## About Us: Cybermedia Center, Osaka University



## Cybermedia Center, Osaka University, Japan

As a resource provider of knowledge and technology derived from advanced researches conducted in Osaka University, the Cybermedia Center (CMC) offers support in the areas of large-scale computation, information communication, multimedia content and education. The center also works closely with educational and research organizations within Osaka University, as well as with industries and institutes outside the University. By sharing its resources and encouraging local communities to use its facilities for public lectures and other events, CMC has helped to create a more internationally-oriented IT society for the region.

## **Research Divisions**

Informedia Education Research Division is involved in constructing an advanced information education environment, providing information and information ethics education, and conducting research and education activities for faculty development of information education staff.

Multimedia Language Education Research Division seeks to create an ideal environment for language education by developing an innovative, user-friendly learning management system for all language teachers/learners, and self-learning software for foreign-language learners. It also supports the operation and maintenance of several computer-assisted language laboratories, and provides students with opportunities to optimize their learning of foreign languages.

Large-Scale Computational Science Research Division is involved in assisting in the operation of the supercomputer system, disseminating technologies for visualizing computational results, providing education on advanced technologies for using the supercomputer system, and conducting education and research activities for computational science and other related courses.

Applied Information Systems Research Division conducts education and research into system architecture and operating technology involving large-scale data, to assist in the operation of our super computer and cloud systems, and to support users. It also performs research and education in the visualization of large-scale data and the architecture of cyber-physical systems.

University-wide Information and Communications Infrastructure Services Promotion Division is involved in promoting and managing the smooth execution and enhancement of university-wide support services which the Cybermedia Center is implementing, such as the maintenance, operation, and user-support of information communication systems installed for education, research, and clerical work.



Location



Vector supercomputer



PC cluster

Computer Assisted Science Research Division supports efficient computer applications and education (relevant also to supercomputers) aimed at identifying and solving scientific problems. It also conducts education and research activities in mathematical and computational modeling of scientific problems.

**Cybercommunity Research Division** is involved in the design of digital libraries, cyber communities, and social networks, building information modeling (BIM), development of risk management systems for urban areas, and evaluation of urban infrastructure, while providing computer-aided design and graphic science education.

Advanced Network Environment Research Division supports the operation and utilization of the Osaka Daigaku Information Network System (ODINS), which introduces novel networking technologies such as high-speed networks, and mobile networking environments, with lower energy consumption. It also conducts educational activities on networking technologies, security issues, information ethics, etc., for university students and staff. In addition, it conducts state-of-the-art research on network-related topics.

