

The Twenty Fifth Anniversary of »Arhiv za kemiju«

Appearing rather irregularly, struggling with manifold difficulties such as lack of funds, of paper, of printing facilities etc. the »ARHIV ZA KEMIJU« has managed to survive all crises up to its twenty fifth anniversary. It was only in the most difficult years of war and enemy occupation (1944—1945), and at the beginning of the reconstruction period (1946) that ARHIV was discontinued. Thus it was »experimentally« proved that we have the right and the duty to communicate with the international body of scientific workers by means of collective scientific and professional letters in the way which has become usual in the scientific world in the last hundred years.

ARHIV ZA KEMIJU represents an organic phenomenon, which in spite of the rather frequent change of name, of form and of contents reflects the continuity in the development of both our chemistry and our understanding of what science means in life. This line of continuity shows better than anything that our community is capable of constructive efforts which are above the selfish, local and everyday limits, and surpass the immediate and shortterm needs; through such efforts our scientific workers and laboratories are being collectively incorporated into the general scientific formation of humanity.

We are quite aware of entering the scientific world as a small focus without tradition and without advantages of large scientific periodicals which in respect to the quality of their publications and authors, the usage of widely used languages etc. represent the regular sources of scientific information. However, we think that further efforts to keep up our ARHIV ZA KEMIJU in spite of all difficulties are justified. ARHIV ZA KEMIJU has its *raison d'être* from the scientific point of view and from the cultural point of view, both in the local and national frame as well as in the widest international frame representing the unity of science.

Already the first issue of ARHIV ZA HEMIJU I FARMACIJU tried to get in touch with the world by means of summaries written in one of the foreign languages. In this first period (Vol. I to VII, 1927—1933) ARHIV was edited by V. Njegovan to whom all credit ought to be given for bringing this new chemical periodical to world. Looking through these first volumes of ARHIV we shall find original papers, technical and scientific reviews and other articles. During the critical period, when it seemed that the existence of ARHIV was brought to an end, the editorship was taken over by F. Hana-man, who, helped by anonymous assistant-editors (R. Podhorsky and S. Orlić),

saved the ARHIV. This was the period (Vol. VIII—XII, 1934—1939) when ARHIV consisted mainly of reviews, technical papers and Croatian translations or summaries of papers published by our chemists in foreign periodicals. Few original papers were published in ARHIV at that time. In 1938 (Vol. XII) the title was changed to ARHIV ZA HEMIJU I TEHNOLOGIJU. Shortly before the war in Vol. XIV (1940) we can find the first original paper published in ARHIV in full in a foreign language. The editor was then S. Miholić. However, ARHIV ZA KEMIJU I TEHNOLOGIJU is still a periodical publishing mainly reviews and abstracts of papers published elsewhere. During the war Vols. XV/XVI (1941/1942) and XVII (1943) appeared as KEMIJSKI VJESNIK under the editorship of M. Deželić. After a break of three years (1944, 1945 and 1946) the publication of ARHIV is resumed under the title ARHIV ZA KEMIJU. Under the editorship of S. Miholić a new phase opens in the development of ARHIV. More and more articles are published in foreign languages and the character of the published papers is changed as well. Most of them are original contributions; since 1949 (Vol. XXI) tables and diagrams are in most cases bilingual; thus the papers published in Croatian become intelligible to readers who do not understand our language. Parallel with the technical improvement, the criteria of accepting papers for publication in ARHIV become more severe: no paper is accepted for publication before two referees submit their opinion about the paper to the editing committee. ARHIV has thus become the product of collective efforts of our chemists.

At the same time Yugoslav chemistry begins to take its place in the statistics of cited papers. The percentage is small but definite. Before the war we were content if a paper published in our periodicals was abstracted in abstracting journals. Some credit for this progress in the publicity of Yugoslav chemistry must be given to our ARHIV.

Today ARHIV ZA KEMIJU is almost exclusively a scientific periodical: as a rule, papers published in ARHIV are original contributions which have not been published elsewhere before. The papers are published either in Croatian with a summary in a foreign language, or in a foreign language with a summary in Croatian. Publication of scientific papers in Croatian (or any other of the Yugoslav languages) is allowed in order to develop our scientific terminology and to stimulate the work of our research schools. There are some objections that ARHIV ZA KEMIJU may be lost in the vast number of other periodicals that publish chemical papers; we think that this fear is unjustified. Our scientists should acquire the habit to publish their results regularly in ARHIV; only the most important results should be published in large well known foreign periodicals quoting the papers previously published in ARHIV. If this policy is followed ARHIV ZA KEMIJU will get its place on the long list of chemical periodicals in proportion to the value of the material published on its pages.

Moreover, it seems that ARHIV is not only well suited to our specific conditions, but that such periodicals, in a more developed form, could become the main reservoirs of scientific production of to-morrow. There is no doubt that large chemical periodicals have many specific problems and difficulties. Although they still resist the tendency of being split into several smaller

journals, it will some day become inevitable, owing to the increased production of scientific publications, to create chemical periodicals for smaller areas, e. g. of New Jersey, Illinois, etc. These journals will serve as filters to the specialized or synthetic journals of continental or global scope which will publish only most important results. On the other side we have today also, for different reasons, scientific publications of New-Zealand, Israel, and to-morrow we may have on the same line chemical journals of Malaya, Afganistan etc.

