IFIP newsletter

International Federation for Information Processing

Editor:
Dr. Jack L. Rosenfeld
Distributed by
CHAPMAN & HALL

Vol. 14. no. 4: December 1997

UNESCO Establishes Closer Relationship with IFIP

IFIP Is Now an "NGO in Formal Consultative Relations with UNESCO"

Following is the text of a letter sent in June by **Mr. Federico Mayor,** the Director-General of UNESCO, **to Prof. Kurt Bauknecht** (CH), president of **IFIP:**

> It is my pleasure to inform you that the Executive Board, at its recent 151st session, decided to admit the International Federation for Information Processing into formal consultative relations with UNESCO ... The advantages and obligations pertaining to this new relationship ... constitute a formal commitment on the part of both parties.
>
> I need hardly emphasize the significance of the formal bond which UNESCO is proposing to establish with your organization, and draw your attention to the philosophy underlying the new era of cooperation opening up between UNESCO and the non-governmental community, in which the role of your organization is of great importance.
>
> ... This relationship between UNESCO and the International Federation for Information Processing, which is established for a renewable period of six years, will become effective once the competent body of your organization has signified its acceptance of the obligations and advantages the relationship entails. Thereafter, the term "NGO in formal consultative relations with UNESCO" may be used to describe your organization's relations with UNESCO.
>
> UNESCO looks forward to a new period of close and fruitful partnership in our converging endeavours in the service of international co-operation and development.

In September, the **IFIP** Executive Board accepted the arrangement and reported it to the General Assembly in Canela, Brazil. As a result, **IFIP** is now one of only 80 NGOs with formal consultative relations with UNESCO.

In order to be so admitted to UNESCO, organizations "must have given proof of their ability to supply UNESCO, at its request, with competent advice on questions coming within their purview and to contribute effectively by their activities to the implementation of UNESCO's programme." Such organizations are required to keep the Director-General informed of relevant **activities,** keep their members informed of relevant UNESCO activities, give advice on and provide assistance to UNESCO programs, upon the Director-General's request, contribute to the UNESCO program, invite UNESCO representatives to their meetings, report on activities, and provide other services. These organizations may also submit written statements to the Director-General, address plenary meetings of the UNESCO General Conference, be invited by the Director-General to send observers to meetings organized by UNESCO, and be entitled to other benefits.

This acceptance by UNESCO was the result of extensive contacts made by **President Bauknecht** and **Mr. Plamen Nedkov,** the IFIP—UNESCO Liaison Officer. We congratulate them on their accomplishment and look forward to closer contact with the organization that sponsored the 1959 World Computer Congress, from which **IFIP** was born.

GREETINGS

At this time of holidays and the new year, we send greetings to all our readers and friends, wishing you joyful holidays and a year of peace, health, and happiness.

Nominations Solicited for Auerbach Award

Nominations are sought from presidents of **IFIP** Member societies for the prestigious **IFIP** Isaac L. Auerbach Award, which is presented during the World Computer Congresses "to the individuals whose service in support of **IFIP** in its mission is deemed by their peers to be extraordinary. The deadline for submission of nominations for the 1998 Award is 31 January. For information about this award, please see the June 1997 ***IFIP*** *Newsletter,* page 6, and for information about the nomination process, contact the **IFIP** Secretariat.

CONTENTS

Closer UNESCO/IFIP Relationship	1
Nominations for Auerbach Award	1
INTERACT '97 Conference Held	2
Namur Award to Prof. Gunilla **Bradley**	3
Summary of TC7	4
General Assembly Meets in Brazil	6
IFIP Publications	7
Prof. Pan Keynote Speaker at WCC'98	8
Strategic Planning	8
PROLAMAT Conference in 1998	9
New Officers and Chairs	9
New Form of **IFIP Membership**	10
IFIP Supporters	10
Outstanding Service Awards	10
WG1.4 Scholarships	11
IFIP PowerPoint Presentation Available	11
National Abbreviations	3
Calls for Papers	12
Future **IFIP** Meetings	12
Calendar of Events	16

IFIP NEWSLETTER

Editor:

Dr. Jack L. Rosenfeld
IBM Journal of Research and Development
T.J. Watson Research Center
P.O. Box 218
Yorktown Heights, NY 10598-0218, U.S.A.
telephone: 1 (914) 945-2362
facsimile: 1 (914) 945-2018
Internet: rosenj@watson.ibm.com

Published quarterly by

IFIP Secretariat
Hofstrasse 3
A-2361 Laxenburg, Austria
telephone: +43 2236 73616
facsimile: +43 2236 736169
e-mail: ifip@ifip.or.at

CORRESPONDENTS

TC2 R.K. DeBry (USA)
TC3 B. Samways (GB)
TC6 D. Khakhar (S)
TC7 J. Dolefal (CZ)
TC8 B. Glasson (AUS)
TC9 J.A.N. Lee (USA)
TC10 E. Dirkx (B)

Printed for **IFIP** by the courtesy of Chapman & Hall. ISSN 1024-8102

Please apply to the **IFIP** Secretariat, at the address given above, for copies of the ***IFIP*** *Newsletter* and to be added to (or removed from) the mailing list.

