has been included as a part of my daily prayers. I seek for my successor, who has a very difficult task ahead, to rebuild, to reconstruct, the degree of harmony which has previously existed, and I seek for him most earnestly a support, a confidence, a co-operation no less sincere, no less complete, than was given to me throughout my period of service. I have been grateful for the opportunity of filling this high office. I have been constantly aware of the injunction imposed by the oath. I wish the Agency, as I have previously said in my more official statement, I wish it the very best of success and accomplishment in bringing some order out of this chaotic world, and some semblance of comfort and happiness to its people."

### A Biographical Note

Mr. Sterling Cole, born in Painted Post, N.Y., U.S.A., on April 18, 1904, attended Colgate, N.Y., University where he received his B.A. in 1925; taught a year at the faculty of Corning, N.Y., Free Academy and attended Albany Law School, receiving his B.LL., 1929.

Mr. Cole subsequently practised law in Bath, N.Y., until November 1934, when he was elected to the 74th Congress, where he was the youngest Republican Member. He has been re-elected to each succeeding Congress, as Representative of New York's 37th District.

Mr. Cole was Chairman of the Joint Committee on Atomic Energy during the 83rd Congress (1953-54) when the U.S. atomic law was completely revised to make possible peaceful development of the new source of energy. He has been a member of this committee since its creation under the Atomic Energy Act of 1946. He served on the House Committee on Armed Services, the Naval Affairs Committee, the Committees on Insular Affairs, Labor and Education, the District of Columbia Committee, the Select Committee on Conservation of Natural Resources, and also the Post-War Military Policy Committee and the Republican Policy Committee.

In 1954, Mr. Cole was awarded an honorary D.LL. by Colgate University of which he was a Trustee. He is also a Trustee of Elmira (N.Y.) College and of the Woodlawn Foundation, Inc.

# DR. SIGVARD EKLUND TAKES OFFICE AS DIRECTOR GENERAL OF IAEA

Dr. Sigvard Eklund, the new Director General of the International Atomic Energy Agency, assumed charge of his office on 1 December 1961.

The fifth session of the IAEA General Conference, at a plenary meeting on 3 October 1961, approved Dr. Eklund's appointment as the Agency's Director General to succeed Mr. Sterling Cole. The appointment, which had been made by a majority decision of the Agency's Board of Governors in June 1961, was approved by the Conference by 46 votes to 16 with six abstentions. The President of the Conference, Mr. Quihillalt, administered the oath of office to Dr. Eklund at a plenary meeting on 6 October 1961.

After this ceremony, the Director General-designate addressed the Conference. The following is the text of the address:

"I would like first of all to express my sincere and deeply felt thanks for the confidence shown to me by electing me Director General of the International Atomic Energy Agency. In the light of the important future tasks of the Agency as well as of its achievements in the past, your election imposes on me heavy

responsibilities of which I am fully aware. I can only state my intention to try to do the utmost within my personal limitations to justify your expectation.

"In accepting the appointment, I am solely motivated by a sincere desire to further the objectives of the Agency. I am quite aware of the fact that certain Member States have not given their support to my election, including Member States with outstanding records of achievements in the atomic energy field. When, nevertheless, I have accepted the appointment as Director General of the Agency, I have found guidance by two facts: that the election was made in full accordance with the Statute of the Agency and that it was supported by a great majority of votes, including many developing countries around the world.

"The election once made in accordance with the Statute, I feel confident that every Member State will find it consistent with their interests as well as with the interests of the Agency to work together in a joint effort to fulfill successfully the functions of the organization. I would like to emphasize that from my side there will be an unfailing effort to co-operate with all



Dr. Sigvard Eklund (center), being sworn in as Director General of IAEA at a plenary meeting of the General Conference on 6 October 1961 by Mr. Oscar A. Quihillalt (right), President of the fifth regular session of the Conference. Left: Mr. Cole, the outgoing Director General

Members of the organization in order to achieve the purposes of the Agency throughout the world. It is very satisfying that in fulfilling this task I can count upon a Secretariat with a high professional standard which most successfully has been established under the able directorship of Mr. Sterling Cole.

"With regard to the future, I consider it very essential that any appraisal of the Agency's objectives be made with regard to the circumstances which we face today in the atomic energy field as compared with the situation in 1957. The time available before we need atomic energy before other energy sources are exhausted should be used to perform extensive research and development work including the construction of reactor prototypes, to make the still missing "break-through". Financial means are a necessary requisite in order to be able to perform development work, but also good brains. The developing countries can make a most important contribution here by providing talents for education in science and technology. I am using education here in a sense where the word means not only the acquisition of knowledge in certain fields of science and technology, but also includes ability for creative thinking in the form of scientific and technical research and development work. Agency ought to be able to assist here to a considerable degree.

"It must be kept in mind that the role of the Agency with regard to the development of competitive reactors probably has to be much less ambitious, unless the Agency's budget is increased to a considerable degree or other ways of financing can be found. It must be kept in mind that the resources of the Agency

are very limited and I cannot help drawing your attention to the very small means which the Agency at present has available. The members of this Conference are certainly aware of the high development costs in the atomic energy field, but it is extremely necessary to consider the Agency's budget in the light of what real development work, including hardware, costs these days, and which is reflected in the budgets of the national programs. In particular I am going to study the records of this Conference, during which, I understand, many fruitful suggestions for the practical work have been made.

