

# ISKO News 17

## Environmental Knowledge Organization and Information Management. Classification, Terminology, Thesauri, and Software

The First European ISKO Conference devoted to a special area of knowledge will take place in Bratislava, Slovakia, September 14 - 16, 1994. It is organized by the National Slovak ISKO Chapter, NISKO; the ISKO General Secretariat, Frankfurt/M., and Infoterm, Vienna with the collaboration of the Ministry of Environment of the Slovak Republic; the Bundesministerium für Umwelt, Jugend und Familie, Vienna; TermNet; and CEDAR, both Vienna and it is co-sponsored by UNESCO, Paris; the Austrian Unesco Commission; WHO, Geneva; EC DIR XI, EEA Task, Brussels; the International Water and Sanitation Centre, IRC, The Hague; and Assistance, Vienna.

To have planned a conference on Environmental Knowledge Organization means a new engagement of ISKO to tackle KO problems in a subject-oriented field, in this case even in a very tough one because of its interdisciplinary character with its special problems of a proper establishment of concept relationships and its respective concept combinations with concepts of other fields of knowledge and with the additional problems of literature- and data documentation as well.

ISKO and its conference co-organizers hope to be able to help in this way in clarifying the conceptual basis of this field and to fulfil the following purposes already mentioned in its Call for Papers:

- 1) *To assemble all those who have already established some sort of a tool, an ordering system (classification system, thesaurus, subject heading lists, mono- and multilingual terminologies, expert systems, etc.) in any field dealing with the environmental sciences;*
- 2) *To clarify the possible common, theoretical and methodological basis of the creation of tools for knowledge organization and information management;*
- 3) *To identify existing tools and those being under development for the organization of knowledge of the kinds mentioned above;*
- 4) *To find a possible metastructure for those tools and to acquaint all those interested with the structure of the software for a metathesaurus under development;*
- 5) *To establish recommendations for further work in environmental knowledge organization.*

The conference organizer, Dr. Pavla Stancikova, has been working in a subfield of the environmental sciences for almost 20 years and received the full support of her Slovakian Environment Ministry for this conference.

Our conference will take place in a newly built complex of facilities of the Ministry of Foreign Affairs, which also provides accommodation for very reasonable prices for a limited number of participants upon early registration. It is hoped that our program will attract all practitioners

and investigators as well as information managers and experts in environment-related institutions, such as libraries, information centers, universities, research centers, industry, government, etc., with interest in knowledge organization and in cooperation, in the relevant standards, in terminology and in multilingual applications

### The Program:

#### Wednesday, 14 September 1994

09:30 Welcome by representatives from the Slovak Ministry of the Environment, the Austrian Ministry of Environment and from ISKO, INFOTERM, and NISKO

**Session 1: Keynote address:** Chair: I. Dahlberg, ISKO.: A.J.N. Judge, Union des Associations Internationales, Brussels: Spherical configuration of categories to reflect systemic patterns of environmental checks and balances.

**Session 2: Inter- and Transdisciplinary Aspects.** Chair: A.J.N. Judge, UAI, Brussels: H. Löckenhoff, FHS f. Technik, Germany: Modelling knowledge for sustainable environment balance. - E. A. Stuhler, TH München: Basic terminology on how human beings organize environmental problemsolving (cognitive information processing).

- H. Benking, FAW Ulm, Germany: Visual access and assimilation strategies for prestructuring bodies of environmental knowledge- Proposals and lessons learned.

**Session 3: Catalogs of Data Sources.** Chair: Han Heijnen, IRC, The Hague: U. Pinborg, EC, Brussels: The European Environmental Agency Catalog of Data Sources. - H. Lessing, T. Schütz, Hannover, Germany: Syntactical and semantic structure of environment data. - W.-F. Riekert, FAW Ulm, Germany: Management of data and services for environmental applications.

**Session 4: National Environmental Information Systems.** Chair: N.N., EC European Environmental Agency, Brussels: K. Zirm, Vienna: Environmental information in Austria. Advances in environmental meta-information systems. - Z. Krakar; N. Mikulic; J. Novak, Zagreb: Metastructure of the environmental management information system in the Republic of Croatia. - I. Dusa, Bratislava: Environmental information system in Slovakia.

#### Thursday, 15 September 1994.

**Session 5: Classification Systems and Thesauri in the Environmental Sciences.** Chair: W. Schmitz-Esser, Hamburg: W.-D. Batschi, UBA, Berlin: Environmental thesaurus and classification of the Umweltbundesamt, Berlin. - B. Felluga, et al. ITBM CNR, Roma: Development of general thesauri for the environment. - T. Kjellström, WHO Geneva: View of WHO on environmental thesaurus and terminology.

