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The Polish initiative in creation of the International Union for Quaternary Research (INQUA)

THE INTERNATIONAL UNION FOR QUATERNARY RESEARCH — INQUA, one of the most active scientific organizations of the International Geological Union, was established though and though owing to the Polish initiative. It was undertaken by Prof. Mieczysław Limanowski and the Polish Geological Society during the meeting arranged at 1928 in Copenhagen on the occasion of 40th anniversary of the Geological Institute of Denmark.

M. Limanowski (1876–1948) was a scientist of broad views and interests realizing successfully two life passions: geology and theatre. After first studies dealing with the geological structure of the Tatra Mts. and other massifs of the Alpine system he got the doctor degree as a fellow of world-famous geologist, Prof. M. Lugeon in Switzerland. During next years his main fields of activity were both geological research in Carpathians and the theatre: direction, playwriting of exposing of drams, lectures in School of Dramaturgy and finally the organization and leading of the Reduta Theatre in Warsaw and in Vilnius. Just after the First World War Dr M. Limanowski was employed in the Polish Geological Institute with special regard for quaternary studies, mainly the number and range of glaciations, which covered Poland and Central Europe. Since 1926 he became the Professor of Physical Geography in University of Vilnius.

The Polish Geological Society was created in Cracow at 24 IV 1921 (Maślankiewicz 1971). Already in next year its activity on the international level was distinctly marked, when seven members of the Society took part in XIII International Geological Congress in Brussels. Chairman of the Polish delegation — Prof. H. Arctowski, together with representatives of three countries (Czechoslovakia, Romania, Kingdom of Serbians, Croats and Slovenians) proposed a motion about creation of the Carpathian Geological Association, which should male easier and integrate geological investigations in mountains divided by frontiers established after the war. The proposition has been fully accepted in the last day of the Session (19 VIII 1922). Dr M. Limanowski was one of Polish delegates, which participated in this undertaking.

In next few years two national scientific societies dealing with quaternary research were instituted (Alexandrowicz 2004). One of them — the Geselschaft für Geschiebekunde initiated the activity at 1924 in Germany. Their main interests were erratic boulders, moraines as well as glacial deposits and forms in Central Europe. The Society edited his own journal (annual) — *Zeitschrift für Geschiebefreunde*. The other association covering the full range of investigations, planed initially as an Institute was established at January 1927 in Soviet Union by the Academy of Sciences of USSR, as the Commission for Quaternary Research. Its main purpose was to integrate interdisciplinary studies in the field of geology, botany, zoology, geography and archaeology as well as soil analysis, subordinated to problems of the youngest geological period. The edition of its organ (Bulletin of Commission for Quaternary Research) started at 1929 in the frequency 1–2 books a year and continues.

The appointment of the Carpathian Geological Association was a worthy precedent to create another, similar commission or association dealing with quaternary research, mainly in respect to correlate the age and ranges of particular glaciations in Europe, stratigraphic schemes and terminology. The idea of the International Quaternary Association was born surely at 1922 during the XIII Geological Congress in Brussels. The initiative undertaken few years later by Dr M. Limanowski was stimulated by his talk and discussion with German geologist — Dr W. Wunstorf, as both of them meet just after the establishing of the Carpathian Geological Association. This purpose found the repercussion in the letter send at February 1928 by Dr P. Krusch, leader of the Geological Institute in Berlin (Preussische Geologische

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Landesanstalt), to the University in Vilnius. He proposed to organize a working group for research of North European Diluvium and in fact it gives rise to the activity crowned in a short time by a full success.

