Keynote Speech at TILC08 Meeting

03 March 2008 Takeo Kawamura

Greetings

Thank you very much for the kind introduction. I want to thank all of you for providing me with this opportunity to make an address representing the Federation of Diet members to promote the International Linear Collider project.

This Federation was established in June 2006. I have been learning a lot about what the aim of the ILC project is, and how impressive its technologies are. For myself, the ILC is a telescope to the past, taking us back to the beginning of the universe. At the same time, ILC is a telescope for the future, opening up bright future with the knowledge and technologies ILC will bring us.

I strongly believe that the ILC project will play an important role in the history of human beings. I have a sense of closeness to Sendai city, because my father graduated from Tohoku University, and he spent his valuable time as a student here. I am feeling very special to be here today.

Science and Education Present situation in Japan

As a Diet member, I am challenging the issues which Japan needs to address. Especially, I have been focusing on education and science issues. I served as the Minister of Education, Culture, Sports, Science and Technology for one year from September 2003. As its name shows, this ministry has the authority over a wide range of subjects. During that period, I keenly realized the importance of education and research activities in the science and technology field, as a cornerstone of the state.

I am also responsible for steering the special committee of the Liberal Democratic Party regarding matters of Japanese space development for the last few years, and have had a close relationship with the science community. I have visited CERN twice when I was a member of Science Technology committee of House of Representative. It is still fresh in my memory how impressive it was to see such a huge and precise machine.

The educational situation concerning Japanese children is getting tougher. A survey to assess the knowledge and skills of 15-year-olds implemented by OECD in recent

year showed the decrease of Japanese students motivation for learning. Their basic scholarly ability in mathematics and science are still in the world top level. However, the interest of Japanese students in studying science was rated lowest in all 57 participated countries. This is a very alarming tendency because younger generation s learning motivation is directly connected to their zest of life. At the same time, it will be crucial to countries potential for the future. I believe it is a responsibility for us who take the helm of state to face the fact, and take the action for it. Actually, Japan is in the middle of the educational reform process now.

Foundation of the Federation of the Diet member to promote the ILC

I am speaking to you today as a secretary general of the federation. The chair of the federation is Mr. Kaoru Yosano, who is a former Chief Cabinet Secretary. When Mr. Yosano told me that he is going to establish the Federation, I must confess that I could not tell the difference between linear collider and linear motor train.

Well, all joking aside, when we established the federation, Dr. Masatoshi Koshiba, the Nobel laureate in physics, told me Thank all of the members for participating in this federation, which would not make you rich nor help you win the election. In fact, this is the first federation which discuss about basic science.

It might be common in many countries that politician s policy depends on how much money they can make or how it will affect the election. To be honest, I am one of them, too. I was worried whether this federation would work or not when I started to establish the federation. In fact, members showed no great enthusiasm for basic science at the beginning.

Activities of the Federation

However, we gradually realized the prospects and impact of this research field. I have visited KEK in Tsukuba with Mr. Yosano who was the Cabinet minister responsible for economic and fiscal policy at the time.

We have had study sessions more than ten times already, discussed with guest speakers who are the experts in science, economics, politics, and industries. We were fortunate to have Dr. Koshiba in almost every session. Now, the federation is very actively working with more than 60 members from the Liberal Democratic Party.

I think that establishing this federation was very much worthwhile, because it provides the opportunity for Japanese politicians to study basic science in depth. As

a result of our activities, Japanese politicians have started to realize the importance of basic science, and linear collider is becoming a familiar word. I am satisfied with the outcome we have now.

Basic Science

We have deepened our consideration of basic science through the federation s activities. What are we made of? What is life? What is happening in our brain? How did the universe start? Where do we come from, and where are we going? These are the universal questions which human have been asking for ages, regardless of the race, nation, or ideology. I believe our curiosity for the unknown is the basic science, our power to create something valuable from nothing.

We would never be able to enjoy the economical growth we are in now without basic science, because thousands of applied technologies which enable us to grow economically have been brought to us through scientific research. We need to realize the fact that the long history of research activities has drastically changed our way of life; uncovering the secrets of the nature and life, or improving our life with the new technology such as electronics or nuclear energy.

The history of Japanese economical success in the post-war years was propelled by the applied technology which came from the research activities in basic science. But I must say that those research activities, a driver for human progress, have been led by the United States and European countries. Now that Asian countries are becoming more mature economically and politically, we must have a share of the leading role in those research activities. We compiled the report entitled Let there be light in Asia and Japan, drawing up the Federation's effort.

Sharing the Dream in the world

This report contains the proceedings, findings and recommendations as follows:

- Basic science and Society
- Integration of particle physics and astrophysics aiming for grand scale
- Magnificence of cutting-edge technology
- ILC technologies and their impact to Japanese society
- Issues in Japanese policy on science and technology

Unfortunately, this report is available only in Japanese right now. But English translation will be available soon thanks to the effort by scientists. Since it is written by politician with their expressions rather than scholarly words, it might be difficult to translate them, but I would like you to read the report once the English version is

ready.

Big science project such as the ILC, global environmental affairs, or fusion research such as the ITER project, such projects are no longer the projects which can be carried out by only one country. And they need to be implemented through international cooperation with a long-term view. Japan should take action according to the current condition.

The most important thing is to communicate with public in Asia, Japan, and all participated countries, sending a message of how wonderful the particle and astrophysics are, to share the dream from the beginning of the project. We are ready to support such efforts as much as we can, and it is necessary to cooperate with scientist to do so.

Basic science and Spiritual richness

I mentioned earlier that we would never be able to enjoy world prosperity without basic science. I would like to conclude my speech talking about the spiritual richness as a politician who should put happiness of people ahead of anything

In the history of civilization, human being nurtured cultures and arts, and we are pushing the boundaries of science with the mind of challenging the mystery of nature and life. We feel satisfied when the desires to know or learn are fulfilled, feeling the sense of high contentment or spiritual richness. And when we feel spiritual richness, we will have a sense of happiness being a human, making us feel grateful to be born in this world.

In Japanese constitution, it declares the will of hold an honorable position in international society. I think it is a time for us to put our effort for becoming the world s top nation in spiritual richness. And the spiritual richness derived from science must rank with that of culture and art. The nation s maturation is no longer measured only by economic indicator such as GDP. We have new indicators to measure nation s maturation such as GNH (Gross National Happiness). Now we should regard the basic science as one of the indicators.

Conclusive Word

The basic science is like a concerto played by our mind to challenge the unknown, and it will compose beautiful harmony only when people in the world play together. I hope that Asia and the whole world will become the place where our children are proud of living, by playing the basic science concerto together.

I believe that happiness of people is the reason for our desire to know and learn, which is inscribed in our DNA. I would like to conclude with my commitment to promote science, art and culture, and prosperity of mankind.

Thank you for your attention.