



JAPAN PRIZE

News

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Dr. Turnbull (left) and Dr. Kolff (right), the 1986 Japan Prize laureates, delivering their acceptance speeches at the Japan Prize Award Ceremony at the National Theater of Japan. Lower left photo shows the distinguished participants on the stage at the award ceremony.

1986 Japan Prize Awarded to Two U.S. Doctors

Dr. David Turnbull and Dr. Willem J. Kolff, both of the United States, were the honored laureates at the 1986 award presentation ceremony of the Japan Prize, the international prize awarded for outstanding

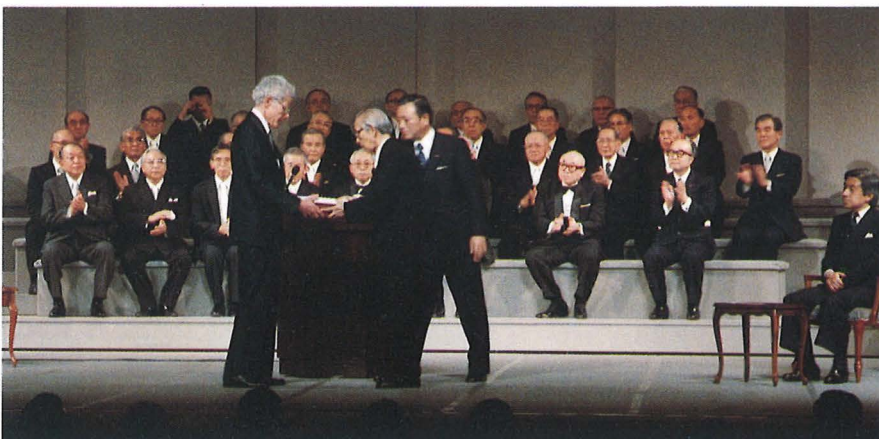
work in the field of science and technology, which was held at the National Theater of Japan in Tokyo, Japan on April 19, 1986.

Dr. Turnbull has greatly contributed to the technological development of new materials, including amorphous solids, and Dr. Kolff has made significant contributions in the

research and development of artificial organs and related technology.

The award ceremony was conducted in the presence of H.I.H. the Crown Prince Akihito and was attended by over 1,300 guests including Prime Minister Yasuhiro Nakasone, Chief Justice of the Supreme Court Koichi Yaguchi, Director General of the Science and Technology Agency Yohei Kono, and representatives of the foreign diplomatic corps and scholars in Japan.

In his felicitations, the crown prince honored the two doctors for their achievements and noted, "We are living in an age marked by remarkable progress in science and technology. Whether man will reap happiness from the fruit of this progress is of exceeding importance. My hope is that this international prize will serve to develop the science and technology which contributes to the welfare of the human race."



Scientific and Technological Excellence Will Usher Us into the 21st Century

For the Peace and Prosperity of All Mankind

Chairman Kisaburo Yokota of the Science and Technology Foundation of Japan opened the award ceremony for the 1986 Japan Prize and Prime Minister Nakasone delivered a congratulatory message stressing the award's significance. The prime minister stated, "Japan should respond to the expectations of the world to further development of science and technology, since they are the important assets of mankind that will lead us into the next century."



Prime Minister Yasuhiro Nakasone delivering his congratulatory message at the award ceremony.



The joint press conference held for the laureates at the Akasaka Prince Hotel.

After the examination committee reported on their decisions for selecting the two prize laureates, President Konosuke Matsushita of the Science and Technology Foundation presented the awards.

In his acceptance speech, Dr. Turnbull said, "I consider that this award recognizes not just my own achievements, but those of the early pioneers of materials science."

Dr. Kolff accepted his award with the words, "I am deeply honored by this award. This is because the



Dr. & Mrs. Turnbull and Dr. Kolff during their visit to the Science Council of Japan.



The laureates chat with Tokyo Governor Shunichi Suzuki during one of their courtesy calls.