The Secretariat can also answer inquiries about **IFIP.**

The *IFIP* *Newsletter* may be reprinted, translated, and reproduced, in whole or in part, except for material specifically denoted as copyright protected. Reprinting in national and local information processing periodicals is encouraged. Acknowledgement to **IFIP** would be appreciated. In order to reprint material protected by copyright, apply for permission to the **IFIP** Secretariat, giving all pertinent details.

Kindly submit material for the *Newsletter* three months before the publication date.

Please send announcements of conferences, workshops, and other meetings directly to the Secretariat, which prepares the Calendar of Events. Calls for papers should be sent to both the Secretariat and the *Newsletter* editor.

IFIP on the Internet

IFIP information (including this *Newsletter)* is available through the Internet as follows:

anonymous ftp:
ftp.ifip.or.at

WWW:
http://www.ifip.or.at

INTERACT '97 Conference Was Held in Sydney in July

*by Ms. Judy Hammond (AUS)**

The **IFIP** Technical Committee on Human—Computer **Interaction** (TC13) held its sixth international conference, INTERACT '97, 16-18 July in Sydney, Australia. Hosted by the Australian Computer Society (ACS), INTERACT '97 signalled major changes, showing a marked increase in interest about HCI in countries that have not traditionally been active in the field, as well as the expansion of information technology (IT) into new areas of work and leisure by means of new, pervasive, powerful systems increasingly based on multimedia and the Internet. More than 300 participants, from 22 countries, attended. The proceedings, edited by **Dr. Steve Howard** (AUS), **Ms. Judy Hammond** (AUS), TC13 chair and INTERACT '97 Conference chair, and **Dr. Gitte Lindgaard** (AUS), were published by Chapman & Hall.

Mr. Tom Worthington, the ACS President, welcomed the delegates to Australia. In the opening session, the keynote speaker, **Dr. Lucy Suchman** (USA), reflected on the past ten years of developments in computing and HCI. She said that while interesting developments have unquestionably emerged during that time in terms of what people have characterised as non-human agency, critical issues remain. These issues have to do with the fundamental character of the problem of mutual intelligibility of action between people and machines, and the reliance of mutual intelligibility on participation in a social world not reducible to discrete abilities and skills. Her address focussed especially on the relation of everyday working practices to computer systems design and concluded that system design must include not only the design of innovative artifacts but also their artful integration with the rest of the social and material world.

Control of Devices by Brain Waves

Invited-speaker sessions offered unique perspectives highlighting cooperation between people and machines. For example, how many of us would like to be able to turn lights off or open garage doors by just thinking it? A team of researchers from the University of Technology (UTS) in Sydney, led by **Prof. Ashley Craig,** revealed how detection of certain EEG signals in the brain has made it possible for people to switch electrical appliances off and on by merely blinking (which alters brain wave patterns). The second invited speaker addressed the social context of computer use. **Dr. Bruce Wilson,** Director of the Union Research Centre for Office Technology, Australia, described an applied participative approach that enabled worker expertise to be contributed effectively in large-scale organisational and technological change projects (such as business process re-engineering).

The Programme

The Conference programme, consisting of four parallel sessions with presentations by experts from all continents except Antarctica, included papers, panel sessions, which aroused considerable debate, new-technology demonstrations, a forum on positioning usability in organisations, and industry overviews. Posters, videos, exhibits by major HCI developers and hands-on interactive experiences created with leading edge systems and approaches were displayed throughout the conference. A full program of 14 tutorials and four workshops was attended by approximately 220 people. These one-day events addressed "hot" topics in HCI, often with a strong industry focus.

Nine HCI research post-graduate students were selected to participate in a one-day Doctoral Consortium prior to the Conference, in which students presented papers on their research and received critical advice and new insights from international **HCI** experts.

