

# МЕЖДУНАРОДНЫЙ КОМИТЕТ ПО ИСТОРИИ ГЕОЛОГИЧЕСКИХ НАУК International Committee on the History of Geological Sciences



## ИНФОРМАЦИОННОЕ ПИСЬМО № 6 NEWSLETTER № 6

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ный консерватор (1951), профессор (1955). Читает лекции по палеонтологии в Мюнстерском (с 1963) и Штутгарском (с 1968) университетах. Занимается изучением юрских аммонитов, стратиграфией юрских отложений и историей геологии и палеонтологии. Автор свыше 50 работ. "Geologie und Paläontologie in Texten und ihre Geschichte". Freiburg-München, Alber, 1960. 565 S.

Чариз А.Флеминг (выдвинут Национальным комитетом геологов Новой Зеландии). Д-р наук, член Королевской Академии
наук Великобритании. Был президентом Королевского общества
Новой Зеландии и президентом Новозеландской и Австралийской
ассоциации по распространению знаний. Основные исследования
по палеонтологии и по изучению раннего периода истории геологических наук (напр.путешествия Кука и его открытия). Перевел важный трактат Фердинанда фон Хохшеттера по геологии
Новой Зеландии. Труды: Ј.А. Thomson's proposals for reform
of the New Zealand Institute in 1917 - a chapter in the
history of the Royal Society of New Zealand. - Proc.Roy.
Soc.N.Z.Cen., 1969, yol.2, No 9, p.129-133. 

□

#### REPORT

on the activities of the International Committee on the History of Geological Sciences (INHIGEO) in 1971.

1. In August 1971 the XIII-th International Congress on the History of Science took place in Moscow. This has been the most important event of the year in the history of science. The Congress included a special subsection for the history of geological sciences that had 4 meetings (from 21 to 23 Aug.); its work was proceeding under the guidance of INHIGEO corresponding members Prof. D.I.Gordeev and Dr. I.V. Batjushkova.

From the total number of 80 papers registered, 20 were actually read by geologists from the USA, Poland, GDR and the USSR. The papers were devoted to most varied topics in the history of geological sciences: neptunistic concepts at the end of the 18th — the beginning of the 19th centuries, progress of geological sciences in 18th century Germany, A.G. Werner and the geology of his epoch, geological research in Poland, in the 18th and 19th centuries, practical use of old manuscripts, stratigraphic studies of the Taconian Mts (USA), the evolution of concepts on the geological structure of the Caucasus, some problems in oil geology, evolution of the concepts "facies" and "crystal", history of concepts on the inner structure of the Earth, development of our knowledge about platforms, history of ideas on the geological role of the biosphere, etc.

Some papers were of a methodological character: concepts of space and time in chemical geology, structural-system analysis and periodization in the history of geology.

Just as at other analogous sessions, greatest interest was shown in papers of a more general nature that discussed broader problems and methodological questions. As a rule, minor, narrow and regional topics did not attract the attention of the audience.

The meetings of the geological subsection of the Congress were attended by 70 scientists from 6 countries.

- 2. On August 19th a business meeting of INHIGEO took place having been attended by 4 Committee members, 7 corresponding members and 15 invited historians of science from various countries. Inasmuch as there has been no quorum, no decisions have been taken, but questions of mutual interest have been discussed. They included four main points: a) The creation of national groups of historians in geological sciences with a status of local INHIGEO subcommittees. Representatives from Canada, India, Poland, GDR, URSS and USA informed the audience about the preparatory work done in this direction in their countries. It has been established that such a group has been formed in the USSR only, while in other countries the efforts to unite historians of geology did not yet materialize.
- b) Preparation of a symposium "History of Concepts of Precambrian Geology" (24-th Session of the IGC, Montreal, August 1972). The audience has been informed about the abstracts received and the progress in finding a possibility to publish the papers of the Symposium.
- c) On a report on the activities of INHIGEO during the four-year period (1968-1972).
- d) On the organization of a joint meeting of the Commission on the History of Teaching with the International Mineralogical Association and INHIGEO during the 24-th Session of the IGC. Information has been submitted on the papers planned to be read and on the preparations for this meeting.
- 3. In preparing for the 24-th Session of the IGC, talks and an exchange of opinions took place between INHI-GEO President Prof. V.V. Tikhomirov, member of IUGS Executive Committee Prof. W.P. van Leckwijck and INHIGEO Vice President Prof.R. Hooykaas (this meeting took place in Kre-

feld, GFR on August 25,1971), as well as between the President and Secretary General of INHIGEO (in December, 1971 in Warsaw).

