.src files are source files, and it is through these files that your WAIS client knows where to look, worldwide, in order to find the requested server. Let's assume that you have this file. At the bottom of this article, it is explained how you can pick it up if you do not have it already.

You, the user, give the command to start up WAIS on your system. A window pops up. You click on an option indicating that you want to make a new search. Up pops your search window. You indicate one or more sources, which are listed by virtue of there being such source files present in your wais-sources directory. Now you give your query. This can be free text, or a string of relevant words. Most public versions of WAIS to date do not, unfortunately, respect boolean connectives ("and", "not", etc.). By clicking on "Search", the search procedure begins. Your request is fired off down the network, to find the requested items from the server, and then returned. Figure 1 shows a search for Newsletter files containing the words "contiguity constraint clustering". Three Newsletter files are returned, with names "ifcs-nl6-pages2-8.ps", etc. They are scored, out of 1000, in decreasing order of relevance to the set of search terms input.

Next, you wish to view the first item returned. You click on this item, and then click on the "View" button. If the item requested were a plain text file, it would appear as such in a new window. You have then the option for saving it (locally, of course; the text requested has just been sent to you from the remote location).

Now, here, we are dealing with Postscript files. WAIS offers the possibility of defining so-called filters for such

files. This means that rather than putting a raw Postscript file into a new window - just as described for plain text - it powers up a Postscript-display utility locally, and only then loads the Postscript into it. This makes the Postscript file much more readable! See Figure 2 at this point. Remember our remark earlier about the user retrieving a potentially large file on such occasions: it is clear that we could do a little better by having the IFCS Newsletters stored as smaller, more digestible files (and, by the way, in some instances WAIS can facilitate this).

There is relevance feedback also in WAIS. There are aspects of WAIS which can be criticized, but it will develop and mature over time. It already has been used in commercial products by Apple and others. It is a quantum leap in terms of facilitating retrieval of information by geographically distributed communities. WAIS can also happily co-exist with other resource-discovery tools which will not be described further here: e.g. Gopher, for network-based navigation and directory searches; and the World-Wide Web or WWW, for distributed hypertext (and more).

The basic distribution of WAIS, including server, text search engine, text indexer, and client, are available from wais.com, think.com and other sites. Macintosh, Microsoft Windows versions, among various others, are available.

The source file for the IFCS Newsletter can be picked up at ecf.hq.eso.org:/pub/swlib/mathstat/multiv/IFCSnl.src Also in this directory you can find a file named www-faq.txt, a FAQ or "Frequently Asked Questions" file, which can be referred to for more information.

F. Murtagh, fmurtagh@eso.org

data; theoretical study of validation problem of generalization and classification models. Includes 17 papers and 2 books. Currently: Head of Research Group.

Sergey I Vatlin, P. Glebka Street 92, opt. 14, 220104 Minsk, Republic of Belarus. Tel: 7 0172 558152 (private), 7 0172 398820 (office).

## **Network-Based Information Retrieval**

The IFCS Newsletter is content-searchable, and retrievable, by network. The tools used to do this are publicly available. They are relatively easy to use. Not everyone has used such facilities, however, and so this article is a quick guide to some revent developments in this area. We begin with some of the necessities, to avail of such software tools.

The Internet, a closely connected set of networks, has an estimated 15 million users worldwide, and it is growing all the time. Certain protocols used on the Internet are presupposed for the proper functioning of the type of software tools to be described here. While gateways easily permit the flow of traffic between the Internet and, say, Bitnet, they do not permit the kind of interactive processing needed in this context. Thus, we will assume from now on that you are on the Internet. Your machine may be an X-windows computer and/or terminal, or a Macintosh, or a PC.

