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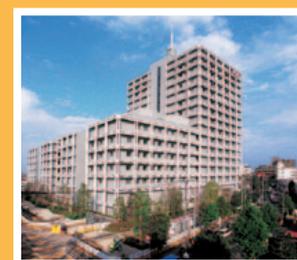
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R&D / Treatise / NHK Technology



STRL Open House 2012 Report -An exciting new world

The NHK Science & Technology Research Laboratories (STRL) held its annual Open House showcasing its latest research results from Thursday, May 24 to Sunday, May 27. This year's open house had the theme, "An exciting new world", and it featured the progress being made toward the new era ushered in by the completion of digitalization of broadcasting in Japan. It included 36 exhibits on topics such as Hybridcast®, Super Hi-Vision (SHV), human-friendly broadcasting technology, and program technologies designed for broadcasting field applications. 19,722 people visited the open house.



Fusion of Broadcast and Broadband

This year's exhibition presented our R&D on advanced broadcasting services, together with a prototype receiver for Hybridcast®, a system that enhances broadcast content through the use of broadband communications.

Human-friendly Broadcasting Service

Technologies for "human-friendly broadcasting" will make broadcasting more accessible to every viewer. One of the exhibited systems converts news content into simplified Japanese. Another was a reception system that adjusts the volume balance between the announcer's voice and background noise.

Super Hi-Vision

We are progressing with our R&D on Super Hi-Vision (SHV), a next-generation broadcasting system conveying a heightened sensation of reality. The exhibits featured a compact SHV camera that is the size of the current HD camera system, SHV terrestrial transmission technology, and a 145-inch large-screen PDP system.

Enhancing Production

We are developing new program production technologies to provide producers with a greater range of expressive power. The research presented here included a technology that enables program producers to easily find and retrieve video material or video clips from a massive amount of video materials and a technology to expand the transmission capacity of mobile relay broadcasts of road races and other sporting events.

Integral Three-dimensional Television

We introduced our studies on three-dimensional television broadcasting, which will one day present natural stereoscopic video without the need for special glasses. Such technologies include an integral 3D display that incorporates an 8000 scanning line video system and a technology that generates three-dimensional video from a 3D model.

Next-Generation Broadcasting Devices

On display were high-capacity recording devices that use thin optical disks and holographic recording and an ultrahigh-definition spatial light modulator for holography in a future 3D television system.

Museum of Broadcasting

NHK's development of satellite broadcasting was certified as an IEEE Milestone in November 2011. This Milestone award recognized the efforts in electrical and electronic fields that went into this achievement. This exhibition presented a brief review of the R&D that took place to make satellite broadcasting a reality, as well as examples of devices, photographs, and documents.

Utilization and Development of NHK Technology

NHK Engineering Services, Inc. handles NHK's patents and licenses the technological knowhow acquired from its R&D activities with the aim of contributing to society. NHK's patented technologies and technologies currently under development have potential in a wide variety of applications.

Interactive Exhibition

Poster Exhibition

Besides the numerous exhibits, we presented poster exhibitions designed to show our cutting-edge R&D to experts in fields related to broadcasting. We also presented four interactive exhibitions in which families could personally experience, touch, and feel some of STRL's most interesting R&D.