

### Departmental Overview

The Information Technology Department (ITD) consists of two primary sections. The Systems Technology Section handles the planning, introduction, and construction of network and servers, and the maintenance of hardware environments (inclusive of personal computers). In addition, the section constructs a variety of databases to store research data and manages the development of relevant application software. The Library and Archives Section manages the RERF Library specializing in journal access, scientific RERF publications, and historical ABCC-RERF materials.

There are 14 employees, including one administrative staff, one assistant chief and the acting chief; 10 of the employees are in the Systems Technology section while one person manages the Library and Archives section. The current department chief serves as an “Acting” chief. An open search was initiated in 2018 for a new chief.

### **FY2018 Achievements**

1. Staff improvement via conference attendance  
Our staff members attended conferences in Open Access infrastructure as well as modern electronic library development. This ongoing personal development has been an important contribution in the ITD's ability to envision the changes that it is facing.
2. Improvement in Internet connection  
We negotiated with our primary internet provider to improve bandwidth speed while reducing the overall costs to the institutes. The bandwidth for Internet connection was increased to 100Mbps from 60Mbps.
3. Uninterruptible power system (UPS) placed in the room adjoining the server room in Hiroshima  
The service life of the UPS placed in the room adjoining the server room in Hiroshima expired. These are very large size batteries that can instantly maintain power to all of our equipment including servers, storage units, and switches for the several minutes needed to engage the diesel backup generators. Therefore, after negotiating with the vendor, the UPS was replaced with a new unit by suspending all of our equipment for two days.
4. Replacement of network switches  
About a half of network switches (seven units) installed at the Hiroshima Laboratory's buildings used to be old and break down often; therefore, such switches were replaced. These switches have a 5-10 year service life.
5. Update of host servers  
Of the three virtual host servers for RERF's core databases, two units were replaced. This is part of our scheduled maintenance and upkeep of RERF infrastructure.
6. Update of storage  
Two aging units of virtual storage were replaced.
7. Personal-computer environment for employees  
As of December 2018, about 40% of the desktop PCs used by employees have been updated to OS Windows10. As of December 2018, about 30% of LCD monitors for the desktop computers have been replaced with large format LCD monitors.