

43 CODATA / NEWSLETTER

JANUARY 1988

CODATA Officers Meet in Moscow

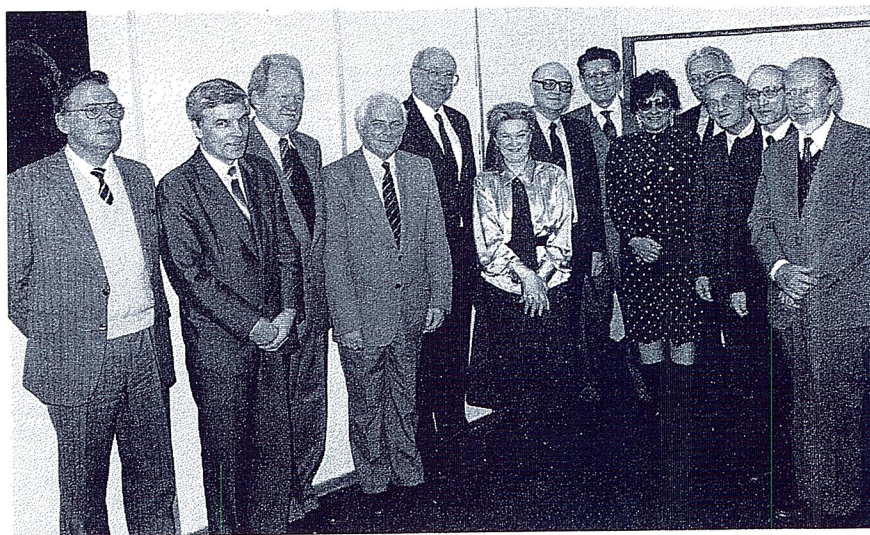
HIGHLIGHTS

Alloy Phase Diagrams	4
Edward L. Brady	3
Books	5
CODATA Calendar	6
CODATA Officers	1 (4)
East-Asian Data Sources	6
Geothermodynamics	5
IGU Global Database	2
Int'l. Connection of Computers	4
Materials Database Management	7 (8)

The Committee on Data for Science and Technology (CODATA) was established in 1966 by the International Council of Scientific Unions.

Working on an interdisciplinary basis, CODATA seeks to improve the quality, reliability, processing, management, and accessibility of data of importance to science and technology.

Temporarily abandoning their traditional Paris Secretariat site, the CODATA Officers met in Moscow as guests of the Soviet National Committee for CODATA (SNC) on October 19th and 20th. Unprecedented weather fogged in Moscow Airport for four days, but the reception was warm and the meeting productive. The guests enjoyed the opportunity for scientific visits to research centers and data services, and, incidentally, for a first hand view of the progress of glasnost, perestroika, as well as of of initiatory capitalism.



The Soviet hosts, CODATA's officers, and others (l to r): A.D. Kozlov (SNC), I.L. Khodakovskiy (TG Chm.), E.F. Westrum, Jr. (Editor), D.G. Watson (Treasurer), D.R. Lide, Jr. (President), V. Ryabova (SNC, Scientific Secretary), V.V. Sytchev (SNC, Chairman), J.-E. Dubois (Vice President), P. Glaeser (Exec. Secretary), N. Rambidi (SNC, Delegate), A. Bylicki (Vice President), L.V. Gurvich (SNC), and A.E. Bussard (Secretary General). --Photo courtesy COMECON.

The Officers reviewed the progress of the CODATA Task Groups and made plans to expedite recommended formats, negotiate contract arrangements and liaisons with other groups.

(See also "Officers," page 4)

IGU Global Database

Planning Project

As part of the ICSU International Geosphere-Biosphere Programme (IGBP), the International Geographical Union has recommended that the status and problems of global databases be examined and widely acceptable courses of action to resolve difficulties be identified. It is planned to hold two meetings. At the first meeting, representatives of all identified existing and planned global digital data bases will be invited to address the status of existing efforts, the need for global data bases and the decision-making context which has to be served, the questions to be solved by their use, the desirable data structures, the potential contribution of (next-decade) computer hardware and concepts of artificial intelligence to data structures, and the desirable degrees of topological coding, the contradictions in map series data used as a base, the ownership of data, the size of global digital data bases, their cost, management, access policy, degree of integration and reliability. Systematic review papers of potential problem areas will be commissioned for the first meeting. Working Groups will thereafter be established to study areas of identified concern in preparation for the second meeting in or before 1990.