A novel competition challenged delegates to critique the Web site prototype of a fictitious company, searching for high-impact usability defects by observing users as they struggled with poorly designed Web pages (created especially for the competition). A portable usability laboratory was used, complete with computers, cameras, one-way window, and (of course) users.

* **TC13** chair and INTERACT '97 Conference Chair

continued on the following page

Prof. Gunilla Bradley to Receive the Fourth Namur Award

*by Prof. Louise Yngström (S)**

In 1989, **IFIP** Working Group 9.2, which is concerned with Computers and Society, decided to establish the Namur Award, to be made biennially for an outstanding contribution to the creation of awareness of the social implications of information technology (IT). Its purpose is to draw attention to the need for a holistic approach to the use of IT, in which the social implications have been taken into account.

Nominations for the 1998 Award were invited by public announcement in the ***IFIP*** *Newsletter* and international specialist journals, as well as on the Internet. The Namur Award Committee, whose members were chosen by and from the members of WG9.2, scrutinised the nominees and recommended a single candidate. This nomination was accepted unanimously during the WG9.2 meeting in January 1997. As a result, the fourth Namur Award will be made to **Prof. Gunilla Bradley,** Professor of Technology and Social Change at the Royal Institute of Technology in Stockholm, Sweden.

Former recipients of the Award are **Prof. Joseph Weizenbaum** (M.I.T., U.S.A.), **Dr. Riccardo Petrella** (head of the European FAST programme), and **Mr. Carlos-Alberto Afonso** (representative of the Alternex Community, Brazil). Details can be found on page 3 of the June 1996 ***IFIP*** *Newsletter.*

The Award, which consists of a commemorative plate and a certificate, will be presented at a ceremony in Namur, Belgium, in January 1998, in conjunction with the WG9.2 meeting.

Prof. Gunilla Bradley

Prof. Bradley is a pioneer of interdisciplinary research concerning IT and its impacts, and the interrelations between techniques, organisations, and humans. In her work, she has always refrained from fractionalising, in order to keep the holistic perspective, and she has never tired in her mission to put forward the human needs and possibilities in relation to IT structures.

Her internationally popular text book *Computers and the Psychosocial Work Environment* presents the essence of the research on the "psychosocial environment" that she originally outlined theoretically in her Ph.D. thesis in 1972 *(Women and Career)* and carried out nationally and internationally since then in enterprises and government organisations: sound psychosocial workplaces and environments produce viable and profitable services and products. Her work has influenced lawmakers to be aware of and to include in laws the psychological and social adaptation of work to human factors, and she has influenced scholars all over the world through lectures, conferences, and textbooks. Today, her work continues in a cross-disciplinary manner into comparing and analysing societal and psychosocial challenges in modern IT domains such as rural vs. suburban communities, and various interactive creative learning environments. She is dedicated to enlightening society to the needs for true human qualities in the IT era.

Since the early 1980s, she has held positions at Stockholm University, Stanford University (U.S.A.), the Royal Institute of Technology, the International Ergonomics Association, and the Swedish National Committee of Psychology. Lately, she has devoted much time to the Organisational Design and Management (ODAM) conferences, for which she was the general chair from 1992 to 1994.

Prof. Bradley also stands out as a role model for women in IT, encouraging researchers of many disciplines to follow their own directions, even though they may not be the fashions of the day. She has persistently stressed the needs and possibilities of all those women who historically, with batch systems, on-line systems with display terminals, and microcomputers, have made up the basic work force required for the development of today's and tomorrow's IT systems — this way empowering humans on all levels with the knowledge of what is needed to carry out human-oriented, viable, but also economically feasible, developments.

In the opinion of WG9.2, the work of **Prof. Gunilla Bradley** firmly supports the work and spirit of WG9.2, now and in the future. By offering this award to **Prof. Bradley,** we honour a woman who symbolises the persistence it takes to create better awareness of the social implications of IT.

* member of TC9 and WG9.2

continued from preceding page

INTERACT '97 Organisation

Most of the organisation work was conducted electronically. With members of the International Program Committee living in many parts of the world, and the 28 volunteer Technical and Organising Committee members residing in one New Zealand city and four Australian cities, e-mail and listserver facilities were invaluable. **Prof. Brian Shackel** (GB), the previous TC 13 chair, acted as Conference Advisor. INTERACT '97 received outstanding support from 14 industry sponsors and 8 Australian universities, as well as 20 cooperating professional societies in the world-wide HIC community.

INTERACT '97 was judged to be an overwhelming success by its participants, some of whom are already making plans to attend the next **IFIP** international HCI conference, INTERACT '99, to be held in Edinburgh, Scotland, 30 August — 3 September, 1999.