If a set of files (say, the IFCS Newsletter, in Postscript format) is stored in some location, and you are accessing part of that information at your home location, then we have the elements of distributed computing. Current evolution is towards the distributed storage of data, - textual, pictorial, software itself, and so on. A major spur to distributed applications has been the client-server paradigm. This often implies that the software package comes in two parts. The server part takes care of data management at the location where the data is stored. The client part looks after your needs, often remote from the server. You can look upon yourself as the client, as you type in your retrieval requests. These requests shoot off down the network, to be picked up by the server software, which then responds. The powerfulness of all this is evident when your client looks after the relevant windows on your workstation, and the arrangement of information in these windows; and the "real work" is all done at the remote site. Not only is a genuinely distributed environment maintained in this way, but it is also quite efficient and fast (so long as network connections allow reasonable speeds).

WAIS (Wide Area Information Servers) was initially prototyped as a joint development of four companies: Dow Jones & Co., Thinking Machines Corp., Apple Computer, and KPMG Peat Marwick. A version of WAIS is available at anonymous ftp sites (see addresses below). WAIS is a free-text searching system, using client-server principles. It standardizes search and retrieval, to its own standard, - ANSI protocol Z39.50.

Assume now that I have server software installed on my system, and that you have client software installed at your side. I run an indexing command on a set of IFCS Newsletters, each stored as an individual file. That last fact, - storage as individual files, may not be the most ideal, as you will see, but for the present we will proceed. Next, since you have WAIS software installed, you will have a special directory which contains a number of very short, plain text files, with the extension .src (that is, unless you automatically avail of such a system-wide directory, which fulfills this role). These should also promote the development of new methods. (ii) It is important to publish proceedings after meetings such as these.

(iii) More time for discussion is needed at these meetings.

Hand: It is quite clear that the different classification societies in different countries serve different roles. I think, therefore, that it is important not to restrict the range of activities (I support Professor Hayashi in this). We need to retain and promote the intrinsically interdisciplinary nature. But our discipline arose from contact with real problems and we need to retain that. I think we should do more to encourage researchers from substantive disciplines to become involved.

**Day:** I would like to return to the point about other groups and their participation in the Federation. I hope the Federation's structure is flexible - we already have provision for small groups to interface with it. But should the IFCS solicit new member bodies? Some people say we shouldn't be too eager to encourage groups to join if they themselves aren't already convinced that membership would be a good thing.

I would also like to point out that the IFCS doesn't have any money. This should be kept in mind when raising our expectations of what the Federation might do.

**Heiser:** Money and other such problems derive from the fact that a Federation is a weak organisation of societies. More intensive activities necessitate a stronger organisation.

**Bozdogan:** Problems with funds might be tackled by asking member societies to attach some small extra amount to their subscriptions, to be passed on to the IFCS.

**Bock:** Perhaps we should turn Professor Day's question around and ask what you, the members of the societies in the Federation, can do for the IFCS.

What has been made clear in this discussion is the tremendous breadth of the field of classification, both in its applications and its methodology. Whatever else, everybody is welcome at our conferences!

## **Events and People**

#### **Events**

**I Jornadas de Classificacao e Analise de Dados.** 13-15 December 1993, Lisbon, Portugal

Sponsored by Projets Scientifiques et Technologiques Luso-Français en Analyse des Données Multivariées et Reconnaisance des Formes.

Infofmation: H. Barelar-Nicolau, Lab. Estatistica e Analise De Dados (LEAD), Fac. Psicologia e Siencias de Educeces, Universidade de Lisboa, Alameda de Universidade, 1600 Lisboa, Portugal

**XIVièmes Rencontres Franco-Belges de Statisticiens.** Classification Methods - Theoretical Problems and Statistical Foundations. 17-19 November 1993. Facultés Universitaires Notre-Dame de la Paix, Namur, Belgium

Contact: J.P. Rasson, Département de Mathematique, Facultés Universitaires Notre-Dame de la Paix, 8, rempart de la Vierge, B-5000 Namur, Belgium. Tel: +32 81 724928, 724929, 724930, fax: +32 81 724914, email: jpr@math.fundp.ac.be

**STAT'expo.** 23-24-25 March 1994, Cité des Sciences et de l'Industrie, La Villette, Paris

This first symposium devoted to the exhibition of all data tools including conception, elaboration, collecting, management, questioning, analysing, summarizing, visualizing, representing, reporting, piloting or helping in decision-making. This relates to software and hardware distributors or manufacturors, desk equipment, statistical services, consulting, publications and any other product or service related to data. Chair: M. Jambu, National Center for Telecommunications Research, France Telecom.

