

## INAUGURAL ADDRESS



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### FRIENDS :

I AM greatly honoured by the invitation which the sponsors of this Telecommunication Engineers Institute have extended to me to come here this morning, and inaugurate your Institution on this very happy occasion, when you are celebrating the centenary of telegraphs engineers. The speed of communications has been one of the main factors in transforming our country and the world. In the last hundred years, ever so many things have happened — telegraphs, telephones and television. In our ancient country we have had such a thing as telepathy, one mind acting on another at great distance without communications through the senses. But the investigations of telepathy belong to psychical research, whereas your investigations are a part of research in physical science. Increase of knowledge has resulted in increase of specialization. There was a time in my own youth, when we had only general practitioners in medicine. Nowadays these general practitioners are passing out. We have an abdomen specialist, chest specialist, surgical man, etc. So also in this branch of telecommunications. It was started as a branch of applied physics, then it became a branch of electrical engineering; today, it has constituted for itself a separate sphere and is treated as a separate subject in association with engineering, civil, mechanical and electrical.

When you went round that exhibition yesterday, you saw marvellous devices. But we should not forget one thing that every mechanical device takes its origin in an idea in the mind of man. Every machine embodies a concept, a plan, so to say, in the mind of man. Its concrete realization is the application of that act. Conceptual plan and concrete realization, these two things go together. The conceptual plan is in the minds of the engineers. It is, therefore, right,

when you look upon that whole exhibition, that you should organize yourself with the soul, so to say, those people who are responsible for generating these ideas and getting them implemented into a separate institution. It is your duty in this Institution to establish standards, to promote research. It is well known that research is undertaken not with an idea of accomplishing something; it is undertaken for the sheer joy of research. You undertake it because you have a curiosity which you wish to fulfil. It may result in intellectual enlightenment and power, but its main objective is merely to do something for satisfying your curiosity. It must be the ambition of every young man who joins this Institute to do something in his life which will outlast his life. He must have that kind of ambition when he joins an institute like this, and senior members must give them inspiration and leadership, must give them advice.

There is a feeling abroad that Indian mind is more metaphysically inclined and is not suited very much for scientific research, a concept which may be regarded as unwarranted. There was a time in this country, when we were not behind other nations of the world so far as their sciences are concerned. You know the iron pillar nearby standing there for fifteen centuries untarnished. The way of treatment of that metal and the cast of that metal, these have preserved it from rust and decay. You have again the great statue of Buddha in bronze pointing out how our ancients were able to handle large metal in mass. For some time we went to sleep, but we are now recovered from that kind of stupor that overtook us. It was in Dalhousie's reign that telegraphs, railways and universities were all established. Though today it is a very small fraction of our people who are trained in sciences, you still

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know that from out of that small fraction contributions of immense value have come to the world, thereby indicating that the Indian mind need not be regarded as something which has not got its taste in scientific research and scientific pursuits. If only we are able to give our young men adequate facilities, scope for development, I have no doubt that they will do quite as well as any other young men in any other part of the world, and I do hope that in your Institution you will try to give encouragement to your young men to the best extent possible. There is a feeling also that science has resulted in barbarism, destruction, fanaticism, Hiroshima, Nagasaki. Well, all that may be so. But it is the abuse of science and not the proper use of science. It is my view and it is the view that is generally held that scientists are making a very valuable contribution and they are to be treated as men who are in their own way religious in their outlook and character. No great scientific achievement can be realized without a whole-hearted, concentrated, intellectual endeavour.

The scientist has a sense of humility, when he looks at the vast phenomena of nature so many secrets of which have not been still unravelled. Rigorous honesty and integrity are expected from the scientist. And, when you saw that exhibition yesterday, you saw that the contribution of scientists of different countries makes for mutual co-operation, makes for international understanding. There is such a thing as the brotherly spirit of science which is encouraged by honest workers who are working in the field of science. They all work together whether they come from India, China, America or England. Their work is of team-work character and that team constitutes not merely of nationals of one country but of nationals of every other country. Besides, it has been the dream of ages that we should establish one family on earth "Vasudev-kutumbha". It has become technically feasible today. The unification that has been brought about by these instruments of communications provides you with the material basis on which a human society could be easily built. Only when you are talking about these communication, you must be careful as to what idea you communicate. Communications are all right. Germs may be communicated, false ideas

may be communicated, but it is essential for those who use these instruments to see to it that right ideas and right values are communicated. This is a country which is famous for what is called its spiritual or religious character. We must try to communicate today the great precepts to the tender, the sensitive, the compassionate. We must try to make everyone judge the issues as they arise from a scientific point of view, not from emotional or a sentimental point of view.

If we are able to go to the United Nations, we must not go there with the idea "My country right or wrong". We must go there with the idea that the end of human progress is the establishment of human society in which all members are units, and when you go there the paramount consideration should be not whether what your country thinks is right or wrong, but whether you are contributing to the establishment of that single world society for which the sages and the saints, the scientists and the industrialists have been working from time immemorial. If you adopt that kind of approach it may be that you may get up and say "What my country says is absolutely wrong and what you are suggesting to me is quite all right" — that is scientific approach, bending before facts, accepting no authority, having no room for prejudice.

The Royal Society was founded with the motive "No authority will be accepted here". So also when you go to the United Nations, you must stand superior to your emotions and prejudices, your differences, your likes and dislikes, and look at the question from one single point, whether the policy which you are advocating contributes to the building up of human society. That should be the one motive which you should have. Science to my mind is the worship of truth, and when Gandhi was asked to define what religion was, he wrote to me, "Other people say God is Truth, I say Truth is God". Those who worship science, those who use intelligence in the unfettered pursuit of science, whatever it may be, whatever the consequences may result in, they are the devotees of religion in this exalted sense of the term. They have the quality of honesty and integrity, of knocking down the prejudices, of holding up to truth and pursuing it, whatever may be the consequences. If

that kind of truth which is broad-based results in the love of humanity, then you have the highest kind of religion. The devotees of science are the devotees of religion in this highest sense. They worship truth and their aim is to practise love. Your instruments, your telecommunications, all these things are bringing peoples together. Physical

approximation and psychological distance, that is a fact today. By means of these communications, you must break down these distances, make everyone look at another human being in the image of himself, make us feel on earth, peace, goodwill, one family.

Thank you.