In the next month (21 III 1928) according to the suggestion of Prof. M. Limanowski, the managing board of the Polish Geological Society undertook the proposition to create the Glaciological Association as an organization integrating research on the Diluvium of North and Central Europe. The Warsaw Branch of the Society and particularly its leader — Prof. Jan Lewiński, in connection with the mover and Prof. S. Pawłowski from Poznań was obligated to prepare the adequate proposal for the planed international conference in Denmark. The delegation of the Society, professors: S. Lencewicz, J. Lewiński, M. Limanowski, S. Pawłowski, B. Rydzewski, with the chairman — Prof. Jan Nowak, was notified at 5 VI 1928 to the Organizing Committee of the Congress in Copenhagen. It was later supplemented by Prof. J. Morozewicz and Dr J. Samsonowicz from the Polish Geological Institute in Warsaw. Simultaneously Prof. J. Lewiński prepared the text of the statute for the new association to recommend it during the session and the firstly proposed name "Glaciological Association" was changed to "Quaternary Association" (Alexandrowicz 2004).

The Congress organized on the occasion of the jubilee of the Danish Geological Institute in Copenhagen took place at 17–30 June 1928 with 102 participants from 17 countries. At 25 June the director of Institute — Prof. V. Madsen opened debates as the chairmen. After preliminary greetings he presented the Polish initiative concerning the creation of a new international association, suggested by Prof. J. Nowak. Then it was presented and motivated in detail by Prof. M. Limanowski (Neustadt 1969). He emphasized, that the cooperation of quaternary geologists in neighboring European countries is not effectively organized and highly inadequate. Additionally a significant part of publications has been edited in Scandinavian languages, poorly known in other countries. Similar difficulties in geology of Carpathians have been overcome, when the adequate association originated six years later.

In the following lively discussion the Polish proposition was actively and with conviction supported by representatives of Soviet delegation (Prof. A. E. Fersman and Prof. D. I. Mušketov) as well as by delegates from Germany, Austria and other countries. In spite the contradictory opinion expressed in the letter send by Prof. G. de Geer, the motion was fully accepted by the assembly. At the termination of debates the general meeting elected the Organizing Committee composed of 14 persons including Prof. V. Madsen as chairman and Prof. J. Nowak as secretary.

During the plenary session in the second day of the Conference (26 VI 1928) the conclusion introduced by M. Limanowski became confirmed with following resolution (translated from French by the author): "Meeting of General International Conference in Copenhagen in 1928 decided to accept unanimously the proposal of Polish delegation and to organize the Association for Investigations of Quaternary of Europe" (Neustadt 1969, p. 10). Consequently the statute of this association prepared already before the meeting by Prof. J. Lewiński was presented and accepted with one voice. The text of this regulation wrote in French comprises six points:

- (1) the name of Association Association pour l'étude du Quaternaire Européen;
- (2) the aim of Association coordination of quaternary research in Europe (in 5 sub points);
- (3) the organization of Association (president and secretariat with of national representatives);
- (4) the accessibility of Association for all scientists interesting in problems of Quaternary;
- (5) the appointment of date and place of the next congress during the preceding one;
- (6) the changes of the statute can be executed only by the general meeting of Association.

According to contents of the second point the Association should have five main purposes in view. There are: service of permanent information, facilitation of geological investigation in member countries, standardization of terminology, organization of periodical congresses as well as elaboration and edition of the geological map of quaternary deposits (Alexandrowicz 2004). Additionally following fourteen countries were mentioned as countries-memberships, founders of the "Association for Research of European Quaternary": Austria, Belgium, Czechoslovakia, Denmark, Finland, France, Germany, Great Britain, Holland, Norway, Poland, Soviet Union, Spain and Sweden. Their representatives entered into the Organizing Committee whose chairmen became Prof. V. Madsen and secretary — Prof. J. Nowak. There was also established the Office of the Association composed of 15 delegates under the leadership of Prof. D. I. Mušketov from Soviet Union. The statute was signet by 95 participants of the conference from countries-memberships supplemented by representatives of Hungary and Italy ((Neustadt 1969).