In 1986, the Executive Committee of the International Geographical Union (IGU) identified three principal themes on which to focus its activities with respect to the ICSU-IGBP program. These themes are

- global database planning and design,
- studies of mankind as an agent of global change, and
- the use of geographical departments and institutes as data collection units for IGBP, particularly with respect to the regional impact of man on the land.

Given that the ultimate objective is coherent earth description that has broader use than that of a single agency or discipline, there is a rich field for cooperation. In each of the activities there are problems to be faced and lessons to be learned that have widespread application. These problems include:

- problems arising from integration for global information systems of data from different sources at different scales and levels of resolution;
- selection of global data structures--questions of edgematching, tessellation, data compaction, indexing levels, pointer levels, linkages to other data sets;
- degree of topological coding and eventual consistency of that coding;
- inconsistencies in map series used as a base;
- problems arising from large volumes of spatial data--initial large size and subsequent growth;
- high costs--including initial costs and distribution, update and maintenance costs;
- data ownership and copyright of unique data structures;
- disputed representation of international boundaries;
- data administration, repositories, access, communication, interchange standards, and responsibility for quality.

Considering this situation, the IGU has recommended to the International Council of Scientific Unions (ICSU) that as part of the International Geosphere-Biosphere program now being planned that these problems be examined and a widely acceptable course of action to resolve them be determined. ICSU-IGBP has requested that the IGU initiate action.

At the first (May 1988) meeting, representatives of all existing and planned global digital data bases will be invited to examine the following topics: the status of existing efforts, the need for global data bases and the decision-making context which has to be served, the ques-

tions to be solved by their use, the desirable data structures, the potential contribution of (next-decade) computer hardware and concepts of artificial intelligence to data structures, the desirable degree of topological coding, the contradiction in map series data used as a base, the ownership of data, the size of global digital data bases, their cost, management, access policy, degree of integration and reliability.

The outcome of the first meeting will be the clarification of the problems that need to be resolved and are of common interest to the participants. In preparation for the second meeting, study groups would be formed and financed to investigate and report on the nature of the problems and recommend courses of action to resolve them. The second meeting, to be held in 1990, at a different location, would present the results of these investigations to a wide audience of academic, government and private sector participants.

Dr. Claude Bardinat will represent CODATA at the meeting in May 1988. Anyone in the CODATA family who has input to make can contact him.

All communication with respect to this project should be addressed to: Dr. R. F. Tomlinson, Chairman, IGU Global Database Planning Project, 17 Kippewa Drive, Ottawa, Ontario, Canada K1S 3G3 (Telephone: 613-234-1001).

Symposium on Numerical Data at Toronto Chemical Conference

Three half-day sessions at the Third Chemical Congress of North America, under the auspices of the Division of Chemical Information of the American Chemical Society on June 7 and 8, 1988 have been organized by Dr. David R. Lide, Jr. on CODATA related data matters.

The first session features goals and structures of CODATA and provision of reliable data for science and technology particularly in the areas of thermodynamics, biology and biotechnology, materials properties, networks, environmental studies, and data referral. The second session continues the presentation of scientific numerical databases including the Canadian Service, thermophysical property databases from AICHE/DIPPR projects, analytical chemistry, molecular biology, and search systems for chemical structures. The third session deals with shorter presentations concerning a number of computerized dissemination systems and tools--primarily from North America but often with international availability--for chemically-related, numerical data.

Nucleic Acid and Protein Sequence Data

Although rapid developments in the biosciences has accelerated the rate at which protein and nucleic acids are being determined, the demand for access to such information is far in excess of the relatively slow pace of journal publication. Many databases duplicate each other's holdings and indeed many useful data collections are known only within a small community of users. This concern led to the formation of a CODATA Task Group on the Coordination of Protein Sequence Data Banks. In turn the Task Group disseminated questionnaires to about 700 sites as early as 1984 and a 37% response was achieved. The responses were analyzed and the new Directory Chapter of the CODATA Bulletin #65 has been released in October 1987.

The Directory provides general information on the interested community, collectors and users of both types of sequence data, the hardware, software, and networks involved, the participants, and sequential questionnaires utilized. The main contributors were USA 49%, Europe 36% and Japan 10%. This most recent of all the CODATA Directory Chapters should find a warm reception in the biological sphere.

Edward Lewis Brady

1919 - 1987

Edward Lewis Brady was involved in CODATA for most of its history on either or both the national and international levels. At the time of his death he was U.S. Delegate to CODATA, the Committee on Data for Science and Technology of the International Council of Scientific Unions.