Exhibitors wishing to participate should contact:

In Europe: STAT'expo, c/o CDK Conseil, 6 rue Casimir Delavigne, 75006 Paris 6ème, France. Tel: +33 1 43.54.85.95, fax: +33 1 43.54.84.07.

In the USA: Ken Kornbluh, c/o Scitech'Int, Baliwick Court Building, 2231 N. Clybourn Ave., Chicago IL 60614-3011. Tel: (312) 472-0444.

### People

Dr Hamparsum Bozdogan, Department of Statistics, University of Tennessee, was one of ten recipients of the Chancellor's Award for Research and Creative Achievement in 1993. From the College of Business Administration newsletter: "These awards are for scholars who have made significant contributions in their fields of study. Dr. Bozdogan, Associate Professor of Statistics, is helping to find new ways to use statistical modeling to solve problems and make more accurate predictions, such as economic forecasts. He organized the first US-Japan Statistical Modeling Conference at the University of Tennessee in May 1992."

Position sought: PhD in Computer Science, post-doctoral course in pattern recognition and mathematical theory of generalization. Interests: methods and algorithms for segmentation of a structured image; methods and algorithms for recognizing and identifying moving objects; application of classification algorithms for interpretation of remote sensing

**Diday:** Many people consider classification to be a subfield of other areas, such as application areas like the natural sciences and biology and areas of mathematics like mathematical programming, statistics, and lattice theory. But this meeting shows clearly that classification is a field in its own right. So, one aim of the Federation should be to define the subject matter clearly. Professor Bock's presentation represents a useful first step in this direction.

**De Soete:** What did Professor Hayashi mean by 'data science'?

Hayashi: Data science includes data analysis, informatics, classification, ...

**Bock:** Note that besides 'data analysis' and 'data science' further denotations have been discussed before, e.g., 'datics' or 'datamatics'. They all seem to combine technical (mathematical, statistical,...) and non-technical (subject-oriented) elements.

**Legendre:** I come to meetings to meet colleagues who do other things but who have similar problems. I think we should consider having sessions at these meetings where people describe problems they have and for which they are seeking solutions.

**Caroll:** To address the question of whether classification is a discipline or a technology. I would suggest it's neither: it's a methodology. But can't technology be a discipline?

**Windham:** A discipline is one which has accepted administrative units.

**Bock:** Artificial intelligence and knowledge based systems impact on our 'discipline'. I would like to ask Professor Diday about the future impact of such methods on classification.

**Diday:** Intention (in the technical philosophical sense) is very important and has been neglected in classification. Data have been regarded merely as units (though some people also look at populations). Intention is more general, and has been vital for the advance of science. Considering descriptions of objects enlarges the domain of classification, from merely numbers to structures.

**Heiser:** I disagree with Professor Diday: it is not necessary to make everything a part of mathematics.

**Friedman:** I support Professor Diday's view that there is no one view of classification. Our role should be one of unification and integration.

**Wille:** Improving intentional descriptions and theory is important. Nobody really says what data are.

**Rizzi:** It is difficult to define mathematics, but one can say that it is not just concerned with numbers, but also with much more general structures.

**Diday:** It is useful to define the problems of classification more generally, not in order to define the discipline, but in order that progress in any one domain can contribute to progress in others through increased generality and abstraction.

# Part II: The Future of the IFCS

**Day:** The Federation has been around for about 6 years. In the early days it was concerned with organisational matters - with finding an acceptable constitution and so on. Now we need to recall the Federation's mandate and ask ourselves if it should be modified. The constitution has four points: (i) to promote communication and cooperation, (ii) to disseminate scientific and technical information, (iii) to organise conferences, and (iv) to publish journals and other material. This conference and the IFCS Newsletter are examples of (iii) and (iv). But we now need to ask if we are happy with this level of activity. Are there other activities you would like to see?