4. In 1971 INHIGEO members published a large number of articles and several books on different subjects in the history of geology. INHIGEO issued its Newsletter No 5 that included INHIGEO report for 1970, a list of corresponding members elected in 1970 and some other informative material.

Newsletter No 5 (22 pages) had a circulation of 650 copies; it has been sent to all major geological organizations and to individual historians of science in the majority of countries all over the world.

Editing was completed of the material of the Soviet-Polish symposium of 1969 and of the Freiberg symposium (History of concepts on mineral deposits) that took place in 1970. The book of papers for the 1969 symposium is scheduled to come out in 1972, whereas papers of the 1970 symposium were published in two issues of the Geological Magazine of the GDR for 1971.

5.In 1971 the Executive Council of the IUGS has assigned Am. \$ 1550.00 for the needs of INHIGEO. This sum has been spent for:

- b) for the preparation of INHIGEO symposium during the 24th Session of the IGC . . . . . Am.£1200.00
- c) for office and postage expenses . . . Am.\$ 50.00 For the preparation and publication of Newsletter No 5 an additional sum of 150 rubles has been spent from the appropriations of the USSR Academy of Sciences.

General meeting of INHIGEO
August 22,1972 from 14.00 to 17.00 (Montreal, Canada)

#### Agenda

- 1. INHIGEO activities during the period from August 1968 to August 1972 (discussion of the report).
- 2. Information on the organization of INHIGEO national subcommittees in various countries (communications by Committee members and corresponding members on the state of this problem in their respective countries).

General meeting of INHIGEO
August 29, 1972 from 19.00 to 22.00 (Montreal, Canada)

#### Agenda

- 1. Plan of INHIGEO activities for the forthcoming four years.
  - 2. Elections of new corresponding members of INHIGEO.
  - 3. On the archives of the IGC and the IUGS.

#### Sessions of Symposium No 106

"History of Concepts of Precambrian Geology"
August 23, 24 and 28, 1972 from 14 to 17.00 (Montreal, Canada, Hotel Benaventure, La Salle Room.)

Session of Symposium No 114 "History of Mineralogy"

August 25, 1972 f m 14.00 to 17.00 (Montreal, Canada)

on the activities of the International Committee on the History of Geological Sciences during the interval between the 23rd and 24th Sessions of the IGC (August 1968 - August 1972)

1. INHIGEO panel and the work of its Bureau

The present panel of the International Committee on the History of Geological Sciences (INHIGEO) was selected by the Council of the International Union of Geological Sciences (IUGS) at the 23rd Session of the International Geological Congress in August 1968: Bureau of the Committee - V.V.Tikhomirov (USSR) - President; R.Hooykaas (Netherlands) - Vice-President for Europe; B.C.Roy (India) - Vice President for Asia and Africa; G.W.White (USA) - Vice President for America; K.Maślankiewicz (Poland) - Secretary General; members of the Committee: J.M.de Azcona (Spain), V.A.Eyles (England), I.I.Gorsky (USSR) - convener, T.Kobayashi (Japan), J.Kořan (CSSR), O.H.Leonardos (Brazil), G.Regnell (Sweden), T.G.Vallance (Australia).

INHIGEO being a Committee of the IUGS is also affiliated with the International Union on the History and Philosophy of Science (IUHPS).

In addition to the enumerated 13 members representing 12 countries, also 39 corresponding members from 20 countries take part in the work of INHIGEO. The Committee is in constant contact with more than 200 historians of geology in 36 countries of all continents.

The current work of the Committee is carried on by its Bureau consisting of the above listed 5 scientists with an active help of the President's personal assistant T.A.Sofiano. During the four-year period there have been four general meetings of INHIGEO (one of them unofficial owing to an absence of a quorum), at which current problems and plans of future work have been discussed; twice (in 1968 and in 1970) there have been elections of new corres-

ponding members of INHIGEO.

Every year the Bureau of the Committee publishes INHIGEO newsletters in Russian and English. During the period under review newsletters NoNo 3,4,5,6 came out with a circulation of 650 copies and a volume from 24 to 40 pages each. They have been sent to major geological organizations of the world and to individual leading geologists and historians of science. INHIGEO newsletters are called upon to popularize the work of the Committee and to involve new geologists into research on the history of their science.