National Abbreviations Used in Newsletter

A Austria	GB or UK United Kingdom	PL Poland
AUS Australia	GR Greece	PRC China
B Belgium	H Hungary	RUS Russia
BR Brazil	I Italy	S Sweden
CDN Canada	IL Israel	SF or FIN Finland
CH Switzerland	IND India	SLO Slovenia
CZ The Czech Republic	J Japan	THA Thailand
D Germany	N Norway	USA U.S.A.
DK Denmark	NZ New Zealand	ZA South Africa
F France	P Portugal	

IFIP Technical Committee 7: System Modeling and Optimization

The **IFIP** Technical Committee on System Modeling and Optimization (TC7) was founded in 1972 at the initiative of **Prof. A.V. Balakrishnan** (USA), its first chair, who has remained very active in the TC until quite recently. His successors were **Prof. Josef Stoer** (D, 1979-1985), **Prof. Mario Lucertini** (I, 1985-1988), **Prof. Palle Thoft-Christensen** (DK, 1988-1995), and the current chair, **Prof. Peter Kall** (CH).

The TC deals with the computational aspects of modeling (or simulation) and optimization in areas such as meteorology, manufacturing (scheduling, supply, distribution of products, etc.), economics, public services (transportation, environment, etc.), aerospace, communications, and, of course, computer networks and computer systems themselves. Generally speaking, the scope of TC7 is two-fold: to foster the theoretical foundation of problems within the TC's concern and, based thereupon, to develop or improve solution methods and their implementations. Although similar work is carried out in various mathematical organizations, TC7 stresses the implementation of algorithms. The broadening of the TC's scope, as reflected by the increase in the number of Working Groups, corresponds to both the progress in theoretical research and the growth in the need for practical solutions. We cite here just a couple of examples of progress in the field:

• In discrete optimization (dealing primarily with discrete, as opposed to continuous, variables), the so-called "combinatorial explosion" remains, but we have learned to analyze special data structures and, taking advantage of this knowledge, develop efficient algorithms and implementations for various application areas.

• In decision support systems, it is necessary to carefully analyze the functional relations and types of optimization problems involved in particular application areas, in order to find stable and efficient solvers for them and thus to develop practical systems for the client. Those who remember the situation in this field 30 years ago know how cumbersome the introduction of these systems was. Now we know of successfully installed systems in various fields, such as planning chemical production, investment consulting, and energy production.

The TC holds a general Conference on System Modeling and Optimization every two years, the nineteenth of which will take place in Cambridge, U.K., in 1999. (The Organizing Committee chair is hoping to charge a low registration fee and thus attract more young people.) These conferences typically have approximately 250 participants; however, some have attracted over 400 people. The Working Groups (WGs) of TC7 organize some of the sessions at the general conferences as well as their own conferences.

The bulk of the TC7 work is carried out by its seven WGs, which are described below. The size and the level of activity of the WGs vary widely, and the topics they cover are very diverse. Furthermore, the expertise of the members ranges widely, from applied to theoretical, and their ages vary too. One area in which more diversity would be welcome is that of geography; in particular, greater activity in Asia would be welcome. Since 1990, the WGs have been involved in no fewer than 61 events — working conferences, workshops, and seminars, most of which have published proceedings — either as main sponsors or co-sponsors.

Some of these WGs enjoy a great deal of independence, adopting the position that they do not need the **IFIP** umbrella in order to pursue their activities. They occasionally publish their proceedings and other books with publishers other than the official **IFIP** publisher, and they are financially independent. However, **IFIP** considers them to be an asset to the Federation and encourages them to increase their ties with the other WGs in their own TC as well as with the other **IFIP** TCs.

WG7.1 on Modeling and Simulation (established in 1972) is concerned with the simulation of large and complex systems, and investigates topics such as modeling and identification (an area of statistics) methodology, simulation methodology, computer simulation languages, and interactive on-line computation. For complex environmental, biological, and societal systems, new techniques have been developed, based on pattern recognition methods, the finite elements approach, and new database organizations.

The activities of WG7.2 on Computational Techniques in Distributed Systems (established in 1973) range from computational techniques in mechanics to applications in economics, biomedical engineering, and material science. Some recent topics have also included identification and optimal control of systems governed by partial differential equations, problems in elasticity and plasticity, and "smart" materials methodologies, e.g., spectral methods and wavelets.

