

Welcome to Connexion

"It gives me great pleasure to introduce Hitachi European Connexion to you.

The Hitachi European Connexion is a newsletter prepared for a very special group of Hitachi's friends: the European researchers and graduates who spent some time in our Japanese facilities through the Hitachi Research Visit Program (HIVIPS).

As you already know, we are planning to organise a pan-European forum "*Hitachi Science & Technology Forum*" with all HIVIPS alumni from Europe to discuss issues focusing on science and society.

Last year, under my predecessor's leadership, Mr. Yamakawa, a first gathering was held in France and all French HIVIPS alumni were invited. At the end of this first forum, we were most encouraged by the general demand for a yearly gathering with invitations extended to all Europeans who visited our facilities.

All of you who will be receiving "*Hitachi European Connexion*" know about the forthcoming Krefeld forum and have taken the necessary steps to be registered. In Krefeld, participants from Germany, the Netherlands and France will gather to meet each other to address together the topic "Information Technology and its benefits to Society".

The second key-point we addressed was the possibility for each participant to communicate with all others. My colleagues in Tokyo have developed, for your exclusive use, a homepage. We will provide you with more information during the Krefeld forum.

Another important point was related to more information about our Brussels office in particular, about Hitachi activities in general. Let us know what are your reactions about the way we started to answer your expectations with this newsletter.

Both the *Hitachi Science & Technology Forum* and *Hitachi European Connexion* are examples of our long term commitment to Europe. With your ideas and your support we will successfully meet your expectations and build together a long-term association that should be of benefit to the European society. This is an ambitious objective that I will share with you in Krefeld. I look forward to seeing you all there."

Norikiyo Koide
GENERAL MANAGER
HITACHI CORPORATE OFFICE, EUROPE

Hitachi Corporate Office, Europe: mission

Hitachi Corporate Office, Europe, in charge of representing Hitachi, Ltd. in Europe, was established in 1988 in response to the economic and political developments surrounding the European market unification.

Originally, the office focused on information collection and analysis of the 1992 market unification and its effects on Hitachi businesses. As a second step, the office started corporate communications activities to foster mutual understanding between Europe and Japan, and to support Hitachi's cooperative relations with European business partners.

An example was the strong Hitachi involvement in the EU-Japan Consumer Electronics Parts and Components Programme, supported by both the European Commission (DGIII and DGXXIII) and the Japanese government (MITI). As a supplement to this main programme, the Hitachi Supplier Development Programme was implemented from 1994 to 1996 to help improving the performance of European SME component manufacturers. This joint project has greatly tightened the bonds between European and Japanese industries and government officials. ➡

The office is also coordinating the Hitachi School Teachers Exchange Program (HISTEP) in Europe. Each year, European, American and Japanese junior high and high school teachers gather to exchange views at the International Teachers Forum, held at Hitachi's headquarters in Tokyo.

The office is also developing, together with Hitachi headquarters, a project of pan-European Forum (Hitachi Science & Technology Forum) which aims at implementing gradually Hitachi's philosophy "contribute to society through technology" in Europe.

Hitachi Corporate Office, Europe team is composed of: Norikiyo Koide (General Manager), Kazuyuki Miyanaga (Deputy General Manager), Stéphane Dupuis (Business Development and Strategy), Grégoire Poisson (European Affairs) and Sylvie Delmarcelle (Accounting & Administration).

HIVIPS Alumni Homepage



Based on a proposal from the French HIVIPS alumni last year, we have designed a homepage to facilitate a networking system among all HIVIPS alumni. More information during the forthcoming forum in Krefeld.

Address:

<http://member.nifty.ne.jp/hitachi/HIVIPS/index.html>

Hitachi Research Visit Programs (HIVIPS)

Started in 1985, HIVIPS (Hitachi Research Visit Programs) invites qualified researchers from all over the world to collaborate with Hitachi researchers, with the hope of promoting "synergistic research through interaction among professionals with different backgrounds". More than 400 researchers, among which 180 Europeans, have participated in this program contributing excellent research results to various fields and helping HIVIPS successfully fulfil its primary goal.

HIVIPS alumni work in various organisations all over the world: some are in academia, some come from industry, some keep doing research, some go into business and some establish their own companies.

First Hitachi Science & Technology Forum in France: a success

In October 1998, the first meeting was held in France focused on the topic "Innovation and the respective role of large enterprises and SME's".

We invited Dr. Kahn (*Vice-President of Institut National de Recherche en Informatique et en Automatique (INRIA)*), Dr. Sabonnadière (*Vice President, Institut National Polytechnique de Grenoble (INPG)*), Mr. Katase

(*Executive Director, Japan Machinery Center for Trade and Investment, Brussels*) and Mr. Souillard (*International Relations Officer, Institut National des Sciences Appliquées (INSA), Rouen*). Forty-five people, including French HIVIPS alumni, attended the meeting. The debate was very constructive. All participants were very satisfied and most of them agreed to participate to a future gathering.

Let's meet...

...at the second forum in Krefeld (Germany)
8, 9 & 10 October 1999

"Information Technology and its Benefits to Society"

Keynote speakers from the European Commission and senior researchers from research institutes.

Hitachi, Ltd.: New President, New Management System Launched

Etsuhiko Shoyama assumed the office of President and Director of Hitachi, Ltd. on April 1st, 1999. His mandate is to lead the transformation process now under way at Hitachi.

"My aim is to make Hitachi the world's most reliable company, a company anyone is willing to choose. This means a company that customers choose and one that shareholders see as providing

a return on investment. I have every confidence that we can achieve a strong Hitachi, a reliable, high-earnings company that is an industry leader of the 21st century. As the head of the changing Hitachi, I will use "Reliability and Speed" as my motto".