2. Scientific and organizational work of INHIGEO.

The task of INHIGEO is to contribute in every possible way to the development of various forms of research on the history of geological sciences in different countries all over the world. A most essential line of INHIGEO work in this direction is the organization of symposia. Altogether INHIGEO has prepared and held 5 symposia and took part in one Congress.

a) International symposium "History of Concepts on Mineral Deposits" (Freiberg, GDR, 14-21 September 1970).

Main organizer - Freiberg Mining Academy (E.Wächtler, M. Guntau). It was attended by 120 persons from 22 countries; the 68 papers accepted deal with a wide range of topics: general problems in the history of geological sciences, history of geological and mineralogical research in studying mineral deposits; history of studies and development of concepts on the origin of ores, caustobioliths and non-ore minerals, early stages in the accumulation of geological knowledge, personalia, the role of minerals in the development of society, etc. Of greatest interest were papers, in which the historical analysis has been brought up to our days. According to the general opinion, such studies provide a basis for an evaluation of modern scien-

tific ideas and research methods. This explains why these papers attracted the attention of wide circles of geologists.

Of substantial interest were papers of a methodological character. In preparing for this symposium abstracts of all papers in three languages and guidebooks of scientific excursions in Saxony (the Erzgebirge) and Thüringia have been published. Full texts of papers have come out in two issues of the magazine "Geologie" (GDR) No 4/5 and 6/7 for 1971.

- b) International symposium "History of Concepts of Precambrian Geology" (Montreal, Canada, August 23,24 and 28, 1972, Symposium No 106). Main organizer J.B. Waterhouse. Twenty papers on various subjects have been accepted: history of concepts on the origin and early stages in the development of life on the Earth, development of concepts on the paleogeography of the Precambrian, the evolution of methods in absolute geochronology, history of studying the oldest metamorphic rocks in various areas, etc. The abstracts of papers are published; the full texts are still in print.
- c) International symposium "History of Mineralogy" (Montreal, Canada, August 25, 1972, Symposium No 114); organized by the International Mineralogical Association with the cooperation of INHIGEO (C.J.Schneer). Eight papers have been accepted dealing with various questions in the development of theoretical concepts and research methods in mineralogy and crystallography.
- d) First bilateral Soviet-Polish symposium "History of Polish-Russian Scientific Relations in Geology and Geography" (Warsaw, Poland, 28-30 September 1969). Organizer Polish Academy of Sciences (A. Halicka, B. Olszewicz, J. Babic) and the USSR Academy of Sciences (V. V. Tikhomirov, N. A. Voskresenskaia). Attended by 76 persons. Thirty four papers were read on the history of investigations by Russian scientists on the territory of Poland and by Polish geologists in Russia, on joint scientific research and applied work of geologists from the two countries, on the mutual influence of

scientific ideas developed by Russian (Soviet) and Polish geologists. After the symposium excursions took place to scientific institutions of Warsaw and Cracow, to old salt mines in Veliczka and to other points of interest. For the opening of the symposium abstracts of papers have been published in Polish and Russian and in 1972 a book of papers and discussions during the symposium came out in Polish and Russian with brief summaries in English.

e) Second bilateral Soviet-Polish symposium "History of Polish-Russian Scientific Relations in Geology and Geography" (Leningrad, USSR, June 12-19, 1972). Main organizer - The Geographical Society of the USSR (I.L.Kleopov, V.V. Tikhomirov, N.A.Voskresenskaia) and the Polish Academy of Sciences (A.Halicka, E.Ozonkova, J.Babic). Attended by 110 persons. The sixty papers accepted covered subjects similar to the preceding symposium. For the opening of the symposium a book of abstracts came out in Russian and Polish. It is planned to publish the full texts of the papers in 1973-74. The work of the symposium included excursions to museums in Leningrad and to historical monuments in Leningrad region associated with the evolution of culture and science in the USSR.