**Session 6: Standardization and Legal Provisions.** Chair: P. Uhlir, NSF, Washington, DC: C. Galinski; G. Budin, Infoterm, Vienna: Legal provisions, standards and technical rules on environment. - P. Stancikova, Bratislava: Linking databases on standards and terminology - a basis for electronic publication processing on environmental topics. - A. Manu, Infoterm, Vienna: Terminology standardization in the fields of the environmental sciences.

**Session 7: Conceptual Bases of Environmental Knowledge Organization.** Chair: O. Sechser, Zürich, Switzer-

land: **I.Dahlberg**, ISKO: Theory and practice of concept systems and concept systematization in relation to the environment. - **O.Nacke, T.Krull**, Bad Salzuflen, Germany: The structure of veritology in environmental protection. - **M. Domokos; E. Dudich**, Budapest: On the possible use of organization levels and t/s parameters in the classification of natural and man-made objects.

**Session 8: Glossaries and Databases in Special Fields.** Chair: P.Lewalle, WHO, Geneva: **W.W. de Mes**, IHP UNESCO, Noord Scharwoude, Netherlands: Online access to databases dealing with Water and Environment. - **E.de Grolier**, Unesco, Paris: INTERCOCTA glossary on global environmental change. - **K.-D.Schmitz**, FHS Köln: Multimedia project and glossary on wind energy terminology.

**Session 9: Knowledge Organization in Special Fields.** Chair: E.Dudich, Budapest: **S.Katuscak, J.Pajtik, I.Beseda**, TUZvolen, Slovakia: Classification and knowledge organization in the areas of ecological quality of materials. - **K.Siwek**, OPI Warszawa: Linguistic tools for knowledge representation in bilingual (Polish/English) databases on research and development.

**Session 10: Software and Multilingual Tools.** Chair: G.Budin, IITF, Vienna: **M.Muraszkiewicz; H.Rybinski**, Warszawa: Environment Macrothesaurus System - MTM 4.0. - E. Chmielewska-Gorczyca, Warszawa: Translating multilingual thesauri.

**Friday, 16 September 1994.**

**Session 11: Environmental Education Programs.** Chair: U.Bosler, IPN, Univ.Kiel: **R. W. Scholz**, ETH Zürich: The natural and social sciences interface in environment problem solving. Objectives and curricula of natural environment scientists education at the Swiss Federal Institute of Technology, Zürich. - **A. Ajtay; Cs. Molnar; T.Toth**, Budapest: Education in cartography and its relation to Environmental Knowledge Organization. - **J. Steinerova**, Bratislava: Education and training in knowledge organization at Comenius University as background to environmental knowledge organization.

**Session 12: Environmental Networking on an International and National Scale.** Chair: P.N.Pembleton, UNIDO, Vienna: **W. Pillmann**, Vienna: Experiences with environmental networking made with CEDAR. - **V. Kassa**, Bratislava: Networking of environmental information libraries and information centres in Slovakia. - **E. Stengard**, Stockholm: The Production of the Nordic Standard Environmental Term List.

**Session 13: Approaches to Harmonize Environmental information.** Chair: H. Keune, UNEP-HEM, München: **H. Keune**: National and international aspects of environmental information management. - **Country reports**.

**Session 14. Panel Session of Conference Chairs.** Chair: Ch.Galinski, Infoterm, Vienna: Evaluation of the Conference and formulation of recommendations for future tasks.

**Closing Session 15: Future Aspects.** Chair: P.Stancikova, Bratislava: **F. Unger**, European Academy of Sciences and Arts (EASA), Salzburg: Global environmental challenges: An approach to a new integrative science.

General Discussion.

Conference language: English. Exhibition/Product Presentations during entire conference.

**Conference Venue:** SUZA, Facilities of Ministry of Foreign Affairs of the Slovak Republic, Drotárska cesta 46, 811 04 Bratislava. **Conference Secretariat:** NISKO & ISIS User Group. Dr. Pavla Stanciková, Biskupická 1, 821 06 Bratislava, Slovakia, Phone/Fax: +427/244 175

## New Roles for Classification in Libraries and Information Networks

### 36th Allerton Institute, Oct.23-25,1994

ISKO's Advisory Council member, Prof. Pauline A.Cochrane organizes this Institute at Allerton Housenear Urbana-Champaign, Illinois. She has circulated its program in May 1994. We are publishing this program under the FID/CR News of this issue of KO. For further information please contact: Willa Reed, Conference Administrator, Graduate School of Library and Information Science, 501 E.Daniel Street, Champaign, IL 61820. phone (217)333-3281.

## Knowledge Organization and Linguistic Aspects. 2nd Russian ISKO Conference, Moscow, May 16-18, 1995

A Call for Papers is being mailed to all institutions of potential interest in Russia (and elsewhere upon request) for this conference which is organized by the Russian ISKO Chapter with the collaboration of the Institute of Scientific Information on Social Sciences (INION) and the Russian State Library.

