvement in cases of pulmonary tuberculosis by the use of powdered fruit of Rudanti (Capparis monii). It is hoped that the value of this drug will be explored further.

There was a paper by the Bengal Immunity group of workers on the chemotherapy of bacillary dysentery, stressing on the possible role of re-excretion of the drug into intestines contrary to the common view that the drug is not absorbed at all and that the beneficial effect is due to its low absorption.

Of the four papers on viral chemotherapy, the one on the methodology by Dr. V. N. Krishnamurthy of Vaccine Institute, Bangalore, emphasised the advisability of using two or more methods even for primary screening of antiviral drugs as against a single test.

There were a few papers on the fungal and parasitic infections and the paper dealing with the method of testing compounds for filariasis by Dr. Hawkins of London evoked much interest.

The absence of papers on two important aspects of chemotherapy, namely, drug resistance and allergy to antibiotics, was noticeable and this perhaps is significant in the sense that both these problems might not be still acute in our country. The papers, in general, covered much ground eliciting thought-provoking ideas and it should be said that the Symposium was a success.

V. N. K.

## U.S. 'ATLAS' MISSILE

THE successful launching of the 'Atlas' missile marks a distinct step forward in space operations. The missile was fired into orbit from the base at Cape Canaveral, Florida. Its weight is 8,700 lb., length 85 ft. and width 10 ft. It has penetrated 928 miles into outer

space and the lowest point of the orbit is estimated at 114 miles. Its period round the earth is about 100 minutes. It carries a communications system which has proved successful in receiving messages broadcast from the earth and relaying them back.