

MR. CHAIRMAN: It would be better for us to discuss that when the Minister is here.

SHRI S. N. MAZUMDAR (West Bengal): Sir, I would like to draw your attention to another very important matter. Only the other day during question hour members of this House were concerned with.....

MR. CHAIRMAN : You had better raise this when the Minister is here.

SHRI S. N. MAZUMDAR: But my submission is that on that day the Deputy Minister tried to convince us that everything was being done to ensure the safety of these bridges, and immediately after, this has happened. Does it not show that something is very wrong in the attitude of the Administration towards the whole thing?

SHRI V. K. DHAGE (Hyderabad): I would also like the hon. Minister to deal with this point in the statement that he will make today, that is, what has appeared in the newspaper today. I shall just read out.....

MR. CHAIRMAN: Let us wait till the Minister comes.

SHRI V. K. DHAGE: It shows that there has been negligence on the part of the Administration because in spite of the warning that there should be no train service on that bridge, the train has been run, and I would like the hon. Minister to make this point very clear whether there was such a warning given and whether.....

MR. CHAIRMAN: I am asking you to wait till the arrival of the Minister.

SHRI S. N. MAZUMDAR: His point is that if this is communicated to the Minister he can deal with this in the statement.

MR. CHAIRMAN: All right; we will start with the first Bill and as soon as Mr. Alagesan comes we will revert to this.

**THE INDIAN INSTITUTE OF TECHNOLOGY (KHARAGPUR) BILL, 1956**

THE DEPUTY MINISTER FOR EDUCATION (DR. MONO MOHAN DAS): Mr Chairman Sir, on behalf of Maulana Abul Kalam Azad, I beg to move:

"That the Bill to " declare the institution known as the Indian Institute of Technology, Kharagpur to be an institution of national importance and to provide for its incorporation and matters connected therewith, as passed by the Lok Sabha, be taken into consideration".

Sir, the Indian Institute of Technology, Kharagpur, was established in the year 1951 in pursuance of the recommendation of the Sarkar Committee. After the last world war in 1945, the then British Government of India framed a plan for the industrial reconstruction of India. It was felt that for the implementation of this plan for industrial reconstruction, a large number of engineers and technologists will be necessary. It was also felt that the existing institutions of engineering and technology in the country were not capable of training such a large number of students, So the Government of India of the day appointed a highpower committee under the Chairmanship of the late Shri Nalini Ranjan Sarkar of Bengal for devising ways and means for the development of technical education in the country. This Committee, popularly known after its Chairman as the Sarkar Committee, recommended that four higher technological institutions should be established in the country on the lines of the famous Massachusetts Institute of Technology in the United States of America. The Sarkar Committee also recommended that the first institution should be established in the eastern region of the country and that there should also be a time lag between the establishment of the first, second and other institution. In pursuance of the recommendations of

[Dr. Mono Mohan Das.]

the Sarkar Committee, the national Government of India in the year 1951 set up this Institute at Kharagpur. The place at which this Institute is located has got a history of its own which may be of some interest to the hon. Members of this House. Hon. Members know that this Technological Institute has been built in the district of Midn'apore, near the big railway junction Kharagpur. Now, this place where this Institute stands was developed by the British Government to be a district town. Midnapore was the biggest district in Bengal and in all fights for freedom this district was in the forefront, the people taking an active part in the freedom struggle. The then British Government thought that if this district could be divided into two equal units, perhaps it would be able for them to stem successfully the rising tide of nationalism in this district. So, they developed this place as the future district town. But the then British Government did not have the opportunity of developing it into a district town because the non-co-operation movement of 1921 under Mahatmaji, flooded this country and thousands of young men and women of our country were to be accommodated in huge jails. There was a great necessity for accommodating those thousands of men and women who courted jail at the hands of the foreign government. So, instead of developing this place into a district town, it was converted into a huge concentration camp. Now, from the year 1921 to 1946 this jail, known as the Hijli jail, continued. After 1946 when the national Government came into power, this jail was selected to be the site of this Kharagpur Institute.

