

JAPAN PRIZE NEWS

THE SCIENCE AND TECHNOLOGY
FOUNDATION OF JAPAN (JSTF)

Shisei Kaikan, 1-3, Hibiya-Koen,
Chiyoda-ku, Tokyo, Japan 100
Tel. 03 (508) 7691

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Scientists from U.S., U.K. and France Awarded 1990 (6th) Japan Prize

Recognized for Scientific Achievements in Technology of Integration and Earth Science



Dr. Marvin Minsky



Dr. William Jason Morgan



Dr. Dan Peter McKenzie



Dr. Xavier Le Pichon

The presentation ceremony of the 1990 (sixth) Japan Prize, the most prestigious and honored prize in the fields of science and technology, was held at the National Theater in Tokyo on April 17. The Prize is presented annually by the Science and Technology Foundation of Japan to scientists and researchers who have made substantial contributions to the advancement of science and technology and to the peace and prosperity of mankind.

The categories this year were "Technology of Integration — Design, Production and Control Technologies" and "Earth Science." A total of 663 nominations were made by top scientists and academics around the world, 208 for the Technology of Integration category and 455 for the Earth Science category. Out of those nomination, four scientists, two from the United States and one each from the United Kingdom and France, were awarded the 1990 Japan Prize.

Dr. Marvin Minsky, professor of Electrical Engineering at Massachusetts Institute of Technology, received the 1990 Japan Prize in the category of Technology of Integration. Dr. Minsky is credited with the establishment of the academic field named

Artificial Intelligence. He devised the fundamental theories of the field and has earned the title of "the father of AI."

The 1990 Japan Prize joint winners in the category of Earth Science were Dr. William Jason Morgan, Knox Taylor Professor of Geography at Princeton University; Dr. Dan Peter McKenzie, Professor of Earth Sciences at Cambridge University; and Dr. Xavier Le Pichon, Director of the Department of Geology at Ecole Normale Supérieure.

They won the Prize for their formation and subsequent development of the theory of plate tectonics, which has had a revolutionary impact on the advance of earth science and related fields.



Their Majesties The Emperor and Empress attend the Presentation Ceremony

Their Majesties The Emperor and Empress attended the presentation ceremony at the National Theater in Tokyo on April 17. Some 1,000 prominent guests attended the ceremony, including the Prime Minister, the Speaker of the House of Representatives, the President of the House of Councilors, the Chief Justice of the Supreme Court, numerous ambassadors to Japan, eminent scholars and researchers and representatives from other fields, including politics, finance, industry and the media.

The ceremony began with a rendition of Minoru Miki's "Overture Japan," a work composed especially for the ceremony and performed by the New Japan Philharmonic Orchestra under the direction of Naoto Otomo. Chairman of the Foundation Dr. Kisaburo Yokota made the opening address and Dr. Takashi Mukaibo, Chairman of the Selection Committee, introduced the winners and their achievements. Chairman Yokota then presented the four winners with their Japan Prize certificates of merit, commemorative medals and, for each category, cash awards of 50 million yen (the three joint winners in the Earth Science category sharing 50 million yen).

In his speech of acceptance of the Japan Prize, Dr. Minsky made a new resolution: "I will propose some new theories as suggestions for beginning the next period of this great scientific adventure." The three 1990 Japan Prize joint laureates expressed their appreciation in their acceptance speeches, as noted by Dr. McKenzie: "Scientific research is a truly international activity, and it gives me special pleasure to be chosen by a country other than my own."

Address of His Majesty the Emperor (Excerpts)



I am of the view that the achievements of these four doctors who have been awarded the Prize this time, are extremely significant to the world of today. Their achievements have not only contributed greatly to progress in their respective fields of study but deeply related to the lives of mankind.

I would like to take this opportunity to express my deep respect to the efforts made by the four laureates and the people who supported them.

Today, remarkable advances are being made in science and technology. However, we must not forget this point: how are these achievements to be utilized to promote happiness and welfare of all mankind. In this context, it is truly significant to have the Japan Prize, established to honor those who have contributed to promoting peace and prosperity of all humankind, and I hope that the Japan Prize will contribute in its own way to the productive development of science and technology in the years to come.



Foundation Named April 15-21 as Japan Prize Week



Joint Press Conference (April 16)

The four laureates attended a joint press conference for domestic and foreign media at the Japan Press Center. The journalists present put many questions to the laureates, reflecting the media's deep interest in the award categories of Technology of Integration and Earth Science.



Courtesy Call on the Governor of Tokyo (April 17)

The four laureates and their wives paid a courtesy visit to Tokyo Governor Shunichi Suzuki. The Governor was especially interested in Earth Science and raised some serious questions with the three doctors regarding earthquakes.



Elegant State Banquet held with Their Majesties The Emperor and Empress

A banquet for the 1990 Japan Prize winners was held at the Akasaka Prince Hotel in Tokyo on the evening of April 17, following the presentation ceremony. In addition to Their Majesties The Emperor and Empress of Japan, 400 dignitaries attended this gala celebration as guests.

The solemnity of previous banquets was augmented this year by an atmosphere of spring-like brilliance, which was reflected in the celebration's many festivities.

The dinner was followed by a congratulatory toast proposed by His Majesty The Emperor honoring the four laureates. A toast was proposed in appreciation of the assistance extended by the laureates' wives, by His Excellency Mr. Ryohachi Kusaba, Chief Justice of the Supreme Court, who represented the three branches of the Japanese government. Then the laureates' wives were presented with bouquets by young Japanese ladies dressed in traditional kimonos.

Another toast was proposed by His Excellency Mr. Tomoji Oshima, Minister of Science and Technology Agency, expressing the wish for the Japan Prize's further development and contribution to world peace and prosperity.

