



Hey, world leaders!



Our instructions to help protect the planet from climate change are...

1 We promote renewable energies which suit the environment of each country.

Electricity is essential for our daily lives. However, thermal or nuclear power generations have their own problems. Therefore, we have developed a new generation system that uses hot springs, which are many in Japan. In this way, we suggest the system of renewable energies that suit the environment of each country.

2 Development of a new intersection car system to reduce CO₂.

We need to reduce CO₂ emissions to solve global warming. Our city, Osaka, is one of the biggest cities in Japan, and we always have a traffic jam. A traffic jam does not only waste energy, but also produces a lot of CO₂. So, we have developed a new intersection car system to solve the traffic jams. We propose to solve heavy traffics all over the world and reduce CO₂ emissions with our innovative system.

3 We propose not to pursue national interests but have a cross-border dialogue.

The problem of climate change cannot be solved by one person or one country. We need to unite the world, think about the future of the planet, and share the ideas, rather than pursuing our own interests. To that end, `dialogue` is important. We propose not to pursue national interests but have a cross-border dialogue to the world leaders too.

Our Team : Otemon Challenger

School: Otemon-Gakuin Otemae JHS& SHS, Osaka, JAPAN

Member: Nao KANDA, Ayumu CHOSA, Hiroshi MINAKATA, Hiyori IGA, Keisuke NAKAMURA, Haruka NISHIZUMI, Shusuke IMANAKA, Ren HATTORI, Yuki KAWAGUCHI, Anji SAKODA, Fuka MIZUTANI, Mizuki FURUMOTO

Team introduction: We are working on robot development activities to solve SDGs. We have invented many robots such as sign language robots and guide dog robots, and we received great praise. We are working on producing robots and developing apps everyday. We hope these activities will lead to a better society in the future, and can make people smile all over the world.



Sign Language Robot
2017 WRO Costa Rica



Food Loss Reduction Robot
2018 WRO Thailand

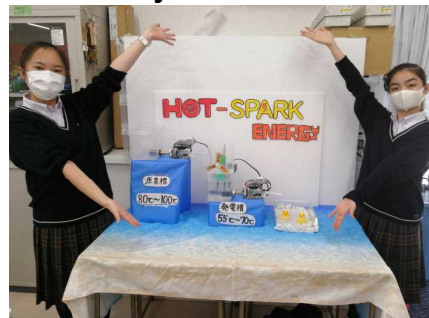
Documents of our instructions

School : Otemon-Gakuin Otemae JHS& SHS ,Osaka, JAPAN

Team : Otemon Challenger

1 We promote renewable energies which suit the environment of each country.

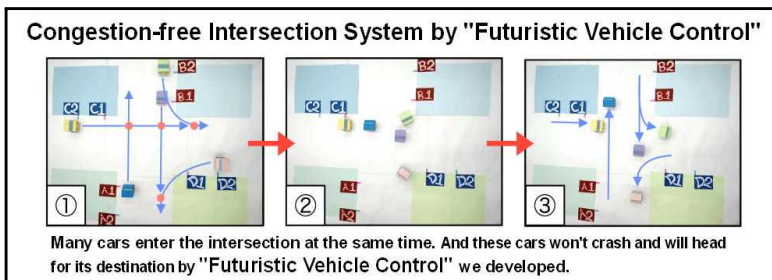
Electricity is essential for our daily lives. However, thermal, hydroelectric, and nuclear power have their own challenges. In Japan, where we live, there are many hot springs. Therefore, we developed a new power generation system that uses hot springs and shape memory alloys. This system does not cause environmental damage and it doesn't emit carbon dioxide. It is truly a renewable energy. Each country has different environment. Therefore, we suggest the usage of renewable energy suited to the environment of each country.



a new power generation by hot spring

2 Development of a new intersection car system to reduce CO₂.

We need to reduce CO₂ emissions because we solve global warming. Our city, Osaka, is one of the biggest city in Japan. And, always happens the traffic jam. We have not only a waste of energy but also emit a lot of CO₂. So, we have developed a new intersection autonomous car system to solve traffic jams. We instruct to solve heavy traffics all over the world and reduce CO₂ emissions with our inovative system. Our system does not collide with cars coming from all directions at intersections. And cars move smoothly. We succeed to get rid of the issue at intersections. Therefore, we instruct to solve heavy traffics all over the world and reduce CO₂ emissions with "Futuristic Vehicle Control" we developed.



Please watch our invention.

→ <https://www.youtube.com/watch?v=oXOdX8n2Wns>

3 We propose not to pursue national interests but have a cross-border dialogue.

The problem of climate change cannot be solved by one person or a single country. We need to unite the world, think about the future of the planet, and share it, rather than pursuing our own interests. We are constantly working on robot development activities to solve the SDGs. There are no borders in the World Robot Competition we try. Everyone praises each other's robots and learns from each other. We also hold an international high school student conference with Malaysian high school students under the theme of "What kind



Video conferencing with Malaysian friends

future world will we create?" All of future world will we create?" All students come from different countries, languages, and cultures, but talk about "what we think of the world today" and "what we create what kind of the world of the future" and about our planet. Cross-border dialogue can eliminate prejudice and create the future of the planet from a variety of perspectives.