Perhaps the history of the Institute will not be complete without giving a financial picture. Up to the end of the financial year, that is, 31st March, 1956, Rs. 3:39 crores had been spent on buildings, equipment and furniture—buildings, Rs. 22 6 lakhs; equipment, Rs. 106:3 lakhs : furniture, Rs. 64 lakhs. In addition, a total sum of Rs. 1:15 crores was spent on

recurring account during the six years 1950-56. The following budget provision has been made for the Institute during the year 1956-57: recurring expenditure, Rs. 47 5 lakhs : non recurring expenditure—equipment Rs. 59-37 lakhs, buildings Rs. 20 lakhs.

The main object of this Institute is to provide facilities for training and research on an extensive scale, especially in subjects, for which training facilities do not exist in the country. Facilities are available in this institution for under-graduate post-graduate and research scholars. A large number of subjects are covered, many of which are new to this country. Subjects which are at a degree level are the following:—

- Civil Engineering,
- Mechanical Engineering,
- Electrical Engineering,
- Metallurgical Engineering,
- Agricultural Engineering,
- Naval Architecture and Marine Engineering,
- Geology and Geophysics.
- Architecture,
- Mining Engineering.

For the post-graduate courses, facilities exist in the following subjects:—

- Structural Engineering,
- Hydraulics and Water Power Engineering,
- Transportation Engineering,
- Soil Mechanics and Foundation Engineering,
- Design of Electrical Machinery,
- Mechanical Handling of Materials,
- Production Technology, Mechanisms and Vibrations,
- Combustion Engineering and Fuel Economy,
- Advanced Broadcasting Engineering,

Technical Gas Reactions and High Pressure Technology,  
 Industrial Physics,  
 Applied Geology,  
 Exploration Geophysics,  
 Regional Planning.

At the degree level this is the only institution in India which provides a course in Naval Architecture and Marine Engineering. At the postgraduate level also there are a large number of subjects, facilities for which exist nowhere in the country. The present number of students are:

Under-graduate course . . . . .	1,275
Post-graduate course . . . . .	77
Research scholars ....	46

It must be said to the credit of this institution that during its short existence from .....

SHRI KISHEN CHAND (Hyderabad): What is the number of professors there?

DR. MONO MOHAN DAS: I am sorry that figure is not here. It must be said to the credit of this institution that during its short existence from 1951 to 1956. about 187 papers on research have already been published and 155 papers are in course of publication. The first batch of undergraduates completed their course in May 1955. The second batch completed their course in May this year. Some of the advanced students.....

SHRI KISHEN CHAND: Have all the graduates who came out in 1955 found employment?

DR. MONO MOHAN DAS : Hon. Members know that there is the greatest scarcity of engineers in our country.

SHRI KISHEN CHAND: I am asking a question.

DR. MONO MOHAN DAS: Yes. Gainful employment you should say.

Sir, some advanced students have also completed their course. By an executive order of the Government of India this Institute has been authorised to confer degrees and the first convocation took place only a few months back.

SHRI C. P. PARIKH (Bombay): How many post-graduate students from 1951 to 1956?

DR. MONO MOHAN DAS: The present figures, the number of postgraduate students who are studying now?

SHRI C. P. PARIKH: Who have studied.

DR. MONO MOHAN DAS: That figures is not with me. The convocation was held only a few months back. It is necessary that this authority to confer degrees should not be derived from an executive order of the Government. It is right and it is just that this authority of conferring degrees should be derived from a legislation passed by this honourable House, the Parliament of India. It is felt that if this Institution is not empowered by Parliament to confer degrees then its degrees will not receive the prestige and recognition which they richly deserve. Moreover, according to the University Grants Commission Act, the right of conferring degrees shall be exercised only by a University or by an institution deemed to be a University by a notification of the Central Government or by an institution specially empowered by an Act of Parliament. The Indian Institute of Technology is an institution of a special type having an individuality and purpose of its own which are quite distinct from those of a University. It is, therefore, necessary to have an Act passed by this Parliament incorporating this institution and giving it the exalted status of being an institution of national importance.

Perhaps a few words about the existing arrangement for management of this institution and the arrangement

[Dr. Mono Mohan Das]

for management in the future as proposed in this Bill will not be very impertinent. This Institute is at present administered by a Board of Governors set up by a Government Resolution. This Board consists of eight members, namely:—

- the Chairman;
- one non-official member nominated by the Central Government;
- one nominee of the All-India Council for Technical Education;
- three *ex-officio* members, name-ly.-
  - the Director of the Institute;
  - the Director General of Supplies and Disposals ;
  - the Director of Scientific and Industrial Research ; and
  - two representatives from the Central Government—one from the Ministry of Education and another from the Ministry of Finance.

