## <Global Engineers>

Have you ever heard the term 'global engineer'? In this presentation, we'd like to tell you about what a global engineer is and how they are connected to you because of environmental problems in the world.

On April 12 in 1961, Gagarin, an astronaut who achieved spaceflight for the first time in human history, said that from space the earth looked like a bride wearing a blue veil. The earth Gagarin was looking at must've been a very beautiful, but small blue dot. Every event in human history, every victory and tragedy, all the wars and starvation, and every great progression made by humankind have taken place on this tiny planet.

Don't you agree that for the last 20 years since we were born, industrial engineering and scientific technology have made drastic progress to enrich our lives? (ここで、誰かに交代する)

Yes, for example, in my college, some students use a motorcycle and even a car to get to college everyday. Beyond that, all Kosen college students use a computer in their classes and at their home. This technology has really made our lives comfortable and convenient. (甲斐君 に戻る)

But, while much of our attention has been focused on the development of new technology, only a little emphasis has been put on dealing with the unexpected problems caused by the development of these new technologies. The bulk of these problems concern the environment and how it's being damaged due to advancement in industrial engineering. As technical engineers, therefore, we shouldn't ignore these issues but rather we must make all possible efforts to find suitable solutions now.

According to the latest estimate by IPCC (Intergovernmental Panel on Climate Change), the earth's temperature is expected to go up by 6.4 degrees Centigrade by the year 2100, and this will cause a rise in sea level of 59 centimeters. The IPCC also warns that there is a 90% probability that man-made greenhouse gas is causing the present global warming. Therefore, because the environmental problems and industrial development are closely connected, concrete actions by engineers are indispensable to solving environmental problems. Finding the solutions to environmental problems is the responsibility imposed upon every human being.

Environmental problems should not be considered the problem of only certain countries, but rather, it's a problem for the whole world. For example, the economic growth of developing countries called BRICs (Brazil, Russia, India and China) is amazing, but at the same time, these countries are discharging a large quantity of greenhouse gas across national borders. To solve this harmful gas problem, all the nations including BRICS should cooperate to control the greenhouse gas on the earth. Now is the time for all the engineers across the world to reconsider the negative effects of technology on the environment and cooperate to solve global warming. (誰かに交代)

It's easy to say these things, but, to cooperate with foreign engineers required us to have a mutual understanding of one another and possess an ability to overcome different ways of thinking based on cultural differences. (三浦さんに戻る)

That's right. The difficulty involved in this kind of cooperation is that engineers living in different countries must break down communication barriers such as languages, cultures, and religions so that they can cooperate smoothly. Therefore, we need engineers who have a

cosmopolitan outlook and who see the world more as a collective. These engineers can be called 'GLOBAL ENGINEERS', and this is the keyword in our presentation.

What do you think of when you hear the term 'global engineer'? You may imagine an engineer with a proficiency in English who travels around the world. However, the true nature of what a global engineer should be is a little different here.

Of course, true global engineers must deal with other companies confidently in English. But, in order to join discussions at foreign companies and answer unexpected questions, for example, global engineers must also be familiar with fields other than their own specialties, such as international relationships and religious backgrounds. In our case, at first we should study our majors including English, and collect pieces of foreign information from world news obtained on TV, magazines, or wherever.

As we have mentioned so far, global engineers need to have English proficiency and a wide range of knowledge about the world. In addition to these, global engineers are also required to be creative, have leadership skills, technical ethics, and of course they have to have extensive technical knowledge. To conclude, global engineers can be defined as those people who have a cosmopolitan sense and a diverse set of skills.

From now on, global engineers who have the ability to interact and succeed in an international environment will be required more and more and they will be expected to find solutions to global environmental problems. True global engineers of different perspectives, who possess deep technical knowledge and a wealth of creativity, can lead any kind of problem to a satisfactory solution. They can reach a hi-level solution without causing international collisions. In the near future, the training of engineers to becoming global engineers will be a very important part in solving global environmental problems. In this sense, all the Kosen colleges will also be required to send such graduates that can become these cosmopolitan engineers.

This summer, we went to Singapore to join an English training course trying to improve our English ability. We felt that life there was so different in terms of the clothing people wore, the food people ate, and just the general way people lived. This amazing experience made us realize that the world is a very wide and unique place. This was the first time in our lives to recognize and experience internationalization.

Now, the three of us are dreaming of working in the world stage as true global engineers. Our dreams of becoming global engineers might be too big, but we trust that our small efforts like saving water, turning off electricity, and reusing backing paper will lead to a small step in becoming global engineers. We believe even these small things can combine together and make a real difference in the world. Why don't you join us and save this beautiful planet Earth for our future generations?

Thank you for your kind attention.