The organizers invite papers with comprehensive and up-to-date reviews of recent developments in the area of linguistic research connected to Knowledge Organization:

- 1) Cognitive Linguistics and Knowledge Organization
- 2) Language and Knowledge Organization
- 3) Terminology and Knowledge Organization
- 4) Terminology and Knowledge Engineering
- 5) Terminology and KO in special fields
- 6) Information retrieval languages, theory and practice
- 7) Subject retrieval systems
- 8) Classification retrieval systems
- 9) Knowledge retrieval and full-text databases
- 10) Natural language processing

Abstracts of 400-500 words should be sent to the Conference Organizing Committee (together with the reply card) until Dec. 1, 1994. The reply card should have the following data: Name, First name, Organization, Address, Postal Code, City, Country, Telephone, Fax. Selected area and title of paper.

Address: Dr.Eduard Sukiasyan, Russian State Library, Ul.Vozdvizhenka, 3, 101000 Moskva, Russia. Fax 095 200 22 55.

**Knowledge Organization in Italy  
Start of a Working Group, Plans for a Seminar  
Dec. 1-2, 1994**

“Models and Methods of Knowledge Organization” was the subject of a meeting organized by the Institute for Studies on Scientific Research and Documentation of the National Research Council (CNR) in Rome on February 2nd, 1994.

The aim of this initiative was to stimulate with this topic a discussion among scientists from different cultural fields and various professions which might help fill up existing theoretical knowledge with applicative experiences, thus providing supportive guiding principles to practical workers in various fields and acquainting those who conduct investigations at a cognitive level with the results of works performed and obtained by experiments and with the theoretical problems existing in their own fields of application.

The objects of this discussion were the contents of the short reports which had been prepared by the participants and been distributed in advance.

The first part of the papers, which were introduced by the Director of the Institute, Prof. Paolo Bisogno, regarded problems of a theoretical nature of models of knowledge organization, explained and discussed by scientists who study logic and philosophy of science, cognitive science, and formal ontology.

The second part was devoted to applicative methods deduced from experiences in different fields (earth science, information science, medical informatics, law informatics, expert systems, philosophy, hermeneutics, environment).

This meeting evoked in the participants a strong interest and will of collaboration in order to attain their objects. As a result, there has been formed a working group “Knowledge Organization”, which intends to increase studies in this field giving ideas for common projects, including one devoted to the terminology in the field itself, in order to arrive at a common language, the divulging of information, and the organization of seminars on knowledge integration.

In the course of editing the printing of these short papers, some very interesting topics have been discovered from which new lines of future work might emerge.

On December 1-2, 1994, a seminar entitled “Categories and Structures of Knowledge” at which Dr. I. Dahlberg, the ISKO President, has been invited to participate, will open a series of meetings. This seminar, organized by the ISRDS, aims to illustrate and discuss problems of a logical-philosophic nature and in particular of formal ontology devoted to ascertain the existence of characteristics of objects, at a general level, and their relationships. Here, the “Systematifier”, a model of facets designed and constructed by I. Dahlberg in order to organize a knowledge field, as well as a method for its application and examples of concrete experiments will be presented.

Contributions by L. Albertazzi and R. Poll of the Centro di Studi per la Filosofia Mitteleuropea and by A. Gangemi, N. Guarino, and G. Negrini of the National Research Council are also expected.

Giliola Negrini

# **INTERNATIONAL SOCIETY FOR KNOWLEDGE OR- GANIZATION**

**Woogstr. 36a, D-60431 Frankfurt**

## **General Bylaws for ISKO Bodies**

### *Preliminary remark:*

These bylaws are intended to serve as skeleton rule of procedure for international and national ISKO committees, boards, councils, etc. Within this framework, and with the approval of ISKO's central executive board, every such ISKO body can adopt further special rules for its work if such additional rules are deemed necessary for its proper functioning and do not conflict with the rules set forth below.

### **1. Formation of ISKO Bodies**

- (a) ISKO's central executive board as well as the executive boards of regional chapters can establish special ISKO bodies for carrying out the tasks of the Society (ISKO Statute, art.11, para.3).
- (b) These bodies shall be called “Working Groups”, abbreviated “WG”.
- (c) Working Groups can deal both with selected subjects in fields extending beyond that of Knowledge Organization and with specific questions restricted to that field.

### **2. Names and Tasks of ISKO Bodies**

- (a) Working Groups can be formed at the request of interested ISKO members, who shall submit their pertinent request to ISKO's central executive board.
- (b) The name and tasks of an ISKO body shall be determined by the (central or regional) executive board establishing it. ISKO's central executive board shall be authorized to change the name and/or the tasks of an ISKO body after having heard the body's chairperson.