Japan Prize is the prize for the peace and prosperity of mankind and the research of artificial organs is also for that purpose."

A colorful commemorative banquet was held to celebrate the success of the two laureates on the evening of April 19, 1986 at the Akasaka Prince Hotel in Tokyo.

During their stay in Japan, both laureates were busy with full schedules that included an audience with H.I.M. the Emperor, courtesy calls on Prime Minister Nakasone and other distinguished persons, meetings with scholars, and press interviews. They also held lectures in Tokyo and Kyoto and received enthusiastic audiences on both occasions.



The lecture meeting with gathered scholars and scientists in Kyoto.

Main Events of the 1986 Japan Prize Week

The "Japan Prize Week" was established to honor the achievements of the laureates and to further the advance of science and technology through lectures and scholarly exchanges.

Schedule for the 1986 Japan Prize Week

Friday, April 18: visit to the Japan Academy; joint press conference; visit to the Science Council of Japan.

Saturday, April 19: courtesy calls on the prime minister and the governor of Tokyo; Japan Prize award ceremony and reception banquet.

Monday, April 21: courtesy calls on the governor and mayor of Kyoto; commemorative lecture and meeting with scholars at the Kyoto International Hall.

Tuesday, April 22: commemorative lecture and meeting with scholars at Keidanren Hall, Tokyo; reception sponsored by the American embassy.

Wednesday, April 23: audience with H.I.M. the Emperor.

Profiles of the Laureates of the Second Japan Prize

Dr. David Turnbull

Professor of Applied Physics,
Harvard University
Born, February 14, 1915.

Dr. David Turnbull is noted as a great figure in the field of materials science for his leading theories on the development of amorphous materials. He perfected theories on the types of alloys which would easily transfer to the amorphous phase. Amorphous materials are now producing dramatic results in various areas of modern industry.

Dr. Turnbull has continued to develop principles relating to glasses for metals, polymers, ceramics, and semiconductors.

Highly esteemed as a representative Harvard scientist, Dr. Turnbull also coedits the prestigious series, "Solid State Physics."

Dr. Willem J. Kolff

Professor of Medical and Biomedical Engineering,
University of Utah
Born, February 14, 1911

Dr. Willem J. Kolff is considered the father of the artificial organ, a development internationally viewed as an epoch in modern medical technology. He was the first to develop the dialysis machine and later, concentrated on the development of dialyzers and made significant contributions to the widespread use of the artificial kidney.

In 1955, he developed an artificial lung and since 1957, he has initiated research on the artificial heart and all twelve of the world's artificial heart replacement operations are a result of his efforts.

Dr. Kolff is also deeply involved in the research and development of biomaterials for artificial organs and prosthetic devices.

Nomination Process for The Second Japan Prize

The two fields selected for the 1986 Japan Prize were materials science and technology, and medical technology. In March 1985, a total of 7,337 letters requesting recommendations for candidates of the prize were sent to distinguished scholars in 73 countries, including Japan. A total of 403 recommendations were received from Japan and 24 foreign nations by the June 30, 1985 deadline. A breakdown of the recommendations are as follows:

FIELD	NON-JAPANESE	JAPANESE	TOTAL
Materials Science & Technology	147	46	193
Medical Technology	158	52	210
Total	305	98	403

The foundation formed the Second Japan Prize Examination Committee in July 1985. The committee consists of 28 authorities from the fields of materials science and technology, and medical technology, and was chaired by President Masao Yoshiki of the Science University of Tokyo who was re-elected from the previous year.

As a result of energetic studies and investigations, and a careful examination of each nominee, the committee reached their final decisions and announced this year's laureates, Dr. Turnbull and Dr. Kolff, in February 1986.

Fields Targeted for the 1987 Japan Prize

Two scientists will be awarded the 1987 Japan Prize for work in the following fields:

1. Improvements of Biological Functions.

This includes all technologies which contribute to improvements in the hereditary qualities of organisms (animals, plants, or microorganisms) or the development of biological functions.

