

is not ploughed in the dry condition but puddled after first letting in the water, this dry application is not feasible.

To meet this situation another experiment on deep placement has been conducted at Central Rice Research Institute for two seasons. The required amount of sulphate of ammonia was mixed with 5 to 10 times its weight of soil and made into a soft dough with water. Small balls of about 1" in diameter were then made from this material and dried. These balls were thrust 2"-3" deep into the soil between rows of standing crop 12"-18" apart at the time of weeding in a transplanted crop or at the time of bushening in a broadcasted crop. It has been found that this method of application is much more efficient than the wet surface application as shown by the figures given in Table II.

The efficiency of the deep placement is 2.5 times that of the surface application. There is an indication that the response for 20 lb. N placed deep can be just as good as 40 lb. N applied on the surface.

While the detailed results of these trials will be published elsewhere, the experiments are

TABLE II
Results comparing 20 lb. of nitrogen applied as ammonium sulphate either on the surface or deep-placed

	Earheads per plant	Mean height per plant (cm.)	Yield lb. per acre	
			grain	straw
No nitrogen	.. 5.3	115.8	1575	1926
Surface application	.. 5.8	120.5	1698	2089
Deep placement	.. 6.3	126.0	1895	2395

being continued and arrangements are also in progress to test the dry application and deep placement on a large scale in the cultivators' fields.

1. Sethi, R. L., *I.C.A.R. Bull.*, 1943, No. 38.
2. Ramiah, *et al.*, App. II (b) to *I.C.A.R. Report on soil fertility investigations in India*, 1947, by Dr. A. B. Stewart.
3. Dastur, *et al.*, *Ind. Jour. Agri. Sci.*, 1933, 34, 3, 963, and 4,803.
4. Russel, E. J., *World Crops*, 1949, 1, 2, 72-6.
5. Dr. Morinaga, *Unpublished note*.

INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR

IN the course of his address at the opening of the Indian Institute of Technology, Kharagpur, the Hon'ble Maulana Abdul Kalam Azad observed as follows:

"The Institute which is being inaugurated to-day will have provision for the teaching of 2,000 students at the undergraduate level, and 1,000 students for post-graduate study and research drawn from all over the country.

"In order to ensure that the Institute serves the needs of the country in the most effective manner, the course in the Institute will be planned on the advice of experts drawn from industry, Government Departments, other employing agencies and educational authorities. In fact, this close association between academic experts and practical administrators is essential for the proper development of an institution of this type. I would like to make a special appeal to our industrial and business magnates to take an active interest in the development of this Institute. They can help in many ways. Industry can assist financially by establishing Chairs in subjects in which it is especially interested. Such assistance would make it possible to have Professors, where necessary more than one, in subjects which are important from the point of view of the development of industry. I have no doubt that in-

dustrialists will also help to make the training in this Institute more practical and concrete by permitting students to visit Workshops and Factories and allowing them to go through organised courses of practical training in the industry. It will improve the quality of teaching in the Institute, and in the end help industrialists themselves, if staff members of the Institute are offered facilities for the study of industrial techniques. Promising employees should also be seconded to the Institute to undertake programmes of research or courses at the post-graduate level. Last but not least, industrial magnates can help by deputing engineers, technologists, and administrators in their concerns to deliver lectures or courses of lectures at the Institute.

"Though situated in one corner of India, this Institute is intended to cater to the needs of the country as a whole. We have been able to recruit very distinguished men to take charge as Professors in the different departments, and we are happy that a scientist of the calibre of Dr. J. C. Ghosh is its first Director. I have no doubt that they will devote themselves to building this institution on sound foundations so that it may take its place as one of the finest institutions of its kind not only in India but in the world."