He was born in Charleston, South Carolina, in 1919. His undergraduate education took place at the University of California at Los Angeles, where he received a BA and MA in chemistry. From 1942, when he joined one of the major laboratories of the atomic bomb project at the University of Chicago, until he came to NBS in 1963, Brady was involved with nuclear energy research and development. His war-time service included work at Clinton Laboratories in Oak Ridge, Tennessee, the forerunner of the present Oak Ridge National Laboratory, where he was a member of the group that designed and operated the first large-scale hot laboratory facilities.

During his graduate studies and research at the Massachusetts Institute of Technology, he published with Martin Deutsch, in 1947, the first measurements of the angular correlations of successive nuclear gamma radiations. This and a series of subsequent publications established an important technique that is widely used in nuclear and elementary particle physics.

After receiving his PhD, he spent 10 years in various capacities with the General Electric Company. While at GE's Knolls Atomic Power Laboratory, he led a research group working on coolant chemistry and a group developing equipment for in-pile tests of reactor materials.

From 1956 to 1958 he served as U. S. Atomic Energy Commission Representative to the United Kingdom and later was the senior scientific advisor of the U.S. Mission to the International Atomic Energy Agency in Vienna. He left Vienna in 1961 to go to General Dynamics Corporation in San Diego where he was responsible for various projects connected with chemical and materials problems of nuclear power plants.

In 1963 the National Bureau of Standards, acting on a recommendation of the Federal Council for Science and Technology, established the National Standard Reference Data System (NSRDS). The system was set up to coordinate the data compilation efforts of government and private-sector groups and to provide critically evaluated data on the physical and chemical properties of substances required by U.S. science and industry. Ed Brady was recruited by NBS to head this program. He set up the Office of Standard Reference Data, organized support for data centers at NBS, universities, and National Laboratories, and started a publication program for reference data. His interest in this program continued for the rest of his career.

In 1968 his responsibilities at NBS were broadened to include all of the Bureau's programs which gather, analyze, publish, and distribute scientific and techni-

cal information. Throughout his career at NBS, he felt it was vital to get the technical information of the Bureau to those who needed it. In a statement before Congress in 1971, he said, "Information is the key to wise management of our future. Perhaps the most important event of the next decade will be the recognition of the true value of information--the right information, reliable, and relevant to our needs, available in a useful form to all those who need it."



Ed Brady carried this philosophy with him to his next position at NBS, when he was named Associate Director for International Affairs in 1978. With his breadth of scientific knowledge, graciousness, and congenial manner, he established official links and made many friends in government research centers around the world. He was instrumental in drafting agreements to guide the United States' exchange of scientific and technical personnel with the Union of Soviet Socialist Republics and the People's Republic of China. He negotiated agreements for technology cooperation with numerous countries, developed policy for implementing U.S. treaties in many areas of science and technology, and established mechanisms for exchanging technical information among countries. For his achievements, he was honored in 1980 with the Department of Commerce Silver Medal Award for meritorious service.

In addition to being a respected scientist, Edward Brady was a born diplomat able to bring order out of chaotic situations with quiet logic and unbounded optimism. His friends in both the science and diplomatic communities were legion and his enemies nonexistent.

A Symposium in his memory entitled appropriately "International Cooperation in Science and Technology" was provided by the National Bureau of Standards in his memory in the Red Auditorium of the Bureau.

Alloy Phase Diagram Intl. Commission

Formed in October 1986, as an international body to coordinate, integrate, and assist the endeavors of many organizations actively striving to provide critically assessed alloy phase diagrams, the APDIC held its second meeting in November 1987 at The Institute of Metals, London, U.K.

At that time the Alloy Phase Diagram International Commission signed a memorandum of understanding and an accompanying Aims and Organization document. The documents will be--or have been--ratified by all 10 of the founding organizations (including CODATA).

Mechanisms for funding APDIC activities, priorities of alloy systems to be evaluated, expansion of reviewers panel, ways of involving more countries in alloy phase diagram evaluation, and formats for publication were some of the subjects discussed, and actions defined.

Dr. Tim Chart is Chairman and Sir Geoffrey Ford, Secretary. APDIC will meet in November 1988.

CODATA Officers Meeting

(Continued from page 1)

They considered how CODATA could have an effective role in the ICSU Global Change Program and insured CODATA participation in an IGU meeting on world data mapping.

An acceptable solution of the admission of Taiwan is being sought. The officers agreed to contribute \$500 to the W. W. Hutchison Memorial Fund for Young Geoscientists, urged restraint in the registration fee for the CODATA Conference, and announced a probable July or August date for the 12th International CODATA Conference in Columbus, Ohio.