The experience of Polish-Soviet symposia indicated the advisability of organizing bilateral symposia devoted to a more narrow range of problems along with the practice of wide international symposia, which deal with an extensive number of topics.

f) INHIGEO took part in the preparation and work of the subsection on the history of geological sciences (on August 21 and 23, 1971) of the XIII-th International Congress on the History of Science (Moscow, USSR).Organizers:

I.V.Batjushkova and D.I.Gordeev. From the 80 papers registered 20 were actually read. They were devoted to various subjects: history of geological sciences in Germany, Poland and the USA, evolution of the concepts "crystal" and "facies",

neptunism at the beginning of the 19th century, certain problems in the history of oil geology, history of concepts on the inner structure of the Earth, on the geological role of the biosphere, on the periodization of the evolution of geological science, etc.

#### 3. Publications

INHIGEO attaches a great importance to the publication of papers on the history of geological sciences. Proceedings of three INHIGEO symposia have already come out; others are still in print.

Especially numerous were papers published individually by the members and corresponding members of INHIGEO summarizing the results of their research on the history of geology.During the period under review they have published over 200 articles, books of collected articles, monographs, annotated translations of interesting papers of the past (the list of books is given at the end of the newsletter).

The entire complex of research and publications on them can be divided into 10 main themes:

- a) Papers devoted to the development of separate branches of geology: C.C.Albritton, D.A.Bassett, I.V.Batjushkova, V.A.Eyles, D.I.Gordeev, M.Guntau, O.I.Islamov, E.A.Radkevich, A.I.Ravikovich, I.I.Shafranovsky, V.V.Tikhomirov.
- b) Reviews of the history of geological sciences in separate countries: J.C.Greene, O.I.Islamov, J.Kořan, R.Mar-tens, B.C.Roy, V.V.Tikhomirov, T.G.Vallance, G.W.White.
- c) History of a geological study of various territories: J.M.de Azcona, D.A.Bassett, I.V.Batjushkova, A.V.Carozzi, T.G.Castellanos, S.Czarniecki, T.D.Ford, D.I.Gordeev,
  J.C.Greene, M.Guntau, H.D.Hedberg, T.Kobayashi, J.Kořan,
  A.Laszkiewicz, K.Maślankiewicz, G.Regnell, B.C.Roy, N.Spjeldnaes, T.G.Vallance, G.W.White, K.Zapletal.
- d) Evolution of certain geological concepts and terms: M. Guntau, V.V. Tikhomirov.

e) General theoretical and methodological problems of geology: C.C.Albritton, I.V.Batjushkova, A.V.Carozzi, H.D.Hedberg, R.Hooykaas, D.I.Gordeev, M.Guntau, O.I.Islamov, E.G.Malkhasian, A.I.Ravikovich, P. Routhier, M.S.Rudwick, C.J.Schneer, V.V.Tikhomirov, G.W.White.

f) Scientific-biographical sketches and necrologues:
A.V.Carozzi, S.Czarniecki, J.M.Eyles, V.A. Eylea, A.Gawel,
J.C.Greene, W.O.Kupsch, A.La Rocque, E.G.Malkhasian, K.Maślankiewicz, Ph.Pinchemel, E.A.Radkevich, M.S.Rudwick, I.I.
Shafranovsky, N.Spjeldnaes, A.Tasnadi-Kubacska, V.V.Tikhomirov, T.G.Vallance.

g) Analysis of the investment of individual scientists into geology: D.A.Bassett, I.V.Batjushkova, A.Cailleux, A.V.Carozzi, T.G.Castellanos, S.Czarniecki, J.M.Eyles, V.A. Eyles, D.I.Gordeev, M. Guntau, H.D.Hedberg, T.Kobayashi, A.Laszkiewicz, K.Maślankiewicz, W.Nieuwenkamp, A.M.Ospovat, M.S.Rudwick, C.J.Schneer, I.I.Shafranovsky, A.Tasnadi-Kubacska, G.W.White.

h) Information on scientific conferences and symposia on the history of geology: I.V.Batjushkova, S.Czarniecki, A.Gawel, R.Hooykaas, T.Kobayashi, A.Laszkiewicz, W.P.van Leckwijck, K.Maślankiewicz, E.A.Radkevich, A.I.Ravikovich, B.C.Roy, I.I.Shafranovsky, N. Spjeldnaes, A.Tasnadi-Kubacska, V.V.Tikhomirov.

i) Jubilees of geological organizations and publications: J.N.de Azcona, D.A.Bassett, T.G.Castellanos, S. Czarniecki, J.C.Greene, M. Guntau, K.Maślankiewicz, E.A. Radkevich, A.Tasnadi-Kubacska, V.V.Tikhomirov, G.W.White.

j) Bibliography: T.G. Castellanos, T.D. Ford.