The banquet continued with congratulatory messages given by Mr. Shunichi Suzuki, the Governor of Tokyo, and His Excellency Pierre Nelson Cofit, Ambassador Extraordinary and Plenipotentiary of the Republic of Côte d'Ivoire, representing the foreign diplomats.

The end of the banquet was highlighted by a warm but lively performance by the Chiba University Mixed Chorus Group, which featured songs of the colleges where the laureates spent their days as young students.

Prior to closing the banquet, Drs. Minsky and Le Pichon gave speeches of thanks and brought the elegant state banquet to its close.



Commemorative Lectures (April 18 and 19)

Commemorative lectures were held at both the Iino Hall in Tokyo and the MID Theater in Osaka. Both sites were filled to capacity, with people standing in the aisles. The four doctors gave such stirring lectures that the event in Tokyo ran long past the scheduled close.



Taking a Break

The four doctors and their wives visited the International Garden and Greenery Exposition in Osaka, where they enjoyed the flowers and greenery while relaxing after the succession of official events.

Remembering Dr. Katchalski-Katzir (Israel) — First Japan Prize Winner —



Mr. Shozo Kadota



Mr. Tsuguaki Kawamura

Dr. Ephraim Katchalski-Katzir, the first Japan Prize winner, was recognized in 1985 for his work in the field of Biotechnology. In addition to being an outstanding scientist, he is also a political leader who served as the fourth President of Israel from 1973 through 1978.

Mr. Tsuguaki Kawamura, Executive Director of the Foundation, interviewed Mr. Shozo Kadota, who was the Japanese Ambassador to Israel when Dr. Katchalski-Katzir won the first Japan Prize. Mr. Kadota was the first person to contact him to inform him officially of his winning the Japan Prize. Mr. Kadota is currently the Superintendent of the Geihinkan (Akasaka Palace), the Government's official state guest house.

The following is a summary of Mr. Kadota's comments made during the interview:

Mr. Kadota: I remember I contacted Dr. Katchalski-Katzir at his home as soon as I could after receiving the official communication from the Ministry of Foreign Affairs in Tokyo. During our conversation I explained that the Japan Prize, as its name implies, is fully supported by Japan's public and private sectors and that it is intended to become an equal to the Nobel Prize.

In response, a delighted Dr. Katchalski-Katzir remarked, "It is an honor and I am pleased to accept."

Later, on another occasion, the Deputy Minister of Israel's Foreign Ministry expressed to me his appreciation for the awarding of the Japan Prize to Dr. Katchalski-Katzir and said that it was an honor for Israel.

Further, in the same way that I explained the Japan Prize to Dr. Katchalski-Katzir, I provided information to Israel's media.

Although Israel's population is no more than about 4 million, the nation is an information-oriented society with a well-developed media. Given this, I believe that a large majority of the people in Israel know about Dr. Katchalski-Katzir's winning the Japan Prize.

Mr. Kadota: Israel's fourth President was Dr. Katchalski-Katzir and the nation's first President, Dr. Chaim Weizmann, was also an outstanding scientist and a leader of the Zionists. There was a story that after the death of the first President, Dr. Albert Einstein was asked to fill the post of Presidency. The Israeli people like scientists as presidents.

Mr. Kadota: My term as Japanese Ambassador to Israel was from 1983 to 1986. When I assumed the post, relations and exchanges with Japan were not very well-founded due to a variety of circumstances. I believe Dr. Katchalski-Katzir's receiving the Japan Prize helped to promote more friendly relations between the two countries. I understand that Japan Prize winners are selected after an extremely arduous selection process in which the nominees' achievements alone are examined, with strict disregard for nationality, race and religion.

Pure motives sometimes lead to unexpectedly good results, which seems to have been the case in the improvement of diplomatic relations between Israel and Japan.

Selection of Winners Begins for 1991 (7th) Japan Prize

The categories of the 1991 (seventh) Japan Prize are Applied Mathematics and Imaging Techniques in Medicine. Candidates have been recommended through numerous letters of nomination received by the Foundation from around the world. The 1991 Selection Committee has been established and the process of selecting next year's winners is under way. Results will be announced publicly in early 1991 and the presentation ceremony will be held in April.

Applied Mathematics

Recently, with the progress in numerical methods by use of computers, applied mathematics has come to play an increasingly important role in various fields of engineering and applied science, making remarkable contributions to research as well as to the resolution of practical problems in industrial and other applications.

The prize for 1991 will be awarded for outstanding achievements in applied mathematics which are based on analytic and numerical methods and whose applications have made significant contributions to the solution of practical problems in industry and other fields.

Imaging Techniques in Medicine

The recent remarkable advances in medicine are in large measure due to the development of imaging techniques for visualizing various activities and disorders within our body; for example, magnetic resonance imaging, positron emission tomography, ultrasonic echo, endoscope etc.

The prize for 1991 will be awarded for innovative contributions to the development and application of medical imaging techniques in the fields of clinical medicine, basic medicine and biology.

General Science and Technology Seminars Held Monthly

The Foundation is holding a monthly General Science and Technology Seminar (in Japanese) for the general public free of charge. The aim is to promote a comprehensive spread and development of information and ideas regarding science and technology.

Lecturers at the seminars are distinguished scholars, scientists and engineers who are recognized as leaders in their fields.

The lectures are presented in easy-to-understand Japanese language.

Future subjects include "Medical Drugs — Effects and Side Effects," "Computer Graphics," "Reliability in Weather Forecasting," and "Artificial Organs."



A view of "Shisei-Kaikan" in Tokyo, where JSTF has its offices