"Some of the lines which the Agency has followed to introduce atomic energy to the benefit of the Member countries have been very successful, and especially the free exchange of information which is taking place in the atomic energy field is most promising for the future. This dissemination of knowledge is unique in the history of science and technology, and may pave the way to international collaboration to a degree unknown before not only with regard to atomic energy but to science in general. It is my firm belief that this collaboration in science and technology will also help to achieve a better understanding between the nations.

"In closing, I want to emphasize that I am starting my work in this Agency with an open mind and that, when performing my duties, I will always be much obliged for all constructive suggestions which can foster the work of the Agency. As I have already mentioned, it is my conviction that also the developing countries can make important contributions to the work and I sincerely hope to have as close collaborators representatives of these countries. In that respect I intend to make an immediate review, in consultation with the Board of Governors, of the Secretariat, and particularly the senior posts, in order that the geographical areas of the world will have appropriate representation. The Agency depends for its work on the collaboration between the Member States, irrespective of whether they have already reached a high degree of development in the atomic energy field or whether they still find themselves in an initial phase. For my part, I want to collaborate with all Member countries, taking into account the fact that they have equal rights and equal duties. You can count on me doing my best but I also deeply feel that I need the help and understanding you can give me in fulfilling the difficult task I am now assuming.

## A Biographical Note

Dr. Arne Sigvard Eklund was born in 1911 in Kiruna, Sweden. He obtained the degree of Master of Science in 1936 and of Doctor of Science in 1946. From 1937 to 1945 he was first Assistant and then Senior Scientist at the Nobel Institute for Physics, and from 1946 to 1950, Senior Scientist at the Research Institute for National Defence, Stockholm. He was Assistant Professor of nuclear physics at the Royal Institute of Technology, Stockholm, 1946-56. From 1950 to 1956, he was Director of Research at the

Swedish Atomic Energy Company (AB Atomenergi, Stockholm).

Until his appointment as Director General of the IAEA, Dr. Eklund was Deputy to the Managing Director of AB Atomenergi (since 1950) and also Director of the Reactor Development Division at AB Atomenergi (since 1957).

His publications include papers on atomic energy as well as on nuclear physics and instrumentation.

Dr. Eklund has also served on a number of international assignments, as listed below:

Member of the Working Group of 1953 the European Atomic Energy Society

Chairman of the Study Group 1956 - of Experimental Reactors in OEEC

	ember of the Halden mmittee	1958 -	
Pu	ember of the General rposes Committee ragon)	1959 -	
	ember of the Board of anagement (Dragon)	1959 -	
	airman of the Board of anagement (Dragon)	1959 -	1960
era nat Co	nference Secretary Gen- al for the Second Inter- tional United Nations nference on the Peaceful es of Atomic Energy	1957 -	1958
Mi	airman of an Information ssion on Nuclear Ship opulsion (OEEC)	Spring,	1960

Dr. Eklund is a Member of the Royal Swedish Academy of Engineering Sciences.

# UTILIZATION OF RESEARCH REACTORS

About 200 research reactors are now in operation in different parts of the world, and at least 70 such facilities, which are in advanced stages of planning and construction, should be critical within the next two or three years. In the process of this development a multitude of problems are being encountered in formulating and carrying out programs for the proper utilization of these facilities, especially in countries which have just begun or are starting their atomic energy work.

The subject came up at the last session of the IAEA General Conference which adopted a resolution urging early consideration of "steps to be taken to promote international co-operation in order to ensure full and effective utilization of the research reactors in such Member States as may request assistance towards that end".

An opportunity for scientific personnel from different Member States to discuss research reactor problems was given at an international symposium on the Programing and Utilization of Research Reactors organized by the Agency almost immediately after the General Conference session. Two hundred scientists from 35 countries, as well as from the European Nuclear Energy Agency and EURATOM, attended the meeting which was held in Vienna from 16 to 21 October 1961.

The discussion was based on 69 papers orally presented at the symposium. These covered such

subjects as problems of organization and training, the experience gained so far, useful fields of research with reactors, and possibilities of international cooperation.

#### **Problems of Establishment and Training**

In a survey of major problems in establishing a research reactor center, R. G. Bradley (USA) stressed the importance of evaluation and determination of research and training programs prior to the building of research reactors. He said that once it was decided that the program justified a reactor, the feasibility of such an undertaking should be evaluated on the basis of the availability of resources, especially the availability of trained personnel and funds. Mr. Bradley added that the problem of developing plans that would assure adequate technical staff for the safe operation, maintenance and utilization of a research reactor was often a major stumbling block, particularly for countries with a relatively new nuclear energy program. He pointed out that some organizations had experienced serious problems not from completing their training programs at too late a date, but rather from the graduates returning home at too early a date to find equipment or programs on which to apply their new knowledge and techniques. Of necessity, they turned to non-nuclear jobs and some were ultimately lost to the nuclear program.

The problem, said Mr. Bradley, might be accentuated by the choice of reactor site. The univer-