A number of INHIGEO members actively participated in the preparation of encyclopedia as editors and authors of articles on geology: C.C.Albritton, A.V.Carozzi, S.Czarniecki, A.Gawel, K.Maślankiewicz, Ph.Pinchemel, M.S.Rudwick, C.J.Schneer, N. Spjeldnaes, V.V.Tikhomirov. This work has been done for the Encyclopedia Britannica, Great Soviet Encyclopedia, Dictionary of Scientific Biography, Polish

Biographic Dictionary, Australian Biographic Dictionary, the Encyclopedia Universalis.

#### 4. Finances.

The activities of INHIGEO are mainly financed by the International Union of Geological Sciences and partly by the USSR Academy of Sciences, as well as, in some cases, by the International Union on the History and Philosophy of Science. During the four-year period under review INHIGEO has received:

from the IUGS - 5159.4 Am.\$

from the USSR Academy of Sciences - 520 rubles from the IUHPS - 250 Am.\$

Total: Am.\$ 5409.4 and Rbls.520.00

The money received symposia, spent for the preparation and work of scientific sympsia, as well as for the publication and mailing of INHIGEO newsletters.

5. Suggestions for the activities of INHIGEO for the new term between the 24th and 25th Sessions of the IGC

On the basis of the experience of INHIGEO work in the past years, a few fundamental trends of its activities could be outlined for the forthcoming four-year term:

- a) In countries, where there is a substantial number of persons engaged in research on the history of geological sciences, it would be advisable to create specialized groups with the national geological organizations with the rights of INHIGEO subcommittees. Such groups should actively contribute to an expansion of research on the history of geological sciences in their country and participate in the preparation of a collateral monograph on the general history of geological sciences.
- b) In order to concentrate and make more available publications on the history of geological sciences, INHIGEO

thinks it most desirable to form an International bibliographic centre, where information would be collected on all the publications on the history of geology appearing in various countries and where annotated references could be obtained.

c) INHIGEO considers conferences, symposia and colloquia as the most important form of its scientific and organizational work that provides a basis for a wide exchange of the most varied scientific information and a successful popularization of research on the history of geology.

The following symposia are suggested for the coming fouryear period:

I. In the name of the Mining-Geological Society of Spain J.M.de Azcona suggested to hold in 1974 in Madrid a symposium: "History of Teaching Geological Sciences".

II. W.P.van Leckwijck, V.V.Tikhomirov and R.Hooykaas made a suggestion of having a symposium in 1975 in Great Britain to commemorate the 100th anniversary of the death of Ch.Lyell: "Ch.Lyell and Modern Geology". It is planned to invite prominet scientists to take part in the symposium and have papers on the evolution of the most important ideas, on which Lyell has been working with an analysis of their present state. Such subjects are: actualism and uniformitarianism, stratigraphy of Tertiary deposits, metamorphism, the origin of man a.oth.

III. M. Guntau and A.I.Ravikovich recommend to have a practice of convening conferences on philosophical problems in geology and, primarily, on the methods in geological sciences with a retrospective analysis of their development.

IV. A.I.Ravikotich suggested to establish a close contact between INHIGEO and the Commission "Geoscience and Man" organizing for this purpose joint conferences and symposia.

d) To achieve a wider information on the work of INHIGEO to invite all members to publish regular communications in various periodicals on different events connected with the history of geology and to have in INHIGEO Newsletters lists of papers that appeared during the past year on the history of geology with brief annotations.

#### LIST

of INHIGEO corresponding members of the first panel 1968-1972, who expressed their consent to work for another term (1972-1976).