WG7.3 on Computer Systems Modeling (established in 1973) is directed toward improving the art of analyzing and optimizing performance and costs of data processing systems through the use of analytical models. Its aim is to promote research in the area of performance evaluation of computer and communication systems by means of both mathematical and empirical methods. All aspects of computer and networking performance evaluation are considered, including mathematical models, measurement, and simulation.

WG7.4 on Discrete Optimization (established in 1986) deals primarily with fundamental issues of discrete mathematics, such as graph theory, finite algebras, polyhedral combinatorics, and discrete probability, and the WG develops the corresponding methodology, such as topological network design, network optimization, scheduling and routing, game theory, and combinatorial solutions of graph problems.

WG7.5 on Reliability and Optimization of Structural Systems (established in 1986) promotes optimization and reliability theory as applied to modern structural systems (e.g., bridges, dams, and oil platforms) and is concerned with, among other topics, the development of computational techniques for structural reliability and optimization problems, including techniques for optimal inspection and maintenance.

The scope of the activities of WG7.6 on Optimization-Based Computer-Aided Modeling and Design (established in 1989) encompasses computer-supported applications and implementations of sophisticated optimization techniques in such areas as engineering, management, industry, ecology, and medicine. In particular, modeling of complex information systems such as knowledge-based systems, decision-support systems, and expert systems, which include optimization or multi-criteria decision making, are within the focus of the WG.

WG7.7 on Stochastic Optimization (established in 1989) is primarily concerned with the solution of optimization problems involving, in an essential way, stochastic components (random variables or stochastic processes) as problem parameters. **In** order to have robust solutions with respect to random parameter variations, we must replace the original problem and its random data with an appropriate deterministic substitute problem. The main goal at present is to develop efficient numerical solution procedures, including the software. A second goal is the application of the resulting stochastic optimization techniques to concrete optimization problems from engineering and economics.

"In the future," says **Prof. Kall,** "we expect, on the one hand, a continuously ongoing activity of our Working Groups within the framework of their aims and scopes. At least in part, the discussion will turn to (very) large scale problems — to find adequate methods as well as sufficiently efficient implementations. Supercomputers will be of some help, but, for instance, solving during our lifetime a stochastic program with recourse having between 10^{40} and 10^{60} scenarios (as reported by the U.S. communication industry in 1994), or dealing with with portfolio selection problems modeled as multistage stochastic programs with as many scenarios goes beyond the possibilities of any machine; hence, we also need new mathematical ideas! On the other hand, we face the need to revise the TC7 mission, e.g., by incorporating subjects like discrete event systems and simulation, fractals and chaos, virtual reality and environments, and scientific visualization into the concern of our WGs."

IFIP TC7

Develops and applies sophisticated methods for system modeling and optimization for a variety of complex systems.

TC7 Chairman: Prof. Dr. Peter Kall
Position: Full Professor, Director of the Institute for Operations Research
Employer: University of Zurich
Location: Zurich, Switzerland
Interests: nonlinear and stochastic programming: theory and computational methods

TC7 Vice-Chairman: Prof. Irena Lasiecka
Position: Professor of Mathematics
Employer: University of Virginia
Location: Charlottesville, VA, U.S.A.
Interests: control theory, optimization, partial differential equations, computational techniques in distributed-parameter systems design, and simulation of computer architectures

---

Working Group 7.1: Modeling and Simulation Focused on large and complex systems arising in environmental, biological, and societal areas, and on the appropriate solution techniques.

WG7.1 Chairman: Prof. Arunabha Bagchi
Position: Professor of Mathematics
Employer: University of Twente
Location: Enschede, The Netherlands
Interests: simulation of complex systems, modeling techniques for large systems

Working Group 7.2: Computational Techniques in Distributed Systems Investigates optimization problems governed by distributed parameter systems, with emphasis on systems arising in mechanics, economics, biomedical engineering, geophysics, and material sciences.

WG7.2 Chairman: Prof. Irena Lasiecka
(See above.)

Working Group 7.3: **Computer Systems Modeling** Deals with all aspects of computer and networking performance evaluation, including mathematical models, measurement, and simulation.

WG7.3 Chairman: Prof. Richard. R. Muntz
Position: Professor and Chair of Computer Science
Employer: University of California at Los Angeles
Location: Los Angeles, CA, U.S.A.
Interests: computer performance evaluation, database systems, multimedia, data mining

Working Group 7.4: Discrete Optimization Studies theory, algorithms, and applications of discrete optimization.