Nuclear Data

A four page newsletter produced by the Nuclear Data Section (NDS) of the International Atomic Energy Agency provides a list of nuclear data, documents, or codes typically available on a complimentary basis either in printed form or computer readable media (tapes and 2HC 5.25 inch floppy disks).

The list includes:

- New data libraries received,
- Nuclear data processing, computer codes,
- Handbooks,
- Reviews,
- Data indexes and bibliographies, and
- Selected, relevant, new publications.

More information can be obtained from:

IAEA Nuclear Data Section (NDS)
P. O. Box 100
A-1400 Vienna, AUSTRIA

Mathematical Geology

The international section on MATHEMATICAL METHODS IN GEOLOGY OF THE MINING PRIBRAM SYMPOSIUM - CZECHOSLOVAKIA will be held again from 16 to 20 October 1989. The dissemination of the circular with complete information and with the preliminary registration form will occur in May 1988.

Further information may be obtained from V. Nemec, Geindustria, Geologicka 2, 152 00 Praha 5-Barrandov, Czechoslovakia; Phone (42-2) 590228 or (42-2) 7811801

Tertiary Information

A chapter entitled "Future of Information Flow: Tertiary Information Providers," by David R. Lide, Jr., CODATA's President, is incorporated in the Seminar Proceeding entitled "Future of Information Flow." See Book section.

Protein and Nucleic Acid Sequences Directory

The CODATA Task Group on Coordination of Protein Sequence Data Banks recommends that "A standardized format for sequence data exchange" by D.G. George, H.W. Mewes, & H. Kihara (Protein Seq. Data Anal. (1987) 1:27-39) should be used for the exchange of amino acid sequences between databases.

Nutritional Sciences (IUNS) Directory

The International Union of Nutritional Sciences (IUNS) have published a 94-page Directory 1986-1990 booklet which contains general information about IUNS, statutes and rules of procedure and details of adhering bodies, affiliated bodies, commissions, committees, working groups and IUNS publications.

Further information may be had from Riekje Janssen, Executive Secretary, c/o Dept. of Human Nutrition, Agricultural University, De Dreijen 12, 6703 BC Wageningen, The Netherlands. Tel: +31 8370-82589. Telex: 45015.

Titles of CODATA Conference Papers

The April 1987 issue of the Newsletter will provide primarily the list of sessions, titles of papers, and their authors for the September 1987 11th International Conference of CODATA at Karlsruhe, FRG.

Prospective attendees desiring more information on the Conference should write to DECHEMA, Attn.: CODATA Conference, P. O. Box 97 01 46, D-6000 Frankfurt/M. 97, Federal Republic of Germany. Telex: 412490 dcha d. Cable: dechema frankfurtmain. Phone: (069) 7564 241/242/243.

New IUPAC Delegate Designated

CODATA welcomes Dr. K.N. Marsh of the Thermodynamics Research Center, Texas A&M University Systems, at College Station, Texas, USA as IUPAC delegate from mid-1987 to mid-1989, replacing Professor E.F. Westrum, Jr. who has served in that liaison role since 1980. Because CODATA's President, Dr. David R. Lide, Jr., is also very active in IUPAC, several communication channels bridge this important Union connection.

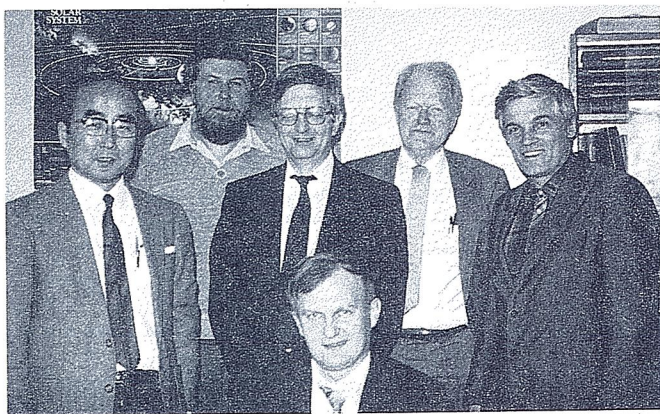


CODATA officialdom relax at reception provided by Soviet National Committee for CODATA (l to r): Dr. A.D. Kozlov (U.S.S.R.), Prof. A.E. Bussard (Secretary General), Prof. J.E. Dubois (Vice President), Dr. D.R. Lide, Jr. (President), Prof. E.F. Westrum, Jr. (U.S.A.), Dr. D.G. Watson (Treasurer), Prof. A. Bylicki (Vice President). --Photo courtesy P. Glaeser.