#### Argentine

1. T.G. Castellanos - Cordoba, Professor, National Academy of Sciences of Cordoba.

#### Belgium

2. W.P. van Leckwijck - Antwerp, Professor, Louvain University

#### Canada

- 3. W.O.Kupsch Saskatoon, Professor, Institute for Northern Studies
- 4. J.B. Waterhouse Toronto, Professor, University of Toronto

#### CSSR

5. K.Zapletal - Brno, Professor, Brno University

#### Denmark

6. N. Spjeldnaes - Aarhus, Professor, Aarhus University

#### France

- 7. A. Cailleux Paris, Professor, Facukté des Sciences
- 8. P.Routhier Paris, Professor, Bureau des recherches géologiques et minières

#### GDR

9. M.Guntau - Freiberg, Doctor, Bergakademie

#### GFR

10. W.v. Engelhardt - Tübingen, Professor, Mineralogical Institute, Tübingen University

#### Great Britain

- 11. D.A. Bassett Cardiff, Doctor, National Museum of Wales
- 12. J.M. Eyles Great Rissington
- 13. V.A. Eyles Great Rissington, Doctor
- 14. T.D.Ford Leicester, Doctor, University of Leicester
- 15. M.S. Rudwick Cambridge, Doctor, Whipple Science Museum

#### Hungary

16. A. Tasnadi-Kubacska - Budapest, Professor, Hungarian Geological Institute

#### Japan

17. T. Watanabe - Akita City, Professor, President Akita University

#### Poland

- 18. S.Czarniecki Cracow, Doctor, Laboratory of Geology, Polish Academy of Sciences
- 19. A. Gawel Cracow, Professor, Jagellonian University
- 20. K.Maślankiewicz Cracow, Professor, Wroclaw University U.S.A.
- 21. C.C.Albritton Dallas, Professor, Southern Methodist University
- 22. A.V.Carozzi Urbana, Professor University of Illinois
- 23. J.C.Greene Storrs, Professor, University of Connecticut
- 24. H.D. Hedberg Princeton, Professor, Princeton Univer-
- 25. A.La Rocque Columbus, Professor, University of Ohio
- 26. A.M.Ospovat Oklahoma, Professor, Oklahoma State University
- 27. C.J.Schneer Durham, Professor; University of New Hampshire

#### USSR

- 28. I.V. Batjushkova Moscow, Dr. Sci., Institute for the History of Sciences and Technique
- 29. D.I.Gordeev Moscow Professor, Moscow University
- 30. O.I.Islamov Tashkent, Professor, Sredneaziatsky Universitet
- 31. E.G. Malkhasian Yerevan, Doctor, Institute of Geological Sciences, Acad. Sci. Arm. SSR
- 32. E.A.Radkevich Vladivostok, corresp. member USSR Acad. Sci., Dalneyostochny Geol. Institute
- 33. A.I.Ravikovich Moscow, Dr. Sci., Geological Institute, USSR Academy of Sciences
- 34. I.I. Shafranovsky Leningrad, Professor, Leningrad Mining Institute

# NEW CANDIDATES FOR CORRESPONDING MEMBERS OF INHIGEO NOMINATED BY NATIONAL ORGANIZATIONS

David Francis Branagan (nominated by the National Committee for Geological Sciences of Australia) - b.in 1930, Ph.D., Assoc.Member Australasian Institute of Mining and Metallurgy, Senior Lecturer in geology, University of Sydney, member of the Editorial Board of "Scan" magazine. Works on engineering geology, geomorphology and history of geology. Author of more than 50 papers including the history of mining and coal geology of Australia: "Geology and coal mining in the Hunter Valley, 1791-1861". New-castle, N.S.W., 1972. 105 p.

Horacio Homero Camacho (nominated by the National Academy of Sciences of Cordoba) - Dr.Sci., Professor in Paleontology at the University of Buenos-Aires (since 1957), former President, now Vice-President of the Geological Association of Argentine, President of the South-American Section of the International Paleontological Union. Papers on paleontology, biostratigraphy and paleogeography of Upper Cretaceous and Tertiary deposits of Argentine and on the history of geology and paleontology: "Las Ciencias Naturales en la Universidad de Buenos Aires", 1971.

Gordon Leslie Davies (nominated by the Irish National Committee for Geology) - b.in 1932, Assoc.Professor of geography in the University of Dublin; past President of the Geographical Society of Ireland, member of the Geologists' Association and the British Society for the History of Science. Editor of "Irish Geography". Author of papers on geomorphology and history of geology: "The Earth in Decay: A history of British geomorphology (1578-1878), 1969.

Antonina Halicka (nominated by the Polish Academy of Sciences)- b.in 1908, a graduate of Vilnius University (1935); Dr.Sc.(1939), professor (1955), researcher at Vilnius University (1930-1940) and of the Geological Survey of Lithuania (1941-1946). Vice-Director (1947-1950) and Director (since 1950) of the Muzeum Ziemi of the Polish Academy of Sciences in Warsaw. Council member at the Institute of Natural Sciences and Technique of the Polish Academy of Sciences, Committee member on the History of Science and Technique of the PASci., active member of a number of committees and commissions of the Polish Acad. Sci. and the Ministry of Culture related to the work of archives and museums.