Only under particularly favourable conditions where the views on science have become uniform, we may expect a superstructure such as *Acta Chemica Scandinavica*, published by the chemical societies of Scandinavia. We are endeavouring to achieve the same, though on a smaller scale, in our republic, by concentrating in ARHIV all scientific production in the field of chemistry. Otherwise, a regular exchange of journals between all these bigger and smaller units of the chemical and scientific world-family, and a quick and free circulation of reprints, photocopies etc. between groups and individuals will be of greatest importance to the scientific community of the world.

Probably we shall not have to wait long before a special system of chemical and other scientific journals is established in the widest international scale, in which the publications of national chemical societies will constitute the backbone (cf. *Arhiv kem.* 23 [1951] 206).

In order to contribute to this end the Croatian Chemical Society with its publishing committee endeavour to find ways and means to make the ARHIV ZA KEMIJU to:

(1) originate all efforts in establishing correct criteria of the value of scientific papers by increasing the number of referees as much as possible.

(2) promote the clear, condensed and methodical presentation as well as improve technical form of scientific publications;

(3) serve as means for the quickest possible publication of our research papers in the form which suits best both the special conditions of national community and the international character of science;

(4) educate our young research workers in editing, translating and technical printing work connected with modern publication;

(5) cultivate our chemical terminology and nomenclature;

(6) harmonize and promote collaboration between all scientific groups in Zagreb, Croatia, Yugoslavia resp. that may be interested in research work without regard to which body they belong (University, Academy, institutes and laboratories of some educational, health, agricultural, industrial, or defence organisation);

(7) connect national scientific centres both in our country and abroad by means of exchange of journals;

(8) complete the Central Chemical Library with journals received in exchange; this library serves as centre for chemical literature in the Republic, and also as deposit for manuscripts;

(9) improve in the direct and indirect way the emitting and absorbing functions of research communications especially in the field of chemistry.

Thus summarizing ARHIV should be a representative journal for publication of original research paper on the field of chemistry in Croatia and possibly other republics of Yugoslavia.

To achieve these aims we must meet with the understanding, help and collaboration of all those who are interested in our work (active or non-active).

If anybody thought that the exclusively scientific character of our ARHIV ZA KEMIJU may be above our educational, technical, agricultural, health, and defence conditions, we have to reply that, in case we really want a progress in all these fields, a direct contact with the huge reservoir of the world's science is needed; this contact may be realised only through giving and receiving, free of any limits, in the field of fundamental science.

Therefore we consider that all our professional men in the field of chemistry should feel responsible for the contents, the size, the form and the frequency of issues of our ARHIV. ARHIV is not a journal of the University, the Academy or of any other body; it is common to all those who know and have to know what science, especially chemistry, means to modern life. A symbiosis is obviously required, the so called »house« od »local« publications are supposed to be discontinued and replaced more rationally by volumes of chosen reprints. The fundamental task of the Croatian Chemical Society is the same as of all other societies in the world with open membership, namely, to unite all chemists of their territory, without regard to their special field of application, or the authorities under which they work. The duty of the Editing Committee and the Council of the Croatian Chemical Society is to fulfil these tasks, which will then result in the fact that all points (1) — (9) are satisfied.

We might be asked why our efforts are not directed towards establishing a representative Yugoslav chemical journal. We have thought of it and have found after a careful investigation into this matter, that, at present, the best way towards this goal is to publish separate volumes of reprints from all Yugoslav chemical journals, the so called »Collectanea«. A too hasty decision to unite all Yugoslav chemical journals could have an adverse effect.

The greatest obstacle in our work represent the limited funds. We understand that such an undertaking has to be subsidised by public means. Even the scientific journals which are issued in tens thousands of copies cannot exist without subsidies. In many countries there is a system of taxes imposed in order to support scientific publications. So far we have not yet found the right way in which to get funds for financing scientific publications.

Before the war ARHIV was depending on the financial help of industrial enterprises; after the war state subsidies covered the expenses for paper and printing. There is no doubt that the small circle of scientists working for years to obtain some results of scientific value cannot be taxed for publishing their results.

However, in spite of difficulties, we believe that ARHIV will find the necessary funds; our community cannot afford losing an established scientific

periodical. In the meantime we shall try to prevent that these temporary difficulties lower the standard of our journal.

Before concluding we should like to appeal to our friends publishing periodicals in the field of chemistry both here and abroad to continue the exchange that has so fruitfully taken place all these years. We are perfectly aware that what we have been able to offer in exchange has not always been what we would have liked it to be, but they can rest assured that we shall do our best in the future. These exchanges have, indeed, proved most valuable to us and we dare hope that they have contributed to closer mutual relation and to a better understanding of our common problems.

BOŽO TEŽAK