

Current Science

Vol. XVIII]

FEBRUARY 1949

[No. 2

	PAGE		PAGE
<i>A Modern Drug Industry for India</i>	.. 31	<i>Sir C. V. Raman</i> 39
<i>Quality in Scientific Research</i>		<i>Modern Trends in Systematics</i>	.. 39
SIR T. S. VENKATRAMAN	32	<i>Mathematical Procedure in Statistical Theory</i> 40
<i>The Asian Regional Commission of the International Meteorological Organisation</i> 33	<i>Improvement of Agricultural Statistics</i>	.. 40
<i>The Micromanipulator.</i> S. L. SCHOUTEN ..	34	<i>Letters to the Editor</i> 41
<i>Bee Research Stations for India.</i> A. S. SRIVASTAVA AND M. SREENIVASAYA ..	36	<i>Research Information Service</i> 53
<i>New Annual Reviews</i>	33	<i>Reviews</i> 54
		<i>Fugitive Molecules,</i>	
		S. V. ANANTAKRISHNAN	57
		<i>Science Notes and News</i> 59

A MODERN DRUG INDUSTRY FOR INDIA

THE decision of the Government of the Indian Dominion to start the production of an essential group of modern drugs—antibiotics, antimalarials and sulphas—at an estimated capital cost of two crores and a half, represents one of the most enlightened and progressive measures adopted by the National Government. The venture is a welcome contribution to the establishment of a drug industry on modern lines.

Major-General S. S. Sokhey, well known not only for his brilliant contributions to chemotherapy but also for his inspiring leadership in the creation of an active,

contented, well disciplined and enduring school of research at the Haffkine Institute, Bombay, we learn, has been largely responsible for conceiving the idea and convincing the Government of the necessity for launching upon this enterprise.

In conformity with the recent policy of the Government of India to requisition expert assistance and advice from foreign firms in the matter of establishing industries in this country, a reputed Swedish firm, according to the press reports, has been invited to tender technical advice in the design and construction of the factory.

The production as planned, is expected to take care of nearly three-fourths of the major illnesses prevalent in India and effect a substantial saving (Rs. 2.25 crores per annum) in hard currency since most of these drugs are, at the moment, being imported from the U.S.A.

We are not quite happy about the disconcerting but nevertheless inevitable time lag—the long three-year period—which is said to be necessary for starting the production of these drugs. Considering the phenomenally rapid advances which are being made in the field of chemotherapy, there is the risk of the drugs now proposed to be manufactured being superseded by superior specifics, more potent, less toxic and less expensive to manufacture. Such risks one has to face in a competitive world, but they could be considerably minimised by a careful selection of plant and equipment, thoughtfully designed and fabricated to secure adequate flexibility so that the same manufacturing machinery could be harnessed for making other drugs. In the present

instance, the plants contemplated to be installed, we hope, possess this merit.

The drugs now proposed to be produced are of vital significance to the nation and in the event of a war, these plants need adequate protection. From this point of view many may doubt the wisdom of locating the factory at Bombay, considering the imminent vulnerability of the metropolis. It would not be difficult to suggest other alternative sites for the location, e.g., Bangalore, offering greater attractions for the industry to flourish and expand. We hope and trust that the organisers of this vital industry will give due consideration to this aspect of the problem.

We look upon this State enterprise as a national asset, not merely because of the means it provides for attaining a state of self-sufficiency with respect to these essential drugs, but on account of the long-range benefits which the venture could be made to confer on the country's drug research and industry, if the industry is well planned with scientific vision and technical foresight.

QUALITY IN SCIENTIFIC RESEARCH

YOUR January issue opens with a leader "Quality in Scientific Research" basing your comments on the recent speech of our outspoken Prime Minister at the Indian Science Institute, Bangalore. He is reported to have stated that research output in our country is not commensurate with the monies expended and with the wealth of research material and human talent available in the country. You lay the blame at the door of what you call the absence of "research climate". Below are indicated certain other causes for the dearth complained of.

With few honourable exceptions the spirit of wholehearted one-pointed continued devotion to research is lacking in many of our scientists. The reasons are partly social: the young enthusiast finds himself saddled with domestic and social commitments at a time when research should occupy his sole attention. Often so-called administrative needs pick him out

of his line and place him elsewhere and this breaks the continuity and enthusiasm of the researcher.

Apparently because the spirit of modern scientific research is somewhat recent in the country, many of our scientists show a love for power and administration, both of which are inimical to true research. A brilliant agricultural scientist held sway over one of our important institutes for about a year and he was able to cut down routine administrative work of the directorate by a well-planned method of decentralization in the matter of control. Others who occupied the same position—both European and Indian—showed a regrettable tendency to gather more administrative control than necessary. Ultimately, the Government red tape with its files and unending back papers proved so stifling that he decided to quit. During his regime the scientists under him enjoyed a freedom they never had before or after.