It is now proposed that this Board may be reconstituted as follows:—

- (i) the Chairman;
- (ii) three representatives of Parliament, elected by the Members of Parliament: two from the House of the People and one from this honourable House;
- (iii) one non-official member nominated by the Central Government;
- (iv) one person nominated by the All-India Council for Technical Education;
- (v) three *ex-officio* members, namely, the Chairman, University Grants Commission; the Director of Scientific and Industrial Indian Institute of Technology. Research ; and the Director.
- (vi) three representatives of the Government of India—one from

the Ministry of Education, one from the Ministry of Finance, and another from any other Ministry of the Government of India.

The Board will be the executive authority of the Institute and will regulate the expenditure and manage the affairs of the institute in accordance with the statutes laid down for this purpose. It will have the power to determine the cadre and grades of the departments and to appoint all staff with the exception of only a few. It will also have the power to amend the Statutes. Any amendment to the Statutes should however receive the prior approval of the President of India in his capacity as the Visitor of this Institute. There will be an Academic Council to look after all academic matters and a Finance Committee to look after financial matters. The entire expenditure of the Institute is at present met by the Government of India. The receipts from students' fees, etc., go to the general revenues. With the setting up of this body corporate as proposed, the door will be open for acceptance of donations, etc., and for the utilisation of the students' fees for meeting the expenditure of this institution.

Sir, as the whole expenditure of this institution is met by the Government of India, it is only just and proper that at least a remote control of administration should be in the hands of the Central Government. This has been sought to be achieved, first, by having the Chairman and some Members of the Board being nominated by Government; secondly, by the appointment of the Director; thirdly, granting of approval to key appointments; fourthly, granting of approval to Statutes; and lastly, by the power to review the work of the institution by the President of India in the capacity of Visitor. So far as the Parliament is concerned, every year they have to pay the money for meeting the expenditure of this institution. This Institute is the first of a chain of four institutions that are going to be set up in this country. The Institute is of a specialised type and it has got its own

individuality and purpose which are somewhat distinct from those of the Universities. The Institute was established in the year 1951, and during the last few years it has been developed into one of the premier institutions of this country. It is therefore proposed that some important position, some status should be given by this parliament to this Institute which it richly deserves, and we hope that this House will do that by declaring it to be an Institute of national importance under Entry 64 of the Union List of our Constitution.

Sir, I move.

MR. CHAIRMAN: Motion moved:

"That the Bill to declare the institution known as the Indian Institute of Technology, Kharagpur to be an institution of national importance and to provide for its incorporation and matters connected therewith, as passed by the Lok Sabha, be taken into consideration".

DR. RADHA KUMUD MOOKER-JI (Nominated) : Sir, While I am in complete sympathy with the objects of this Bill, I wish to take advantage of this occasion to remind the hon. Minister of certain very great difficulties in the way of developing even this one technological institution which is at Kharagpur. I addressed sometime back a question on the subject to the effect that there were in that Institute at Kharagpur more than 60 vacancies in regard to higher educational posts and these posts could not be filled up even in the space of one year with the result that much of the higher technological education in the Institute has been completely dislocated for want of properly trained staff. I therefore wish to draw his attention to this primary fact on which depends the efficiency of this educational institution. My second point is this it concerns a sort of a pious resolution to always invoke the example of the Massachusetts Institute of Technology. I should like him to note that the primary fact as regards that wonderful Institute is that there are on

