Telerobotics ~For extreme environments from the deep sea to space~

## Professor Yuichi Tsumaki







Cherry harvesting robot







Parallel mechanism, wire-driven mechanism, ...etc.

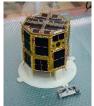




Wearable miniature humanoid robot









Robotics for extreme environment

## Content:

Telerobotics is a technology for effectively achieving remote control of robots. It is also a technology that expands human ability spatially and temporally. In addition, the goal is to perform difficult tasks by properly combining the capabilities of robots and humans. Not only the robot system, but the entire system including the communication system and human interface must be properly designed. Therefore, system integration is also an important key technology.

Our laboratory is developing a wearable miniature humanoid robot that realizes mutual telepresence. Meanwhile, we are conducting research on cherry harvesting robots for the local community. We are also working on the topic of explosion-proof robot arms for industrial applications. Furthermore, as a contribution to "Science," we are also developing robot technology in extreme environments such as asteroid exploration rover and whale rover moving in the deep sea.

Appealing point:

We are developing technologies that only we can do, such as innovative human interfaces, unique mechanisms, and robot technologies with AI.

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Research Interest: Telerobotics

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