

2003 Okochi Memorial Grand Technology Prize awarded to Brain-function imaging method Optical Topography®



Measurement scene (left) and sample result (right)

Recipients

Dr. Atsushi MAKI (Sr. Researcher, HARL*), Dr. Hideaki KOIZUMI (Sr. Chief Scientist - Corporate Technology, Hitachi, Ltd.), Dr. Tsuyoshi YAMAMOTO (Researcher, HARL), Mr. Fumio KAWAGUCHI (Sr. Engineer, HMC**), Mr. Noriyoshi ICHIKAWA (Chief Engineer, HMC)

*HARL: Advanced Research Laboratory, Hitachi, Ltd. **HMC: Hitachi Medical Corporation

Award Details

The Optical Topography® equipment images regional hemodynamic changes which occur as a result of brain activity by irradiating the scalp with near-infrared light. It is used by researchers in Brain Sciences and medical doctors in the field to observe brain activity under natural environment, as hemodynamic changes can be measured by simply fitting an optical cap, and the subject movement is not restricted by the equipment. Recently, successful observations were made of brain activity in newly born infants indicating a cognitive recognition of their mother tongue.

Hitachi, Ltd. and Hitachi Medical Corporation were awarded the 50th Okochi Memorial Grand Technology Prize by the Okochi Memorial Foundation (Director General: Hiroyuki YOSHIKAWA) for “the development of an imaging method for the measurement of brain activity using near infra-red light, Optical Topography and its practical applications.” The Okochi Memorial Grand Technology Prize is awarded for “the development of highly original technology and distinguished achievements through its practical application.” The award recognizes the achievements of Dr. Atsushi MAKI, Senior Researcher at the Advanced Research Laboratory of Hitachi, Ltd. and colleagues, in their leading work on the research and development of a measurement method and equipment for brain activity using near infrared light, and its practical applications.

The awards ceremony will be conducted on 9th March at the Gakushi Kaikan in Chiyoda Ward, Tokyo, Japan.