WG7.4 Chairman: Prof. Dr. Uwe Zimmermann
Position: Professor of Applied Mathematics
Employer: Technical University of Braunschweig
Location: Braunschweig, Germany
Interests: linear and discrete optimization and its applications, e.g., in transportation and logistics problems

Working Group 7.5: Reliability and Optimization of Structural Systems Promotes modern structural system optimization and reliability theory and its applications in structural systems.

WG7.5 Chairman: Prof. Andrzej S. Nowak
Position: Professor of Civil Engineering
Employer: University of Michigan
Location: Ann Arbor, MI, U.S.A.
Interests: system reliability, structural reliability, bridges

Working Group 7.6: Optimization-Based Computer-Aided Modeling and Design Considers high-performance computer-aided systems to support modeling, decision analysis, optimization, and multicriteria decision making.

WG7.6 Chairman: Prof. Dr. Hans-Jurgen Sebastian
Position: University Professor of Operations Research
Employer: Aachen Institute of Technology (RWTH Aachen)
Location: Aachen, Germany
Interests: optimization in transportation, engineering design, and configuration, knowledge-based decision support systems, fuzzy sets in engineering and ecology

Working Group 7.7: Stochastic Optimization Takes into account random parameter variations in order to get more reliable solutions of optimization problems under stochastic uncertainty.

WG7.7 Chairman: Prof. Dr. Kurt Marti
Position: University Professor of Mathematics
Employer: Federal Armed Forces University, Munich
location: Neubiberg/Munich, Germany
interests: RSM-based stochastic approximation methods, robust design, stochastic optimization of robots, adaptive control under stochastic uncertainty

IFIP General Assembly Meets in Brazil

Bollerslev Is President-Elect

The 1997 **IFIP** General Assembly (GA) and the related committee meetings took place in Canela, near the southernmost tip of Brazil, 1-4 September, preceded and followed by other **IFIP** activities in the same geographical region. **Prof. Ricardo Reis,** the Brazilian representative to **IFIP** and an **IFIP** trustee, had organized the following events in order to benefit from GA members being in Brazil: lectures by **Prof. Wilfried Brauer** (D), an **IFIP** vice-president, the WG10.5 VLSI '97 conference, and meetings of TC10 and WG10.5, before the GA, as well as lectures by **Prof. Kurt Bauknecht** (CH), the **IFIP** president, and **Prof. Jean-Claude Laprie** (F), the new TC10 chair, following the GA. (In addition to overseeing all these activities, **Prof.** Reis had to cope with concerns for his young son, who broke his leg during the week of the GA meetings. At last report, both father and son were doing fine.)

The GA was officially welcomed by **Prof. Flavio Wagner,** vice-president of the Brazilian Computer Society, and **Prof. Tom Price,** Director of the Computer Science Institute of the Federal University of Rio Grande do Sul.

There were no momentous revelations during the GA. Probably, the most significant actions were the announcement that **IFIP** had been admitted into "formal consultative relations with UNESCO" (see the article on page 1), the report by the treasurer that **IFIP** assets had reached record levels and that the surplus for 1997 is expected to be between 100 and 150 thousand Swiss francs, and the election of new officers (page 9). No new Working Groups (WGs) were formed, although plans to dissolve several were discussed, and no major new technical initiatives were announced.

Financial Matters

The good financial news for 1996 — a surplus of 300 000 Swiss francs (300K CHF) — had been announced at the Council meeting in March. For 1997, a surplus of 100K-150K CHF is expected, although the 1997 budget anticipated a loss of 13K CHF. This discrepancy occurred fundamentally because royalties were higher than expected (primarily owing to the strength of the British pound, in which the royalties are paid) and expenses of the Secretariat were lower than anticipated. (Great satisfaction was expressed with the economical way in which the Secretariat is run.)

Along with this very good news, the **IFIP** treasurer, **Prof. Dipak Khakhar** (S), mentioned a couple of areas of concern. Proceeds of technical events sponsored by the **IFIP** Technical Committees (TCs) are below the expected amounts, primarily because **IFIP** does not have a mechanism for collecting the sums agreed upon from the organizers of the events. Also, the 100K CHF that the organizers of the 1996 World Computer Congress in Canberra agreed to pay **IFIP** when they made their bid to host the Congress have not been received. (The Congress did lose money.) It is hoped that they will eventually pay the amount due, a bit at a time. It was also reported that the recent return on **IFIP** assets (approximately 3.4%) is lower than reasonable. Part of the problem is that the assets are invested almost entirely in Swiss bonds that pay a low interest rate (and involve very low risk), and much more than is necessary is kept in cash rather than income-earning financial instruments. **Mr. Jose Granado** (P), chairman of the Finance Committee, announced that the investment portfolio would be changed so as to include one or more currencies in addition to the Swiss franc and that a cash-flow plan and projection would be instituted in order to enable **IFIP** to invest more of its cash in income-producing securities. A return of 4.5% seems possible.