**Lebart:** The paradigms of classical statistics (variable and units, for example) do not adapt well to some new sciences (such as computer science). The IFCS is the right place to discuss these new developments.

**Yajima:** It would have taken 18 hour days to attend all the papers presented at this conference (which is why we needed parallel sessions and, later, the published proceedings). It is good that there should be so many papers from so many different viewpoints.

**Hayashi:** Before this conference I was at a meeting on facet theory. Topics were restricted to a very narrow region. What was needed was an open-minded approach. The IFCS must not limit itself, but must be an always expanding open set.

**Windham:** I asked some of my colleagues what questions they would like me to raise at this conference. They said: (i) Should we incorporate groups into the Federation (subsec-

tions based on disciplines)?(ii) Should we promote more interaction between this and other societies? Joint meetings, for example.

(iii) What should be the relationship between the IFCS and the Journal of Classification?

The discussion can continue through the medium of the IFCS Newsletter and I would like to encourage people to write in.

#### Rizzi: I have three points:

(i) I agree with Professor Lebart: the Federation should be an interface between classification and other disciplines, but it

# Perspectives in Classification and the Future of the IFCS

D.J.Hand The Open University, Milton Keynes MK7 6AA, UK dj\_hand@vax.acs.open.ac.uk

**Abstract:** This is the summary of a panel discussion which took place on Friday 3rd September, Professor H.H. Bock in the Chair. The panellists were Professors Bock, Day, Hand, Hayashi, Heiser, Lebart, Rizzi, Yajima, and Windham, and further contributions were made from the floor. The session was divided into two parts, the first being concerned with the subject of classification itself and the second with the future of the IFCS. I have done my best to summarise the discussion as accurately as possible, and I apologise if I have misrepresented any speakers in any way.

## Part I: Perspectives in Classification

**Hayashi:** Classification is a fundamental topic. The theory of classification should be based on real data, showing the effectiveness of the results, although artificial data is also important to explore the properties of methods.

**Heiser:** I would first like to address the question of whether classification is or is not a discipline. I would like to suggest it may not be desirable to be one. Classification is a forum for people from different disciplines to come together and interact. Psychometrics, in contrast, is a discipline. In psychometrics there is a common database of problems/models/data types. Classification does not have such a common background.

**Windham:** In an academic department there are expectations. These are concerned with the recognition of an activity. There are difficulties with the CSNA because people from Mathematics Departments do not know what classification means: they do not know how to recognise the activity. So one objective of ours should be to explore how to obtain recognition of classification research as a legitimate activity.

Secondly, I would like to ask how we should develop classification in an appropriate way. Professor Bock, in his talk, produced a valuable list of suggestions. We have a responsibility to make clear what kind of 'clusters' correspond to different methods, to make clear the limitations and robustness of different methods, and so on.

Thirdly, how do different types of scientists use different classification methods? Perhaps some guidelines are needed.

**Rizzi:** I work in social and public statistics. Classification equals data analysis.

Hand: Science is a truly international activity, uniting people from different countries, with different languages, and from different cultures. In a similar way the science of classification is a unifying force: it unites different scientific disciplines. Its development has been driven partly by applications problems and partly by the intrinsic interest of the theory. More recently, however, a new force has had an impact on the direction of classification research. This is the computer. It has led to, for example, speech recognition, automatic fingerprint identification, the human genome project, smart weapons, and so on. Some of these problems could only be dreamt about before powerful computers became available. We can extrapolate these trends to try to predict something of the future of the discipline. Future developments will arise from new applications, from new types of data (such as symbolic data), and from greater computer power.

I am also concerned about terminology. Classification involves two kinds of problems: (i) Dividing a set of objects into homogeneous groups. This has been called unsupervised pattern recognition, cluster analysis, partitioning, dissection, and, simply, classification. (ii) Formulating rules for classifying new objects. This has been called discriminant analysis, supervised pattern recognition, allocation, assignment, and, again, classification. Perhaps we need to sit down and introduce some rigour and precision into these terms.

**Lebart:** We need to show people with classification problems that we can help, that our work is relevant, and that we have efficient tools for tackling classification problems.