Etsuhiko SHOYAMA

From April 1st, Hitachi installed new, extensively streamlined company officer

And management systems designed for speedy response to an ever more rapidly changing business and social environment. One aspect of this change is an increasing need for full-scale consolidated management. To meet this challenge, Hitachi has already started work on refocusing the power and optimising the efficiency of the Hitachi Group of over 1,000 companies.

Breakthrough in new generation semiconductor memory

A team of scientists from Hitachi and Cambridge University announced on May 17th a breakthrough in semiconductor memories for the new generation. The creation of a new memory device named 'PLEDMTM – Phase-state Low Electron (hole)-number Drive Memory, will have major implications for computer, communication and electronic systems.

PLEDMTM will enable instant recording and accessing of a massive amount of information: for example, all the images & sounds of an entire movie can be accessed from a single PLEDMTM chip. In addition, PLEDMTM consumes very little power, making equipment such as mobile phones and computers lighter and more economical.

The ongoing quest to develop smaller and faster memories is leading to chips with increasingly complicated structures and higher power consumption. DRAMs are currently used as main memories in computers because of their high-capacity and high-speed. DRAM technology, however, has an inherent drawback—namely the contradictory requirements of further reduction in cell size and maintenance of S/N (signal-to-noise) ratio large enough to guarantee operation.

Scientists at Hitachi and Cambridge University have, therefore, been focusing on developing a totally new type of cell structure to overcome this drawback. Conventional DRAMs consist of one-transistor and one-capacitor cell, the new PLEDMTM cell uses instead two transistors to make a 'gain-cell' in a smaller area.

The PLEDMTM is a promising candidate for the multi-Gbit memory chip, which is scheduled to become available early in the next century. With further development, could also solve the current performance tradeoffs experienced with the two existing types of memory: the DRAM – high-speed but volatile memory (memory lost when power switched off) and the FLASH – slower but non-volatile (memory retained when power switched off).

Prof. Haroon Ahmen, Professor of Microelectronics at University of Cambridge, said: "This project is likely to be a commercially exploitable output from the Hitachi and Cambridge University research collaboration, which, over the last ten years, has produced many scientific breakthroughs. It represents a significant step in the path to an electron-number scalable RAM cell and eventually to high-speed single electron device technologies.

NEC & Hitachi agree to extensive DRAM cooperation

NEC Corporation (NEC) and Hitachi, Ltd. announced on June 23rd that the companies have agreed to establish wide-ranging cooperation in their DRAM businesses. The companies are to consider establishing a joint-venture company responsible for DRAM development and design and unification of their DRAM products under a single brand manufactured using the production resources of both companies.

Preparations are underway with a view of establishing the joint-venture development and design company at the end of this year, while a unification of products brands and other items is expected upon reaching a basic, concrete agreement.

There are an increasing number of large-scale tie-ups between those in the DRAM area. There is a rapid rise in the number of strategic alliances and mergers as the expenses for development of leading-edge technologies and products present a series of issues for companies facing extremely stiff world-wide competition.

Through the joint-venture DRAM development and design company, NEC and Hitachi believe their top-class technology will guarantee them a leading position in the industry, that will provide significant improvements in profitability for the semiconductor businesses at both companies thanks to economies of scale and shared expenses.

Hitachi present at Telecom 99

Hitachi, Ltd. will participate in TELECOM 99, the World Telecommunication Exhibition & Forum, which will be held in Geneva from October 10-17 1999, sponsored by the International Telecommunication Union.

Hitachi's theme for this exhibition is "Yes! We have the answers.". Hitachi will exhibit and demonstrate next-generation network solutions, centering on "Optical IP Network Solutions".

Hitachi will introduce total solutions and display related products and technologies capable of constructing optical backbone transport network, IP/ATM core network, network service platform and application services at the "Optical

IP Network Solutions Zone", "E-Commerce Solutions Zone", and "Enterprise Network Solutions Zone".

In the "Optical IP Network Solutions Zone", Hitachi will introduce next-generation network solutions aimed at the rapid expansion of network through DWDM (Dense Wavelength Division Multiplexing) and implementation of an open environment through IP technology. Hitachi will exhibit active network architecture, a next-generation network system that is being jointly developed by Hitachi and GMD FOKUS (German National Research Center for Information Technology - Research Institute for Open Communication Systems).

In the "E-Commerce Solutions Zone", Hitachi will exhibit an electronic cash commerce system and a system for implementing sales and the purchase of products via the internet.

In the "Enterprise Network Solutions Zone", we will introduce our network outsourcing services, "Compassport" and business media services for intercorporate EC transactions.

Furthermore, in the "Digital Image System Zone", we will demonstrate super high-resolution images through state-of-the-art computer image processing technology.



International Garden Festival of Chaumont-sur-Loire: Initial Support by Hitachi

From June 12 to October 24 1999, the 8th International Garden Festival is taking place in Chaumont-sur-Loire (France).

This unique festival in Europe was initiated in 1992 with the support of Hitachi, together with the Region Centre. This contribution has enabled the "Conservatoire International es parcs et Jardins et du Paysage" to be created and training programmes to be launched. Since 1992, the International Garden Festival has welcomed thousands of visitors from all over the world and has become increasingly famous.

The theme for 1999 is "Vegetable gar-

dens". This year, the festival explores a botanical and "society" theme, including various other themes such as "Pleasure", "Gardens of curiosity" and "Ricochets". The 30 vegetable gardens are free, and full of ideas and techniques. They examine the social, ethnic, cultural and economic barriers. They have been created by landscape designers and gardeners, as well as designers, artists, architects and amateurs.

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