Geothermodynamic Tables

A small but dedicated CODATA Task Group under the Chairmanship of Professor Igor L. Khodakovsky is endeavoring to do for geological thermodynamics what another CODATA Task Group is doing for chemical thermodynamics. Although profiting by the pioneering endeavors of the chemical group and meeting occasionally in joint session with them, the geo-practioners are especially concerned with the high pressure regime, often with higher temperatures, the molten states of minerals, rocks, and problems which are more acute in the natural processes area. To expedite the production of their Guidelines and the enhancement of local--as well as globular--consistency involves meeting of at least partial membership of the Task Group several times each year.

A meeting of the Task Group in April 1987 at the Vernadsky Institute in Moscow, USSR brought together as many as nine Task Group scientists.



A meeting of the Task Group on Geothermodynamic Data at the Vernadsky Institute, Moscow (l to r): N. Kishima (Misasa, Japan), O.L. Kuzkov (Moscow), B.R. Staples (Albany, Oregon, USA), Yu.V. Semenov (seated, Moscow), E.F. Westrum, Jr. (Ann Arbor, Michigan, USA), I.L. Khodakovsky (Chairman, Moscow). (Not shown: V. Medvedev (Moscow), C. Monnin (Toulouse, France), L. Gurvich (Liaison, Moscow).

An important aspect of these Guidelines--to be submitted to the relevant community at the Strasbourg Symposium on Natural Processes in July--is the application of the local consistency approach to encouraging wide participation from the geothermodynamics community. Demonstration of the reliability of this approach is made together with examples and protocols for the submission and inclusion of such values. This method is regarded as important in the preliminary assessing and evaluation of the geothermal data and is to be ultimately replaced by global consistency procedures. In order to facilitate this approach these guidelines also provide a terse review of current techniques useful in the critical evaluation and assessment. Despite high interest by the geoscience community, they have not had the long-standing involvement of their chemical and chemical engineering counterparts. It is anticipated that the penultimate version of these Guidelines can be shown to the General Assembly at Karlsruhe in September. The Guidelines will then be submitted to the user community for their evaluation and approval before their enhancement and elaboration is undertaken.



A joint meeting of the Chemical and Geothermodynamic Tables Task Groups in the Institute for Silicate Chemistry at Leningrad, U.S.S.R., April 1987. Seated (l to r): N. Kishima, C. Monnin, M. Chase, H.J. White, Jr., D. Wagman, V.S. Yungman. Standing (l to r): J. Haas, (V. Ribova), D. Garvin, V.V. Medvedev, I.L. Khodakovsky, O.L. Kuzkov, L. Gurvich, B.R. Staples. Dr. Chase proudly displays the prototype "Calcium Tables" of the CODATA Thermodynamic Tables (Not shown: E.F. Westrum, Jr.).

CODATA Books

Directory of Protein and Nucleic Acid Sequence Data Sources (A Report of the CODATA Task Group on the Coordination of Protein Sequence Data Banks)(a) CODATA Bulletin No. 65.

Books and Computer Services

The 1987 ICSU Year Book.(b)

Materials Data for Cyclic Loading. By C. Boller and T. Seeger. (Materials Science Monographs, 42A-E)(c)

The geothermodynamicists have held two subsequent partial Task Group meetings in Moscow in October and in Washington, D.C. in December.

Proceedings of the Fifth British National Conference on Databases. Editor: E. A. Oxborrow.(d)

The JANAF Thermochemical Tables (1985). (e)

The Use of Serials in Document Delivery Systems. By A.K. Kent, K. Merry and D. Russon.(f)

Future of Information Flow. Editors: A.K. Kent and J. Gravesteijn.(g)

Footnotes

(a)iv + 68 pp. Number 65, October 1987. Individual copies available for U.S. \$15 from Pergamon Press, Ltd., Headington Hill Hall, Oxford, OX3 0BW, U.K. Fairview Park, Elmsford, New York 10523, U.S.A.

(b)ISSN 0074-4387 ISBN 0-930357-11-6. The ICSU Press, single copies U.S.\$25, postpaid. Remittance must accompany the order and be made payable to the ICSU Press in U.S.\$, Ffr, DM, Sfr, etc. Send to the ICSU Press, P.O.Box 016129, Miami, Florida 33101-9990, U.S.A. Telex: 519308. Telefax: 1-305-324-5665.