I would suggest that classification is a technology rather than a science (see M.J.R. Healy (1978) Is statistics a science? Journal of the Royal Statistical Society, 141, 385-394). It also may lack a general methodology.

One important problem is how we should use external information.

We must also consider the economics of classification: there are costs associated with finding a new method and training people to use that method.

George Barnard likened statistics to a telescope: it enabled the user to see what was approaching before others saw it.

**Yajima:** The social science and marketing communities are heavy users of classification tools. The Quality Control Society has more members and more people interested, but classification has a broader area of applications. There are many guides to practice in the quality area but none in classification. There is a need for them in the latter.

**Hayashi:** A guiding idea of data science is based on the Eastern way of thinking: The methodology does neither grow by formal logic nor flourish when based on the phenomena only: We must not draw information by selecting one single point-of-view in 'entweder - oder', but to find it in the underlying balance and harmony.

#### JCS - Japanese Classification Society

The annual symposium to review classification research work on a specific topic was held on 30 July, 1993. There were four presentations under the theme of "Pattern Recognition in Phylogenetic Inference". The titles are as follows, where the reporter is responsible for translation.

- Nobuhiro Minaka (National Institute of Agro-Environmental Sciences, Tsukuba), "Tree topology and common ancestors: The aims and methods of phylogeny reconstruction".

Tetuaki Murakami (Nikko Botanical Garden, Faculty of Science, University of Tokyo), "Molecular characters are better than morphological ones for phylogenetic analyses".
Jyun Adachi (The Graduate University for Advanced Studies), "Maximum likelihood inference of molecular phylogeny".

- Kunimasa Ohta, "Information context in phylogenetic inference".

Keiji Yajima, yajima@jpnsut20.bitnet

#### GfKl - Gesellschaft für Klassifikation

The 18th Annual Conference of the Gesellschaft für Klassifikation will be held in Carl von Ossietzky Universität, Oldenburg, on 9-11 March 1994. The theme will be: From Data to Knowledge - Theoretical and Practical Aspects of Classification, Data Analysis and Knowledge Processing.

A wide range of special sections are planned. Tutorials (on the 8 March 1994), Workshops and Software Demonstrations will be organised in the framework of the Conference.

The deadline for submission of proposed abstracts is 1 December 1993. The Conference organisers are D. Pfeifer and H. Havekost, Oldenburg.

Further information: Prof. Dr. D. Pfeifer, FB Mathematik, Carl von Ossietzky Universität Oldenburg, Postfach 25 03, D-26015 Oldenburg. Tel: +49 441 798-3243/3237, fax: +49 441 798-3004, email: 206150@doluni1.bitnet.

#### **Classification and ZIP codes**

As you might have noticed, all postal codes in Germany have been changed, on the one hand as a consequence of the recent unification process, on the other hand because a new postal distribution system has ben introduced. Since the new ZIP code system looks somewhat puzzling at first sight, this short note may help you in getting your letters correctly 'classified':

1. All ZIP codes have five digits now (so you can distinguish them easily from the old four-digit code).

2. Any addressee can have up to 4 different postal codes:

\* One for his house address (Haus-Anschrift; every town is clustered into several districts distinguished by the last two

digits); if used for parcels, they will typically be delivered here.

\* One for a Post Office Box address (Post-Anschrift; then you need the Box number as well).

\* One for bulk customers, big enterprises, universities etc.
with their own postal redistribution system (Grosskunden-Anschrift; then you need neither street nor P.O.B. number!).
\* One for parcels (seldom; only for big enterprises).

- 3. Example: The Department of Mathematics of the Univer sity of Karlsruhe has three ZIP codes:
  - Haus-Anschrift: Englerstr. 2, D-76131 Karlsruhe
  - Post-Anschrift: Postfach 6980, D-76049 Karlsruhe
  - Grosskunden-Anschrift (to be typically used): D-76128 Karlsruhe

Hans-Hermann Bock, bock@stochastik.rwth-aachen.de

#### SFC - Société Francophone de Classification

IFCS-93: The 4th Conference of the International Federation of Classification Societies has just taken place in Paris from 31 August to 4 September 1993. The success of this event was clear: more than 270 participants and around 150 presentations were shared among very varied themes. The publication of the proceedings is foreseen for April 1994.