Prof. Tom Price welcoming GA.

The GA approved a budget for 1998 that calls for a surplus of approximately 50K CHF. The GA also endorsed a proposal to institute a supplementary pension plan for the Secretariat staff, retroactive to the time of their initial employment.

New Officers and Members

Dir. Peter Bollerslev (DK) was voted president-elect. The list of new officers and committee chairs can be found on page 9.

Prof. Asbjørn Rolstadås (N), president of **IFIP** from 1992 to 1995, was unanimously elected Honorary Member by the GA. (Although he is no longer active in **IFIP, Prof. Rolstadås** is president of the Norwegian Computer Society once again.)

In addition, New Zealand was readmitted as a Member of **IFIP.** It had withdrawn from the Federation in 1991 because, at that time, it could not afford the expenses entailed.

The **IFIP** secretary, **Mr. Graham Morris** (GB), reported that Armenia and Belarus, admitted to Membership in 1995 and 1994, respectively, have yet to assume Membership by being represented at a GA and paying the designated dues. In addition, Ireland and Russia have lost voting rights, Albania, Greece, and Tunisia are suspended, and Nigeria will soon be expelled because they owe back dues.

Other Matters

As usual, the World Computer Congresses (WCCs) were the object of much discussion. In reporting on the 14th WCC, held in 1996 in Canberra, **Prof. Ashley Goldsworthy** (AUS), chair of the Organizing Committee, mentioned two lessons learned: that the International Program Committee should have more representation from the host society, since typically 2/3–3/4 of the participants are from the local area, and that **IFIP** should take some financial risk in its Congresses. Information about the 15th WCC, to be held in 1998 in Vienna and Budapest, can be found on page 8. Concern was raised about the 16th WCC, to be held in 2000 in Beijing, since the representatives of the Organizing Committee did not appear in Canela until late in the final session, because of visa problems, and both **Dr. Bruce Shriver** (USA), the designated chair of the International Program Committee for the Congress, and **Mr. Howard Funk** (USA), designated vice-chair of the Organizing Committee, have resigned. **President-Elect Bollerslev** will be responsible for supervising the Congress.

Dr. Walter Grafendorfer (A), then chair of the Activity Management Board

(AMB), reported that 74 **IFIP** technical events were scheduled for 1997 (as of 1 August), of which **IFIP** is the full or main sponsor of 2/3. This is a significant increase over the previous two years. He also announced that various documents related to event organization have been revised and are now available on the **IFIP** WorldWide Web site. He reminded the GA that events can be approved by TC chairs if there is no **IFIP** financial involvement; otherwise, AMB approval is required.

The TC Chairs Forum, comprising the TC chairs and the Technical Assembly (TA) chair (by invitation only), met for the second time. This informal body is designed to permit the TC chairs to discuss matters of mutual interest in an isolated environment. At this meeting, the Forum prepared lists of items to be discussed by each of the committees with which the TC chairs met. Everyone involved felt that the Forum, created at the March Council meeting in Bratislava, is a valuable mechanism. It is gratifying to observe that such an activity could be created without the need to modify the Statutes and Bylaws.

Other matters considered by the GA included the following:

• Outstanding Service Awards were granted (see the article on page 10).

• A proposal for an **IFIP** Cryptographic Policy was presented to the GA. (This will be included in a future *Newsletter.)*

• A new category of **IFIP** member, International Professional Society Member, was proposed (see page 10).

• Further discussion of a strategic plan for **IFIP** took place (see page 8).

• The TA discussed whether WGs should continue to include members who do not belong to **IFIP** Member societies. The primary argument in favor of permitting such members is that the WGs are then free to include the best professionals in their fields. The main argument for restricting membership is that this would encourage potential WG members to belong to their national computer societies.

• The TA formed a committee to propose new, innovative activities that might use some of the **IFIP** surplus for constructive work. Projects of benefit to Member societies or related to developing countries are especially favored. Suggestions are solicited and should be sent to **Dr. Jack Rosenfeld** (USA), whose address is in the masthead on page 2.

• The Executive Board recommended that no TA be held in conjunction with the March Council meetings; however, as a result of the opposition of the TC chairs, the GA rejected this proposal.

