

# **Construction of an Automated High-Definition Remote Lecture System Connecting 18 National Universities in Japan**

Takeshi SAKURADA<sup>1\*</sup>, Yoichi HAGIWARA<sup>1</sup>

<sup>1</sup> Information Media Center, Tokyo University of Agriculture and Technology

We have constructed a new high-definition remote lecture system, which connects 18 national universities in Japan. The system we have constructed is automated by a reservation system so that users can use the system easily.

Some points were required in the new system by teachers and students. The first point is multi-directional communications, which connect many sites at the same time; the second point is simplicity of machinery operation; the third point is interoperability with the other remote lecture and videoconference systems.

It is difficult to operate standard videoconference devices because there are dozens of buttons on infrared wireless commanders, which are attached to devices.

Thus we have constructed the new system where a touch panel is available instead of all infrared wireless commanders. The users can operate a videoconference device, a camera position, and audio-visual equipment from the touch panel. The touch panel is connected to an administration system of reservation through the wireless LAN. Our constructing administration system of reservation accepts a remote lecture reservation through the Web. When the reservation time comes, the administration system of reservation turns on the equipment of the planning site of usage automatically and connects the videoconference device to MCU. Then, when it is the ending time of the use, the administration system of reservation shuts down the equipment of each site automatically.

We have constructed the system at February 2009. Remote lecture and teleconference are held with the system about twice per a day. This system can reduce a burden of the users because it is automated by the reservation system and the touch panel is used for local control.