### **3. Membership in ISKO Bodies**

- (a) Membership in an ISKO body is acquired through a personal pertinent decision by the prospective member, who shall thereupon approach that body's chairperson to obtain his or her approval. Such approval can be withheld only with the concurrence of the (central or regional) executive board.
- (b) Membership in an ISKO body expires
  - when the body is dissolved,
  - when so resolved by the (central or regional) executive board.
- (c) The chairperson of the ISKO body shall keep ISKO's central executive board regularly informed on the body's membership status.

#### **4. ISKO Body Chairpersons and Secretaries**

(a) The body members shall elect from among their ranks by a simple majority one member as the ISKO body chairperson and, if deemed necessary, a further member as secretary. Still another member can be elected deputy chairperson. Absentee balloting shall be permissible.  
(b) The terms of office of chairpersons and secretaries shall be four (4) years.

#### **5. ISKO Body Meetings and Special Lectures**

(a) ISKO bodies shall meet at least once a year and/or carry on a correspondence of adequate intensity.  
(b) Place and time of a meeting, if not laid down by the body at a previous meeting, shall be determined by the chairperson.  
(c) Invitations to meetings shall be sent out by the chairperson and be accompanied by an agenda and further relevant documents. Between the invitation and the meeting there shall be an interval of at least four (4) weeks.  
(d) ISKO bodies shall keep ISKO's central office informed of their meetings and activities by sending it the invitations and further documents.  
(e) The members of the central or regional executive board concerned are authorized to attend ISKO body meetings.  
(f) ISKO bodies shall be authorized, upon consultation with the central or regional executive board concerned, to stage lecturing events, either independently or within the framework of regional or international ISKO conferences.

#### **6. Quorum and Resolutions**

(a) An ISKO body shall have a quorum when at least four or half the number of its members are present. If the votes are tied the vote of the chair shall be decisive.  
(b) The presence of a quorum shall be acknowledged when so moved.  
(c) Resolutions shall be adopted by a simple majority.  
(d) Voting shall be secret if so moved by any member.  
(e) Voting by proxy shall not be permissible.

#### **7. Minutes and Other Records of Meetings**

(a) Minutes shall be kept of any meeting and be signed by the chairperson.  
(b) The minutes shall be forwarded with due speed and no later than three (3) months after the meeting to the participants and to ISKO's central office. A corresponding report on a meeting shall appear in ISKO News.  
(c) Minutes and other records on meetings shall be marked in their right upper corner by an identity number, e.g. WG-CD-91-1 = Paper No.1 of the Working Group on Contents Description in 1991.  
(d) Permission of the central or regional executive board concerned shall be required for the passing-on of minutes to non-members.

#### **8. Work Reports and Publications**

(a) The ISKO bodies or their chairpersons shall prepare a work report every two (2) years.  
(b) The committees are authorized to publish reports on their meetings and work results (e.g. "Recommendations on Knowledge Organization") in ISKO News or the journal KNOWLEDGE ORGANIZATION.  
(c) ISKO bodies are authorized upon duly so informing the central or regional executive board concerned, to publish books of their own and, with the approval of the central or their national executive board, to publish letters to their own members as well as circulars.  
(d) The copyright to publications of committees shall rest with ISKO. The Working Group concerned or the responsible person shall be regarded as their publisher.  
(e) If a member of an ISKO body publishes anything on a subject that the body has also done some work on, that member shall mention this fact and this body in his/her publication.

#### **9. Handling of ISKO Body Affairs**

(a) The chairperson of any ISKO body shall be responsible for handling that body's affairs.  
(b) The ISKO bodies shall use the stationery and letterhead of the Society while adding the body's name underneath the Society's name and indicating the address of the given ISKO body.  
(c) When ISKO bodies propose projects to be financed by public sponsors and work on such projects, the central or regional executive board concerned shall be duly informed, and the given body or a sub-body set up by it shall function as advisory council to the project.  
(d) Applications for outside funds for an ISKO body shall be submitted, with due restriction to the purpose specified, by the treasurer of ISKO's central executive board or by the regional executive board concerned. The same shall apply to the acceptance of funds from third parties.  
(e) Funds from third parties made available to an ISKO body shall only be put to use with the permission of that body's chairperson.  
(f) If ISKO bodies secure any income through their work of publications, such income shall preferably accrue to the given body for its further work. Such funds shall be handled by the chairperson of an ISKO body in cooperation with the treasurer of ISKO. This handling of funds shall be governed by the usual criteria.  
(g) ISKO bodies shall need authorization by ISKO's central executive board to assume legal obligations engaging the Society.

Frankfurt/Darmstadt, Febr.23, 1994.