Problems connected with quaternary research were well represented during debates and excursions of the conference in Copenhagen that is why it was appreciated as the first meeting of the new created Association. Delegation of Great Britain commits oneself to organize the next (second) meeting two years later. This appointed time was afterwards elated and put off till 1932. Unfortunately this declaration was also not adhered.

A short time after the Danish conference the International Institute of Intellectual Cooperation in Paris was notified about the appointment of Association for Research of European Quaternary and tacked it on board. Finally the affiliation to the International Geological Union stayed as the last step in the carried on formal procedure, which was initiated by Polish geologists.

The report on the activity of the Polish delegation in Copenhagen was presented during the VIII annual assembly of the Polish Geological Society in Lwów (September 1928). It met with an enthusiastic reception and was accepted by acclamation. The commission composed of representatives from five universities (Professors: M. Limanowski, W. Szafer, L. Kozłowski, S. Pawłowski and S. Lenewicz) was elected during this meeting to coordinate actions of the just now appreciated organization in Poland. Prof. J. Lewiński was simultaneously indicated as the secretary-correspondent, cooperating with the Office of Quaternary Association.

Already before the Danish conference the Polish Geological Society makes efforts to obtain the financial support for the participation of three members (Prof. J. Nowak, Prof. J. Tokarski, Dr S. Kreutz) in the Geological Congress organized in the next year in Pretoria. The conference engaged in the organization of investigations dealing with the Polish Diluvium, deliberated at 9 III 1929 in the ministerial Department of Science in Warsaw under the chairmanship of Director S. Michalski. Delegates of the Society: Prof. M. Limanowski and Prof. J. Lewiński presented the motion as well as the necessity of quaternary research and the participation in the next International Congress, what was discussed and accepted. In consequence the Polish delegation (Professors: J. Lewiński, W. Goetel, J. Morozewicz, J. Loth) got the possibility to go in the summer to South Africa.

The XV International Geological Congress took place at 27 VII – 7 VIII 1929 in Pretoria. Prof. J. Lewiński representing the Polish Geological Society participated in meetings of the Council. The affirmation of European Quaternary Association was planed as a point of debates. Other Polish representatives — Prof. J. Morozewicz proposed a motion to confirm it as the Association of the World Geological Union, just as the Carpathian Geological Association, affiliates seven year earlier during XII Congress in Brussels. Different, less advantageous alternative, to recognize it only as a Commission, was posed by Dr P. Krusch, the member of German delegation. The reason motivated in detail by Prof. J. Lewiński was much more convicting and in consequence after a discussion it found the acceptation during general meeting. Finally the General Secretary of the Congress accepted the following resolution: "To write an official letter to the President of the above Association; to draw his attention to the resolution of Council (August 5) giving official recognition to the Association and to offer, on the part of all the permanent International Commision, the heartiest co-operation of this Congress" (Neustadt 1969, p. 11). In this way the North-European Quaternary Association finally became the part of World Geological Union with a desirable independency, like the Carpathian Geological Association created seven years ago.

During the Congress in Pretoria the British delegation refused his own proposition posed in Copenhagen, to organize in 1930 or 1932 the second conference of the Association in Great Britain. Unofficial negotiations about this unexpected situation were undertaken by the delegate of the Polish Geological Society with representatives of few countries Finally Prof. D. I. Mušketov tacked the initiative and in the name of Soviet delegation suggested Leningrad as a place of the next conference. After discussions this proposition was finally accepted.

The second International Quaternary Conference started 7 IX 1932. After one week of debates the three-week excursion from Leningrad through Kiev, along the lover course of the Volga River and back to Moscow was performed. Only twenty foreign delegates (including four from Poland) tacked part in this meeting. The geological map: Quaternary Deposits of the European Part of USSR, presented during the session drew special attention of delegates. International Commission leaded by Prof. W. Wolf (Germany) was established to prepare in relatively short time a similar map for the whole Europe. Other commission dealing with saprogenic deposits was created, too. Resolutions indicating the advisability of studies about loess, biogenic and littoral sediments, fossil man and changes of the see level as well as

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other problems were indicated and accepted. According to the proposition of Prof. Bertrand, Austria was indicated as the place of the next Quaternary Conference. New member-countries: Unites States, Canada and Japan join the Association and in consequence, according to the motion of Prof. V. Madsen the new name — Weltassotiaton für das Studium des Quartärs has been introduced. It was accepted a year later during the XVI International Geological Congress in Washington.