The Second Meeting of the SFC: Organised by J.P. Asselin de Beauville, this will take place in Tours on the 12 and 13 September 1993. The Call for Papers includes the following topics:

1 - Methods of exploratory data analysis and combinatorics; partitioning, trees, graphs; proximity measures;

decision aids and identification keys; statistical, combinatorial, symbolic/numeric and connectionist approaches.

2 - Applications of classification; biology (phylogy, genetics, etc.); pattern recognition; machine learning; image and signal analysis; production managent; quality control; industrial problems

For information, from November 15 1993, contact: J.P. Asselin de Beauville, Ecole d'Ingenieurs en Informatique pour l'Industrie, 64 avenue Jean Portalis, 37200 Tours, France.

A new Newsletter of the SFC has appeared. It is the Bulletin de la Société Francophone de Classification, and Issue Number 1 appeared in July 1993. This first number was 22 pages in length. Among other articles, one can find a report on a cooperation agreement between the SFC and the GfKl; an article entitled "Survey on the Foundations of Classification" by E. Diday; and an article entitled "Statistical Implication: A New Method for Data Analysis", by R. Gras. Also included are laboratory reports, a report on the Journéees de Classification held in Brest on 10-11 September 1992, and doctoral theses which are underway.

Patrice Bertrand, bertrand@icare.inria.fr

## **Klauer Receives First IFCS Prize**

The first IFCS Prize for Outstanding Research, instituted to recognise young researchers who have made significant contributions to classification or related areas of data analysis, was awarded at the IFCS-93 conference to Karl Christoph Klauer.

K. C. Klauer was born in 1961, and was awarded a diploma in mathematics from RWTH Aachen and a diploma and Ph.D. in psychology from the University of Hamburg, receiving the Heinz-Heckhausen young scientist award of the Deutsche Gesellschaft für Psychologie in 1990 for his Ph.D. thesis. He gained his Habilitation in 1992, and currently works at the Institut für Psychologie, Freie Universität Berlin.

In recommending that he receive the prize, the IFCS Awards Committee stated: "Karl Christoph Klauer is a prolific researcher who has made impressive contributions to quantitative psychology. Of particular relevance to classification methodology is his work on network representations for proximity data, for which he has presented axiomatic characterizations, developed efficient algorithms, and conducted careful empirical studies".

At a plenary session of the IFCS-93 conference, Dr Klauer presented a talk on his work in this area, entitled 'Representing proximity by graphs'.

The IFCS Council has approved the conducting of a second prize competition, with a view to awarding a Prize for Outstanding Research at the next IFCS conference to be held in Japan. The prize includes a cash award, the presentation of a scientific paper at the IFCS conference, the waiving of conference registration fees, and the reimbursement of reasonable travelling expenses to the conference. Full details of the procedure for nominating candidates will be given in the March 1994 Newsletter.

Allan Gordon, a.d.gordon@st-andrews.ac.uk

#### News from the Societies

#### SIS - Società Italiana di Statistica

37th Scientific Meeting of the "Società Italiana di Statistica" (SIS). April 6-8, 1994, Sanremo, Italy.

Among other topics, the tentative programme includes: - an invited paper session on "New tendencies in the analysis of multi-way contingency tables" (organized by C. Lauro); - two selected topic sessions on "The analysis of spatial and spatio-temporal data" and "Statistical analysis of textual data". IFCS members interested in the meeting should contact: Prof. Domenico Costantini, Istituto di Statistica, Università di Genova, Corso Paganini 3, 16125 Genova, Italy; (Fax: +39 10 2095267).

Sergio Zani, statec1@ipruniv.bitnet

#### **BCS** - British Classification Society

A joint meeting was held with the Neural Computing Applications Forum on 3rd March 1993 at the University of Birmingham entitled "Statistical and Neural Network Approaches to Classification". About 50 people were present. Details of the programme were given in the last IFCS newsletter.