(c)The handbook comprises five volumes containing a collection of some 600 data sets with over 4000 experimental results in total. The information is presented as follows: Part A: Unalloyed Steels; Part B: Low-Alloy Steels; Part C: High-Alloy Steels; Part D:

Aluminum and Titanium Alloys; Part E: Cast and Welded Metals. Most data have been taken from the literature. Quite often the experimental values had to be measured from plots as they have not been reported numerically. The experimental results are reported in all their detail (stresses, strains, fatigue life) so that users may judge for themselves how representative the constants evaluated for the stress-strain and strain life curves are. This is the only single source of reference for such materials data and as such will undoubtedly prove to be an invaluable aid for designers and engineers.

(d)199 pp. Cambridge. \$44.50.

(e)Also available in computer readable form from NBS Standard Reference Database 13, it is available for \$1200 from the Office of Standard Reference Data, A323

Physics Building, National Bureau of Standards, Gaithersburg, Maryland 20899, U.S.A. (telephone, 301-975-2208).

(f)Contents: Executive summary, introduction, aim of study, participating organizations, qualitative data, data-source and sample size, comparisons of serial usage, and conclusions and recommendation. 1987, 72 pp, ISBN 92 9027 009 8. Price: 600 Ffr per copy (or the equivalent in other convertible currencies). ICSTI, 51, boulevard de Montmorency, 75016 Paris. Telephone: (33)(1)45256592 Telex: ICSU 630 553 F.

(g)1987, 58 pp. ISBN 92 9027 010 1. Price: 100 Ffr per copy (or the equivalent in other convertible currencies). ICSTI, 51, boulevard de Montmorency, 75016 Paris. Telephone: (33)(1)45256592 Telex: ICSU 630 553 F.

Data Sources in East Asian Countries

The First Meeting of CODATA Working Group on Data Sources in Far-Eastern Countries (WG) was held at Science Council of Japan, Roppongi, Tokyo, Japan, on 28-30 October, 1987. The participants included the Working Group Chairman Prof. J. Osugi, four other Japanese, two Chinese, honorary, ex-officio, and liaison members, as well as seven Japanese National Committee for CODATA members and two observers (from Thailand and Indonesia).

In line with CODATA's constitutional objectives in studying methodologies for compatible dissemination of databases and enhancing cooperation, this Working Group is endeavoring to overcome the twin barriers of oriental languages and geographical location in an endeavor to share the experience of the Far-Eastern countries in this area.

The Working Group members reviewed for each other the nature of the sources and developers of databases within their own countries including academic, research institutes, corporations, private and national networks. Hundreds of solicitation letters have been disseminated. Interestingly, Prof. Jiang reported that many Chinese databases are in English and there is a translation problem to make them readily accessible to young scientists (e.g., college students).

Practices in various disciplines (biology, chemistry, physics, geosciences) as well as those in industry were compared. In Thailand, financial support is a problem in the universities but computing centers work on databases. In Thailand, data bases in science and technology are scarce, but statistical economics and social sciences databases exist. Activities on Taiwan were not surveyed.

Practical matters concerning the preparation of the CODATA Directory Chapter were discussed and transmission to Ann Arbor of the hundreds of responses with information already available by midsummer is anticipated. Names of data sources and data banks are to be represented in English, in the native language characters, and in a phonetic version. (Compatibility of data exchange for the Directory is not a trivial problem.)

In concluding, all noted that it had been a productive and fruitful experience. Many of the participants were treated to a tour of Tsububa Science City and several national research institutions actively producing databases.

CODATA Calendar

1988

March

3- 5 32nd CODATA Executive Committee, Paris, France

7- 8 Chemical Thermodynamic Tables

May

23-24 Materials Database Management, Paris, France

----- Multisatellite Thematic Mapping, Beijing, P.R.C.

July

25-28 First International Symposium on Thermodynamics of Natural Processes, Strasbourg, France

28-29 CODATA Task Group on Geothermodynamic Data, Strasbourg, France

September

----- Multisatellite Thematic Mapping, Karlsruhe, F.R.G.

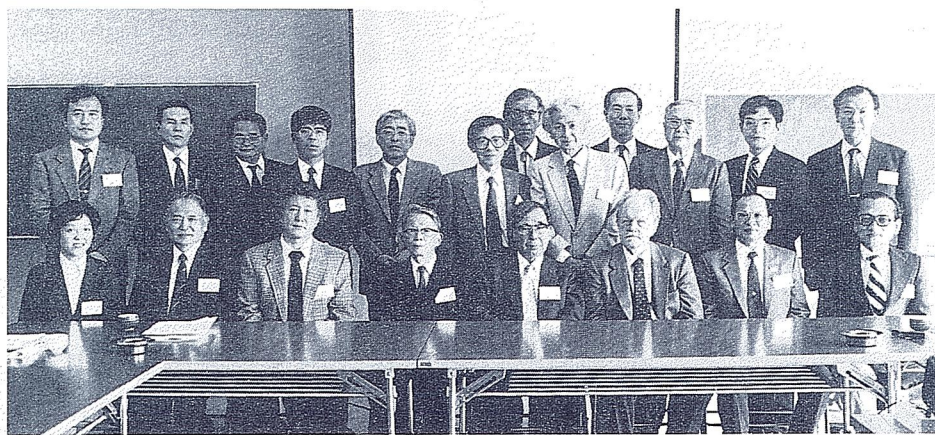
26-29 11th International CODATA Conference, Karlsruhe, F.R.G.

