

Multi-Stakeholder Forum on Science, Technology and Innovation for the SDGs (STI Forum)

Session 5: Emerging science and technology trends, challenges and the SDGs

Summary of presentation by Matsumoto Hiroshi, President, RIKEN (shortened version)

First, I'd like to talk a little about how emerging technologies can be put to use during crises or for the achievements of the SDGs. In October last year, we held an international meeting of national research institutes from around the world to talk about our response to the COVID-19 pandemic. We discussed issues such as the need to share data and how teleworking has both facilitated collaboration and made it more difficult to communicate informally.

Then, I would like to talk about how my institute is how we and other institutes have used emerging exascale computing systems, such as our Fugaku computer, to combat the crisis. We, like other institutes, made these resources available to scientists around the world. We can do this for the SDGs as well.

A second point I would like to make is that when confronting crises such as the need to create sustainable energy, under Goal 7, we need to have a shared vision of where humanity is going, and perform our research based on that. As one example, rather than simply working to make current energy systems more efficient, I have advocated expanding the humanosphere into outer space and gaining huge amounts of energy while reducing the burden we place on the environment. What I am referring to is a type of technology known as Space Solar Power Systems (SSPS). SSPS will allow us to realize a more secure and convenient life without leaving anyone behind.

And as one more proposal to strengthen innovation, I think that we need to do more to encourage researchers in the natural sciences and humanities to work together more closely, so that we can incorporate philosophy into our system of innovation. This is true both for achieving the SDGs and for confronting crises such as COVID-19.