the rolls of that Institute at Boston, Massachusetts, about 4500 students who are taught by a galaxy of about 900 technically qualified professors and, not merely that, you have to recognise the fact that a technological institution of that grade is prepared to teach at least 900 different technological subjects. Therefore, they have been able to recruit persons with the highest possible qualifications, persons who have specialised in all these various branches of technology. It will not do for us simply to vote funds for the development of institutions which even normally are not being run efficiently for the simple lack of proper talent to run the institutions. The Education Minister in reply to a question did admit the fact that there were some difficulties in recruiting the adequate talent on the basis of which such high grade technological institutions are managed efficiently. I therefore think, Sir, that while I do not oppose in any way the idea of developing this institution so that it may be given the status of a University and making conditions more attractive to those student recruits, at the same time I think it is the duty of the Government to pay particular attention to this primary difficulty and deficiency due to which the working of this institution has been very much suffering. So they must create the conditions on the basis of which they must attract talent. I have been told, Sir, that many good teachers are also applying here and there for posts which may suit them better than teaching there on account of these primary difficulties. I hope that this is an occasion on which the Government should be able to apply proper remedies by means of which adequate talent may be attracted for the running of this institution, so that ultimately we may be able to realise the ideal of the Massachusetts Institute of Technology which has a galaxy of 900 technically qualified staff teaching as many different branches of technology and applied science.

PROF. N. R. MALKANI (Nominated) : Sir, I welcome this Bill about the Indian Institute of Technology, making it a corporate body. I visited

[Prof. N. R. Malkani.]

the Institute two years ago. Some changes have taken place since, and I put some questions also about it last year. It is a very important, perhaps the most important and premier Institute of what is called higher technological training and research in India. If we look at the figures of expenditure, we find that the expenditure is fairly high. We find from the figures given here that we have a provision of more than Rs. 47 lakhs for recurring expenditure and more than Rs. 59 lakhs for non-recurring expenditure making a total of more than Rs. 106 lakhs, *i.e.*, more than a crore of expenditure, in a year, half of it recurring and half of it non-recurring. I also recently visited the Institute of Science, Bangalore. As far as I know, their estimated expenditure this year is only Rs. 21 lakhs and, as far as I know, their teaching is in no way inferior; if at all, it is superior to that of the Institute at Kharagpur.

Sir, last year when I put a question, I was told that there were only two Post-Graduate courses at Kharagpur— one was Chemical Engineering with 7 pupils, and another Mechanical Handling of Materials with 5 pupils only, or in all 12 for Post-Graduate studies. On the other hand there were 1,123 Under-Graduates in that Institute.

DR. MONO MOHAN DAS: Last year?

PROF. N. R. MALKANI: Here is your report for 1955-56. On page 32 you mention 1123 Under-Graduates but 82 Post-Graduates. Last year I was told there were only 12 Post-Graduate students. Now there are 82. Last year there were only two. Post-Graduate courses and this year we are told that there are 21 additional courses. To me it appears that this addition is rather haphazard and too hasty. It should have been properly phased. Last year there were only 2 and now we have 21 more. But I would like to know how many Post-Graduate students are there in these 21 sections started in one year, last year I was promised in an answer that more

were being started, but, in this haphazard manner, 21 courses have been started. I would like to know how many pupils per course have been recruited at the present moment. Sir, it appears to me that this institute is one in a chain of institutions for higher technological training. I find however that this is a central institute. It should not mainly be an institution for the < training of under-graduates. They could be trained in any other University, in any other college, and the staff here is very highly paid, is very highly technically qualified, is an expert staff. I do not see any reason why Kharagpur should be like an ordinary college coaching students for ordinary courses of Under-Graduates. It was intended to be for Post-Graduate students. Sir, when I visited Bangalore I was told that in almost every section there were a few Post-Graduate students, a few students for research. I am not aware that there is a single research student in any of these sections at Kharagpur Sir, there are some post-graduate students, but I am not aware of any research students there. But there are research students in Bangalore, Sir, I am told also that the prestige and the position of the- Bangalore Institute is much higher than that of the Kharagpur Institute though the Kharagpur Institute, is very well endowed, and its finances are very ample, if not lavish. But its output, to my mind, is not up to the mark.

Then, Sir, another thing to which I must draw your attention is this.....

MR. CHAIRMAN: How long are you likely to take?

PROF. N. R. MALKANI : Five minutes more, Sir.

MR. CHAIRMAN: I will give you five minutes more later. Mr. Alagesan is going to make a statement now.

#### STATEMENT ON RAILWAY ACCIDENT BETWEEN JAD- CHERLA AND MAHABUBNA-GAR

THE DEPUTY MINISTER FOR  
RAILWAYS AND TRANSPORT (SHRI O. V.  
ALAGESAN): It is with