30- Oct. 1 CODATA General Assembly, Karlsruhe, F.R.G.

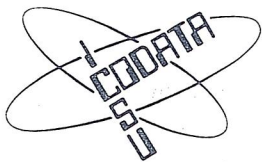
Attention was drawn to Prof. H. Chihara's (Osaka, Japan) relevant paper, "Factors Involved in Japan's Contribution to International Chemical Information Activities: Present Status and Prospect," J. Chem. Inf. and Sci., Vol. 27 (1987) pp. 59-62 and to an unpublished paper of Prof. Gustav Ostberg's (Lund, Sweden) revealing historical blocks to database use entitled, "What is a Materials Data System?"

A Newsletter article with information on the Working Group is contained in the CODATA Newsletter #41, page 2.

The Working Group foresees a continuing need for their activity as a Task Group at least through 1990 to pursue the initiated activities to other disciplines and to other East-Asian countries.



Participants in Working Group on Far-Eastern Data Sources first meeting. (l to r, seated): Profs. Y. Hu & C.S. Jiang (China); Prof. M.S. Jhon (Korea); Profs. M. Kotani (Honorary Member) & J. Osugi (Chairman) (Japan); Prof. E.F. Westrum, Jr. (Liaison Member, U.S.A.); Prof. R. Satrawaba (Thailand); Dr. W. Priyodiprojo (Indonesia). (l to r, standing): Profs. S. Iwata, M. Tasumi, A. Tsugita (Ex-Officio Member), S. Gonda, Mr. N. Hasegawa, Profs. M. Sugiura, Y. Yoneda, Y. Mashiko, K. Takayanagi, Dr. H. Sugawara, & Prof. K. Wadatsumi (Japan). --Photo courtesy Prof. Osugi.



Task Group on Materials Database Management

MATERIALS DATABASE NEWSLETTER

JANUARY 1988, NUMBER 2

The CODATA Task Group on Materials Database Management was established in June 1987 as a result of a recommendation made at the CODATA Workshop on Materials Data Systems for Engineering, held in Schluchsee, West Germany in September 1985. The broad objective of the Task Group is to promote improvements in the accessibility, quality and beneficial exploitation of materials information for all users of individual systems and national and international networks. The Group will interchange and disseminate information on topics of relevance to the building, management and use of machine-readable databases containing the performance properties of engineering materials. On carefully identified and selected problems, the Group will arrange cooperative action to promote its specified objectives. Areas for such action will include: promotion of communication and awareness; influence in the preparation of standards, guidelines and terminology; education in the technology of building and using materials databases; and promotion of knowledge and practices to improve the bridge between users and managers of materials databases.

Membership of the Task Group is as follows: Dr A.J. Barrett, ESDU, UK (Chairman); W.G. Jackson, Institute of Metals, UK; J.G. Kaufman, MPD Network, USA; Dr A.D. Kozlov, VNIIMS, USSR; Dipl.-Ing. H. Krockel,

JRC Petten, NETHERLANDS; Dr S. Nishijima, National Research Institute for Metals, JAPAN; Dr N. Swindells, Matsel Systems, Ltd., UK; D. Vinard, Saint-Gobain Recherche, FRANCE; Dipl.-Chem. J. Wierer, Deutsches Kunststoff Institut, FRG; Dr Yunwen Lu, Tsinghua University, PRC (Corresponding Member); Dr J. Rumble, Jr., National Bureau of Standards, USA (Corresponding Member); Dr R. Sandstrom, Royal Institute of Technology, SWEDEN (Corresponding Member); Dr H. Behrens, Fachinformationszentrum Energie, Physik, Mathematik GmbH, FRG (Ex-Officio Member); Dr. J. H. Westbrook, Sci-Tech Knowledge systems, USA (Ex-Officio member); Mrs P. Glaeser, CODATA, FRANCE (Exec. Secretary).