Helmut Hölder (nominated by the German Geological Society) - b. in 1915. Studied natural history in the universities of Tübingen and Königsberg (1935-1939). Dr.Sc.(1942), assistant professor (1949), chief museum keeper (1951), professor (1955) at Tübingen University. Lecturer in paleontology in Münster and Stuttgart universities (since 1963 and 1968 respectively). Studies on Jurassic ammonites, the stratigraphy of Jurassic deposits, the history of geology and paleontology. Author of more than 50 papers. "Geologie und Paläontologie in Texten und ihrer Geschichte". Freiburg-München, Alber, 1960. 565 S.

Ludovit Ivan (nominated by the National Committee of Geologists of Czechoskovakia) - b. in 1913, a graduate of the department of natural sciences Charles University in Prague. Dr.Sc., Lecturer at the School of Pedagogy, Director of the Geological Institute in Bratislava (1952-1958), Director of Geological Funds (since 1964). Author of more than

30 papers on the geology of Neogene deposits, of the Quaternary period, non-ore minerals. Published 14 articles and 3 books on the history of geological sciences: "Life and work of Dionyz Stur", 1954; "Life and work of G.K. Zechenter", 1955; "Following obliterated trails", 1955.

Jean Pierre Portmann (nominated by the University of Bern). b.in 1921 . Dr.Sc. (1954). For eight years studied glacial deposits in Greenland, Scandinavia, Spitsbergen, and Canada. Author of 30 papers on geological sciences including 7 devoted to the history of geology: "Aperçu historique". Dans: "Les méthodes d'étude pétrographique du dépôt glaciaire". - Geol. Rundschau, 1956, No 45/2; "Notice historique de géologie neuchâteloise". - Eclog. geol. helvet., 1966, 59, 1.

Alexandr Sergeevich Povarennykh (nominated by the Academy of Sciences of the Ukrainian SSR) - b.in 1915, a graduate of the geological department of the Central-Asiatic Industrial Institute (1940). Assistant professor (1950), professor (1959), corresponding member of the Academy of Sciences of the UkrSSR (1969). Head of a department at the Institute of Geochemistry and Physics of Minerals of the Acad. of Sci. of the Ukr. SSR. Author of over 150 papers on mineralogy, crystallography and crystallochemistry; more than 25 articles are devoted to the history of mineralogy and to methodological problems. Труды: "К развитию определения понятия минерала".-Геол.и минер., 1954, вып. I, с. 3-3I (то the evolution of the concept "mineral"); "Минералогическое общество в течение первых ста лет своего существования".-В кн. Очерки по истории геологических знаний.М., 1956, вып. 5, с. 3-47 (The Mineralogical Society during the first hundred years of its existence):"К вопросу о периодизации истории милера:логии".-В кн. Очерки по истории геологических знаний. М., 1962, BMH.IO, c. 65-89. (On the problem of periodization in the history of mineralogy).

Juan Carlos Manuel Turner (nominated by the National Academy of Sciences of Cordoba) - Dr.natur.sci. (1947), Ph.D. (1950), professor in geology at the Department of exact and natural sciences of the University of Buenos Aires; corresponding member of the National Academy of Sciences. Author of a number of papers on the geology of Argentine and on the history of geology: "Historia de la geologia del noroeste Argentino"; "Evolución de las ciencias geológicas de la Republica Argentina, 1923-1972".

Charles A. Fleming (nominated by the New Zealand National Committee for Geological Sciences). Dr.Sci., Fellow Royal Society. Former President of the Royal Society of New Zealand and President of the Australian and New Zealand Association for the Advancement of Science. Fundamental research in paleontology and on the study of early scientific work (like Cook's voyages and discoveries). Translator of an important early treatise on New Zealand geology by Ferdinand von Hochstetter. Papers: J.A.Thomson's proposals for reform of the New Zealand Institute in 1917 - a chapter in the history of the Royal Society of New Zealand. - Proc.Roy-Soc.N.Z. Cen., 1969, vol.2, No 9, p. 129-133.

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