2. Electro Optics

The field of broad leading-edge technology developed through the introduction of new concepts in electronics or laser technology, including all types of

lasers and their application to industry, atmospheric and space science and technology, medical science, laser chemistry, optical computers, optical information memories and processing, optical communications, optical measurements, etc.

Over 9,000 letters requesting the recommendation of candidates for the 1987 award were sent at the end of March 1986 to eligible persons in Japan and overseas. The deadline for recommendations was June 30, 1986.

The Science and Technology Foundation of Japan and the Japan Prize

The Purpose of the International Prize In the Fields of Science and Technology

The Science and Technology Foundation of Japan was established on May 5, 1983 as a nonprofit foundation under the supervision of the Prime Minister's Office, the Science and Technology Agency, the Foreign Affairs' Ministry, and the Ministry of Education. The prime task of the foundation today is to present the Japan Prize. The award is a state-level prize, since, in relation to its establishment, the Japanese government gave the following cabinet endorsement, an act not usually performed for specific organizations:

"It is the view of the Japanese government that the Japan Prize will serve to deepen the understanding of the role played by science and technology in furthering world peace and prosperity, thereby making a vital contribution to the positive development of mankind. Based on this judgement, the government agencies concerned will offer whatever cooperation necessary to promote the prize." (Cabinet Endorsement, October 28, 1983).

The purpose of the foundation is to foster the Japan Prize as the Nobel Prize of the East for the fields of science and technology. The first Japan Prize award ceremony was held in Tokyo in April 1985.

The foundation is headed by President Konosuke Matsushita, executive advisor to the Matsushita Electric Industrial Co., Ltd., who has made extensive personal efforts to establish the prize, Chairman Kisaburo Yokota, ex-chief justice of the Supreme Court, and a board of directors consisting of renowned scholars and scientists.

A Banquet to Honor the Laureates

A wave of toasts was reflected in the candlelight, congratulatory messages were sounded, and a blend of soft voices and mellow laughter filled the air. Such was the atmosphere at the banquet held in the presence of Crown Prince Akihito at the Akasaka Prince Hotel's Crystal Palace on April 19 to honor Dr. Turnbull and Dr. Kolff for their achievements.

Close to 500 eminent scholars, distinguished guests, including Minister of State and Secretary General of the Science and Technology Agency Yohei Kono, Tokyo Governor Shunichi Suzuki, Nobel prize-winner Dr. Ken-ichi Fukui, Order of Cultural Merits recipients and honorable ambassadors to Japan were in attendance.



H.I.H. Crown Prince Akihito (center) listens while Chairman Kisaburo Yokota (standing) delivers a speech at the award banquet. Seated on the left is the Minister of State for Science and Technology, Yohei Kono.



Dr. Turnbull (standing) addresses the guests at the award banquet held in the Crystal Palace at the Akasaka Prince Hotel, Tokyo.

During the course of the evening, the "Lullaby of a Silk Tree," a Japanese song with lyrics by Crown Princess Michiko, was sung by a female duet to congratulate Dr. Turnbull and Dr. Kolff on their successes. The performance received enthusiastic applause from all of the guests including the two laureates.



A female duet entertains banquet guests with the song, "Lullaby of a Silk Tree."

Announcements

Japan Prize News and Information

Official records of all events held during the 1986 Japan Prize week are being compiled in both Japanese and English. Copies of the book may be ordered through the foundation.

The foundation publishes the JAPAN PRIZE News in both English and Japanese twice yearly, with the hope that the award will receive recognition worldwide as the prize for the peaceful development of mankind through scientific and technological excellence. Please write to the foundation if you wish to become a subscriber.

It is the hope of the foundation's members to foster the Japan Prize as a truly significant international award, a prize in which Japan can take pride in and also encourage the development of cooperation between renowned scholars from various fields. Your frank opinions and comments about the Japan Prize are also highly appreciated.