At the first meeting of the Group, held in Paris in June 1987, three projects were identified and discussed for further action: the publication of a Materials Database Newsletter (of which this is the second issue); the development of a set of Guidelines for Database Producers; and the establishment of a Register of Database Producers. The second meeting of the Task Group was held in Philadelphia in October 1987 in association with the ASTM symposium on materials databases (see below), and a number of additional areas for action were identified which will be reported on in future issues of the Newsletter.

NETWORKS

On November 30, 1987, the Japan Information Center of Science and Technology (JICST) became the third STN service centre, following CAS (Ohio) and FIZ (Karlsruhe). Existing databases in English within the JICST computer may now be accessed, including the "JICST-E File" which contains abstracts of articles covering the fields of science and technology in Japan. Recent materials information may also be accessed as JICST-E covers various engineering fields (mechanical, electrical, electronic, metallurgical, mining, nuclear, etc.).

DIRECTORIES

The European Commission's ECHO host system has announced the availability of a new database called DOMIS (Directory of Materials Information Systems). This file will contain information on all European information sources relevant to the materials field, including technical consultancy services, printed publications and databases. A printed version will also be made available. SOURCE: ECHO News, 1987, No. 2. FURTHER INFORMATION: ECHO, 177 route d'Esch, Luxembourg.

STANDARDS

The Board of Directors of the National Federation of Abstracting and Indexing Services (NFAIS) has approved a CODE OF PRACTICE ON GATEWAYS which identifies the rights and obligations existing among participants in a gateway arrangement. The Code of Practice covers: Identification of Database Ownership; Identification of User(s); Identification of Host System(s); Identification of Database(s) Accessed; Description of Gateway Component(s); Accuracy and Quality of Data/Services; Updating; Privacy; and Use of Information. Copies are available from: NFAIS, 1429 Walnut Street, Philadelphia, PA 19102, USA.

The Report of the VAMAS Technical Working Area on Materials Databanks (see Materials Database Newsletter, Issue No. 1) has now been published. Copies are available from: Dr. J. Rumble, Jr., NBS, A323 Physics Building, Gaithersburg, MD 20899 USA.

LEGAL ASPECTS

NFAIS has also published the GUIDE TO DATABASE DISTRIBUTION: LEGAL ASPECTS AND MODEL CONTRACTS, by Joseph Bremner and Peggy Miller. The Guide addresses in detail fifteen components of an ideal database distribution agreement and includes model contract wording for each. An additional chapter includes interviews with 7 industry experts on legal and business issues, and an appendix contains a full sample license agreement. The Guide is

**LEGAL
ASPECTS
(cont'd)**

not intended to be a substitute for legal counsel, but as a source of background information on distribution negotiations for all parties to agreements and their advisors. SOURCE: NFAIS Newsletter, Oct. 1987, Vol 29, No 2, p 113.

**SYMPOSIUM
REPORT**

ASTM Committee E49 on Computerization of Material Property Data hosted the First International Symposium on Computerization and Networking of Materials Property Data in Philadelphia, PA, USA on November 2-4, 1987. The sessions were attended by 125 experts from ten countries. Thirty-three presentations covering worldwide standardization activities and database building and distribution programs, including eight from international participants, were on the program and the proceedings will be made available in an ASTM Special Technical Publication (STP). Prominent among those participating were representatives of a number of international programs, including the European Community Demonstrator Program, DIN (Germany), JICST (Japan), and the CODATA Task Group on Materials Database Management. Demonstrations were given of 18 PC-based databases and expert systems and several online systems, together with the US National Materials Property Data Network.

CALENDER

19-20 January 1988: Tokyo, Japan

Symposium on **INFORMATION PROCESSING TECHNOLOGY**. Topics include: Artificial Intelligence, Expert Systems and their Application; and the Development of "Real" and "Full-Scale" Materials Database Systems. CONTACT: Mr Kimura, Information Processing Society of Japan, Hoshina Bldg., 2-4-2 Azabudai, Minatoku, Tokyo 106, Japan.

9-13 May 1988: London, UK

MATERIALS '88: MATERIALS AND ENGINEERING DESIGN. Topics include: Materials Databases and Expert Systems for Use in Computer-Aided Engineering. CONTACT: Conference Manager, The Institute of Metals, 1 Carlton House Terrace, London, UK, SW1Y 5DB.

26-29 Sept 1988: Karlsruhe, Federal Republic of Germany

11th International CODATA Conference **SCIENTIFIC AND TECHNICAL DATA IN A NEW ERA**. CONTACT: DECHEMA, Abt. Tagungen, POB 97 01 46, Theodor-Heuss-Allee 25, D-6000, Frankfurt am Main, FRG.

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