The AGM and a meeting were held on 17th June 1993 at the Institute of Psychiatry, London attended by about 20 members and guests. Four sets of data were collated and distributed by Prof. B.S. Everitt and analyses were presented by Mr. C. Taylor, Prof. Everitt and Dr. A. Unwin and discussed by members and guests.

The next meeting will take place at DRA on Wednesday 20th October 1993 organised by Richard Glendinning under the heading "Contextual Methods in Classification". Invited speakers include Martin Russell, S. Protheroe, Andrew Carothers and Edwin Hancock. Prior registration is essential and those interested should contact Dr Glendinning at St Andrews Road, Malvern, Worcestershire WR14 3PS; or Tel: 0684 894850; or e-mail; rhg@signal.dra.hmg.gb

Clive Moncrieff, cbm@nhm.ic.ac.uk

#### **CSNA - Classification Society of North America**

The twenty-fifth annual meeting of the Classification Society of North America takes place June 16 - 18, 1994 in Houston Texas. The meetings will be held at the Hilton Plaza Hotel, one block from the Texas Medical Center and adjacent to Rice University. We hope to have, in addition to the usual scientific sessions and contributed papers, invited sessions on medical applications and NASA-related applications. More details will be available in subsequent Newsletters.

We are interested in soliciting presentations in all areas of the scientific study of classification and clustering. Persons wishing to present a talk, propose a symposium, or request information about local arrangements should contact:

Local host: Dennis Johnston, Biomathematics, 237 MD Anderson C Center, 1515 Holcombe, Houston, Texas, USA 77030 Phone: +1 (713) 792 2617, E-mail: an122051@uthvm1.bitnet

Michael Windham, windham@foda.math.usu.edu



# International Federation of Classification Societies Newsletter

Number 7

October 1993

President: William H.E. Day

Editor: Fionn Murtagh

The International Federation of Classification Societies, founded in 1985, is composed of: British Classification Society, Classification Society of North America, Gesellschaft für Klassifikation, Japanese Classification Society, Société Francophone de Classification, Società Italiana di Statistica, Association des Sociétés Yougoslaves de Statistique, and Vereniging voor Ordinatie en Classificatie.

The IFCS is a non-profit, non-political scientific organization, the aims of which are to further classification research. Among other activities, the IFCS organises a biennial conference, and supports the Journal of Classification.

# **From the President**

The Federation's Fifth Conference, IFCS-96, will be organized by the Japanese Classification Society and tentatively will be held in March 1996 at Kobe, Japan. We will announce details of the conference in the next issue of the Newsletter.

IFCS-93, which ended on 4 September in Paris, attracted 280 registrants and by almost every measure seemed to have been a successful event. For their efforts in organizing the conference, we are indebted to Edwin Diday (Université Paris-Dauphine), Marie-Claude Sance (INRIA-Rocquencourt), Marie Bacquerot (Télécom-Paris), and the many persons who assisted them.

On 3 September the Council of the Federation held its regular biennial meeting. Of the many items discussed by Council, the following might be of particular interest. The Council fixed at US \$2,000 the cash value of the Prize for Outstanding Research that will be awarded at IFCS-96. The Council has learned that the Section on Classification and Data Analysis of the Polish Statistical Society is applying to become a Member Society of the Federation. The Council's Executive Committee is attempting to arrange reasonable ways in which members of the Jugoslovenska Sekcija za Klasifikacije (JSK) might participate in the Federation's activities. The Council will be considering a proposal to use a system of proportional voting to elect the Federation's officers and the Council's additional (elected) members. I am forming an ad hoc committee to consider how the Federation might undertake, encourage or promote publications in its areas of interest, and to prepare a position paper on these matters for consideration by the Council.

On 31 December my term as President ends - and not a moment too soon! For sound advice and unflagging support I am indebted to Allan Gordon, Pierre Legendre, Jacqueline Meulman and Fionn Murtagh. I extend my best wishes to Allan Gordon who on 1 January 1994 will become the fifth President of the International Federation of Classification Societies.

William H. E. Day, whday@ac.dal.ca

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