

2022 C&C Prize Ceremony

The 2022 C&C Prize Ceremony (**Photo 1**) was held at ANA InterContinental Hotel Tokyo on November 24, 2022. The ceremony started with the welcoming speech by Mr. Takashi Niino, President of the NEC C&C Foundation, followed by the recognition of 2022 prize recipients by Dr. Tomonori Aoyama, Chair of the awards committee. The 2022 C&C Prizes were presented to Dr. Satoshi Matsuoka, Dr. Charles H. Bennett, and Prof. Gilles Brassard.

Group A: Dr. Satoshi Matsuoka in **Photo 2**;

For Contributions to Pioneering Research and Development of Energy-saving and General-purpose Ultra-high-performance Computer Systems

Group B: Dr. Charles H. Bennett and Prof. Gilles Brassard in Photo 2;

For Pioneering Research on Quantum Cryptography and Essential Contributions to the Establish-

ment of Quantum Information Theory

After the congratulatory speeches and the recipients' acceptance speeches, the ceremony ended with the dinner to celebrate the 2022 prize recipients.

The details about this paper can be seen at the following.

Related URL:

For more information about the recipients of the C&C Prizes please visit The NEC C&C Foundation website.
<https://www.candc.or.jp/en/2022/ceremony.html>

About The NEC C&C Foundation

The Foundation is a non-profit organization established in March 1985 to foster further growth in the electronics industry by encouraging and supporting research and development activities and pioneering work related to the integration of computers and communications technologies, that is, C&C, and ultimately to contribute to the world economy and the enrichment of human life. The Foundation is funded by NEC Corporation.

The Foundation currently has two main activities. It presents the annual C&C Prizes to recognize outstanding contributions to R&D activities and pioneering work in the area of C&C. Candidates are recommended from all over the world. Each prize winner receives a certificate, a plaque, and a cash award (ten million yen per group). As of 2018, 112 prominent persons had received the prize. In addition, an Outstanding Paper Award for Young C&C Researchers is awarded annually to outstanding paper(s) presented at an international conference overseas with the support of a grant from the Foundation. Each recipient is given a cash award of 200,000 yen.

The Foundation also gives the following two grants: (1) grant to enable researchers in Japan to attend international conferences overseas to make presentations in the field of C&C and (2) grant to non-Japanese researchers in Japan.



Photo 1 C&C Prize Ceremony.



Photo 2 From the left: Dr. Satoshi Matsuoka, Group A recipient; President Niino; Dr. Charles H. Bennett and Prof. Gilles Brassard, Group B recipient.

Information about the NEC Technical Journal

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Comprehensive Digital Predistortion for improving Nonlinear Affection and Transceivers Calibration to Maximize Spatial Multiplexing Performance in Massive MIMO with Sub6 GHz Band Active Antenna System
Black-Box Doherty Amplifier Design Method Without using Transistor Models
39 GHz 256 Element Hybrid Beam-forming Massive MIMO for 8 Multi-users Multiplexing

Initiatives in Open APN (Open Optical/All Optical)

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NEC's Approach to APN Realization — Features of APN Devices (WX Series)
NEC's Approach to APN Realization — Field Trials
Wavelength Conversion Technology Using Laser Sources with Silicon Photonics for All Photonics Network
Optical Device Technology Supporting NEC Open Networks — Optical Transmission Technology for 800G and Beyond

Initiatives in Core & Value Networks

Technologies Supporting Data Plane Control for a Carbon-Neutral Society
NEC's Network Slicing Supports People's Lives in the 5G Era
Application-Aware ICT Control Technology to Support DX Promotion with Active Use of Beyond 5G, IoT, and AI
Using Public Cloud for 5G Core Networks for Telecom Operators

Enhancing Network Services through Initiatives in Network Automation and Security

NEC's Approach to Full Automation of Network Operations in OSS
Autonomous Network Operation Based on User Requirements and Security Response Initiatives
Enhancing Information and Communications Networks Safety through Security Transparency Assurance Technology
Enhancing Supply Chain Management for Network Equipment and Its Operation

Network Utilization Solutions and Supporting Technologies

Positioning Solutions for Communication Service Providers
The Key to Unlocking the Full Potential of 5G with the Traffic Management Solution (TMS)
Introducing the UNIVERGE RV1200, All-in-one Integrated Compact Base Station, and Managed Services for Private 5G
Vertical Services Leveraging Private 5G to Support Industrial DX
Integrated Solution Combining Private 5G and LAN/RAN

Global 5G xHaul Transport Solutions

xHaul Solution Suite for Advanced Transport Networks
xHaul Transformation Services
xHaul Transport Automation Solutions
Fixed Wireless Transport Technologies in the 5G and Beyond 5G Eras
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