Speech by Dr. S.S. 3hatnagar at the foundation stone laying ceremony

Fr. President, Mr. Prime Minister, Ladies and Wentlemen, I am sincerely happy to be able to participate in this pleasant function. ceremony which is going to be performed by the Prime Minister today is the result of a great deal of thinking and action by the Indian Atomic Energy Commissioners, the dinistry of Natural Resources and Scientific Research, the Bombay Government and the Tata Organization. About a year ago, Dr. Bhabha and I were working on the plan for the development of the fundamental research laboratory for nuclear physics. The problem which perplexed us was whether we could afford to have a separate institute for nuclear studies or expand the Tata Fundamental Research Institute to include all this and develop it into a really very good laboratory for such investigations. The lack of sufficient funds made me propose that the Tata Fundamental Research Institute should be expanded to include all scientific research of a fundamental character in these fields and that it should be ranked and perhaps named as a national institute. As we were briskly at work on these ideas, a distinguished young politician walked into my room and asked me about the nature of discussion which we were having. I explained to him briefly our ideas on the subject. Dr. 3habha had to go away for he had another appointment and this young man found time to ask me in all curiousness as to why as a practical scientist I wanted to associate myself with the transfer of such important practical activities to the care of Or. Bhabha whose fame rested mainly on subjects which were highly mathematical and of little significance to the material development of our country. He said a senior scientist asked him to dissuade me from being a party to an ambitious project which could not be brought into being in my

life time. With all the patience and gentleness I am capable of having, I told my friend that he did not know Dr. 3habha intimately enough and that although his fame in mathematical physics brought a great deal of credit to India his talents in other fields such as arts and paintings were no less creditable and that above all he had had his basic training in engineering subjects and he holds a degree in engineering and that nobody in India was in my opinion better fitted to take up this task which was assuming world importance and could not be neglected by us. As to whether the task is completed in my life time or not cannot dissuade me from helping my brilliant friend in accomplishing this act of service to our country. I said to him I am like an old gardener planting a mango tree. You ask me whether I expect to eat mangoes from this tree. At my age I know I perhaps go but all my life I have enjoyed mangoes not from a tree planted by myself. I would not have had mangoes if other men had not done what I was doing now. In fact, instead of keeping away we both plant mango tree and eat mangoes often unconscious of the fruit of our own little thoughtfulness and equally the thoughtfulness of others who had invested for our benefit perhaps many years ago. I told him I shall give Dr. Bhabha all the help I can for his laying the foundation of an investment in future happiness and prosperity of our country. In furthering this project Dr. Bhabha has worked with courage and devotion and the Government of India, the Bombay Bovernment and the Tata Organization could not have chosen to give him a better new year present than the proposed Institute. The doubting Thomases will be surprised when they see this project will be completed within the next few years. I am an impatient man and often cause annoyance to those

who cannot keep pace with my speed which rightly or wrongly Bhabha Calls "jet propelled". In a meeting of the Atomic Energy Commission I was pressing for more speed in our work. Our able and distinguished colleague. Dr. Krishnan, whispered into my ears "Please don't hurry Dr. 3habha too much. He does not like to be hustled any further". I reminded him of a London story. The bus conductress was being rude to her driver. "Get a move on. Can't you? What do you think you are doing?" The passengers were amused. "You had better be careful" said one of them, "He will get angry". "He would not dare" said the bus conductress. "He is my husband". I told Dr. Krishnan, "Bhabha would not be annoyed with me. He is my driver and my boss and steerman of the Atomic Energy Commission, but I am his bus conductor, his security, so we cannot afford to differ from each other violently or not give each other a hearing. This story is just a prelude to my appreciation of Dr. 3habha's qualities as a co-worker. I can say with sincerity that one could not expect a more conscientious and considerate colleague than Dr. Bhabha. Some people erroneously think that things can happen by magic wand when once the money is available. As one who has some experience of collecting funds, building, equipping and manning of research laboratories, I can say there is no work which gives more headache than the task Dr. Shabha has now before him. It requires exceptional organizational ability and qualities of hard work to be able to accomplish all this. I know the hurdles which we have to cross and the difficulties we have to surmount in getting the site, in preparing the plan, in having the architectural talents in this country and abroad mobilised to plan this Institute and in educating a team of workers which is ultimately managed. In this task we realise that we are not the only people who are

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persistent. I was amazed at the solid strength and tenacity of our Defence Forces. You are fortunate, Mr. Prime Minister and Mr. Defence Minister in having an army which whenever it takes possession of a territory clings to it and occupies thoroughly and completely. It is difficult for anybody to dislodge it easily from its possession. The beautiful site which we have now secured for you was occupied by our Defence Forces and even high military officers were not successful in persualing the forces of occupation, to leave the site. Not until you yourself, Sir, came with the necessary initiative and convinced that we in the Atomic Energy Commission were also fighters on the same side that the site could be effected. These happenings have somewhat delayed our operations but we have to realise and appreciate the great qualities of persistence of our Defence Forces, who have right to some confort of some sort but in these days of doubt and suspicion we can count without doubt on the stability and tenacity of our Defence Organization. I will fail in my duty if I don't express my appreciation of the Tata Organization. We have been blamed for connections with the Tatas in this project by some to whom richness of any kind is an obsession. I am of the opinion that the Tata Organization can be considered capitalistic only because it gives large capital sums to all good causes, in the world. Their pioneering efforts to promote scientific and technical measures in this country led to the establishment of this Institute as well as to many other activities of a similar nature. I wish to clear up a misunderstanding from which public in Bombay is suffering. It has been reported to me that the people are not happy with the idea of radioactive newcomers increasing the population of this already overcrowded city. This Institute will not do anything of the kind as it is essentially an institute

for higher studies in mathematics and nuclear physics. The new radio-active population of isotopes will have another site far from any big city. You may well tell this to your friends. This Institute will increase the happiness and the wellbeing of workers and residents of Bombay and will do nothing which may suggest even a minor disaster. The Cascade Generator will no doubt increase the ozone contents of the air in the vicinity and improve the climatic conditions of Colaba. Before I close, I wish to offer my colleague, Dr. Bhabha the felicitations of the Ministry of Natural Resources and Scientific Research. I hope my desire to see the grandeur and beauty of this new Institute with my own eyes will be fulfilled. I have decided to live to see it fully constructed and equipped.

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