The third Quaternary Conference deliberated at September 1936 in Vienna with the participation of about 200 scientists, including 92 delegates from 23 countries with the Polish delegation (9 persons, i.e. Prof. S. Lencewicz, Doc. M. Ksiażkiewicz, Dr M. Klimaszewski, and Dr R. Galon). Prof. G. Götzinger was the chairmen of debates and Prof. A. Penck, a German world-famous geomorphologist was the honor-president of the meeting. A year ago the name of association — International Union for Quaternary Research (INQUA) was firstly introduced in two contributions published in Sweden and in Germany by G. Götzinger, O. Ampferer and H. Gams. Both the name and the abbreviation used up today have been accepted. Mountain glaciations of Alps, their ranges and relation to Scandinavian ice-sheets attracted the main attention. Problems of quaternary deposits and forms in Carpathians, the marine transgression and the fauna of last interglacial and few other problems were presented by Polish participants. Pollen analyses as a useful way to quaternary stratigraphy and palaeoclimatology, varve chronology and studies of loess were other hardly discussed topics. Geological map of quaternary deposits of Europe drew a special attention. After the demonstration of such maps prepared by State Geological Institute in Warsaw (Dr B. Halicki) and by Soviet Quaternary Commission the decision about the edition of the map for the whole Europe was tacked. During the meeting of representatives of member-countries Great Britain or Sweden was indicated as organizers of the next conference in 1940.

After the break caused by the Second World War Quaternary research in Poland were activated by the Polish Academy of Arts and Sciences during the national meeting organized by Prof. W. Szafer at 1–3 III 1946 in Krakow. One point of the discussion concerned the reactivation of the Polish Section of Quaternary Union, to facilitate the effective participation in works of this institution. Unfortunately it came into being however only 10 years later.

The next (IVth) Congress of INQUA happened at 1953 in Italy. Due to the unfavorable political and international situation, Polish scientists isolated in that time from West-European countries can't take part in meetings and excursions and were represented only by publications sent to the bureau of conference. At least during the Vth Congress in Spain at 1957 the Polish delegation (8 persons with Prof. R. Galon as the leader) becomes the possibility to participate and was very active, presenting 18 reports and 41 summaries. It also posed the proposal to organize the next meeting in Poland, which was accepted during the General Session. In consequence the VIth Congress of INQUA took place at 2–7 IX 1961 in Warsaw with excursions before them (28 VIII – 1 IX) and after them (8–21 IX). It was excellently prepared by the Organizing Committee with Prof. W. Szafer as the manager. More than 500 scientists from 31 countries (including 272 foreigners) participated in this meeting, which debated in 7 sessions and 6 committees. About 300 reports were presented and published in four volumes. The term Holocene was used the first time and has been accepted. The congress of INQUA in Poland scored a full success and crowned the Polish initiative in creation and development of this international Union.

References

Alexandrowicz S.W. (2004), *Starunia and the Quaternary Research in the Tradition and Initiatives of the Polish Academy of Arts and Sciences*. Studies and Materials for the History of the Polish Academy of Arts and Sciences. III, pp. 261 (in Polish, English summary).

Maślankiewicz K. (1971), Fifty years of activity of the Geological Society of Poland. Annales Soc. Geol. Pol., 41, 1: 5–30 (in Polish, English summary).

Neustadt M.I. (1969), *Historique des Congrès*. Union Internationale pour l'étude du Quaternnaire (INQUA), pp. 97, Moscou.