• The activity of the task force on the Harmonization of IT Professional Standards was discussed. A large majority of the GA were in favor of the project continuing. The Executive Board decided to transfer the implementation of the project to TC3 on Education and to fund the first phase of the project: preparing and sending a survey form to all **IFIP** Member societies about their IT-professional standards, analyzing the response, and sending out the conclusions for comment.

• The IFIP/UNESCO curriculum on Informatics for Secondary Education, prepared by TC3, is now out of print but available on the Web at

(http://www.ge-dip.etat-ge.ch/cip/unesco/welcome.html).

• TC2 on Software: Theory and Practice plans to organize an advisory board to assess the relevance of its work. The TC2 WG on Programming Methodology plans a two-week lecture program in South Africa in 1998.

• Concerns were voiced with regard to the viability of TC12 on Artificial Intelligence.

• The very high registration fee (1600 CHF) for the 1997 TC 11 conference on Information Security was noted with concern.

• CEPIS (Council of European Professional Informatics Societies), an Affiliate Member of **IFIP,** expressed a willingness to offer its European Computer Driving License program (see the June 1996 ***IFIP*** *Newsletter,* page 9) to **IFIP** Member societies outside of Europe.

Prof. Flavio Wagner welcoming GA.

• No progress was reported with regard to IFIP's lengthy effort to gain membership in ICSU, the International Council of Scientific Unions (see the article on page 10 of the December 1995 *Newsletter).*

continued on page 12

Publications Discussed by General Assembly

As usual, **IFIP** publications were a main topic of discussion at the September General Assembly (GA) in Canela, Brazil. **Dr. Roger Johnson** (GB), chair of the Publications Committee (PC), reported that ISBNs (International Standard Book Numbers) can now be provided by the **IFIP** Secretariat for publications not being handled by Chapman & Hall (C&H, the **IFIP** publisher) or other publishers. This is the first step toward implementing the plan for publishing conference proceedings that are deemed by C&H to have sales insufficient to cover the cost of marketing (see the article on page 11 of the December 1996 ***IFIP*** *Newsletter).* The Secretariat can provide further information concerning the process to be used in requesting ISBNs. No decision has been reached with regard to the name to be given the series of books published under this plan.

Mr. Mark Hammond reported for C&H that 36 **IFIP** books will be published this year. Sales for current books are better than the plan calls for; however, sales for older books are half of what was expected, which will probably result in a failure to reach a level of profitability the publisher finds acceptable. (Nevertheless, the royalty income that **IFIP** receives compares well with what has been received in the past.) The best-selling **IFIP** book in 1996 was *Distributed Platforms,* edited by **Prof. Alexander Schill (D).** So far, the 1997 leader is *Integrated Network Management,* edited by **Aurel Lazar** (USA) and **Roberto Saracco (I). Mr. Hammond** reminded the GA of the increase of the discount on **IFIP** publications that C&H offers to all members of **IFIP** Member societies to 35%. Negotiations are now under way for the renewal of the contract between **IFIP** and C&H.

Some TC chairs expressed their unhappiness with the publisher's policy of not refunding the cost of unused conference proceedings that the conference organizers wish to return. **Mr. Hammond** pointed out that because C&H is generally able to deliver, at short notice, copies of the proceedings ordered after the initial orders have been placed, it is to the advantage of the organizers to be conservative in their initial orders and subsequently to request additional copies once they have better estimates of the number of participants attending the conferences. A suggestion was made that C&H establish a

continued on page 11

Professor Yunhe Pan: a Keynote Speaker at 15th World Computer Congress

Changes to Congress Plans Are Announced

We are pleased to announce that **Prof. Yunhe Pan** will be a keynote speaker for the 15th World Computer Congress **(IFIP** Congress '98, to be held in Vienna and Budapest 31 August — 4 September 1998). The selection of the other three keynote speakers was reported in an article on page 1 of the September ***IFIP*** *Newsletter.*

Prof. Pan is the President of Zhejiang University and head of its Artificial Intelligence and Industrial Design Institutes. He is a member of the Science and Technology Commission and the State Education Commission and the director of the China Computer Association and the China Artificial Intelligence Association. He is on the editorial board of five journals.

He was born in Hangzhou, the People's Republic of China, in 1946. He obtained the B.Sc. degree from Tongji University in 1970 and the M.Sc. degree from Zhejiang University in 1981. He has served as the head of the Automation Research Institute at Xiangfan City, Hubei Province, the vice-director of the Science Commission at Xiangfan, a vice-president of Zhejiang University, and a director of its Computer Science Department. From 1986 to 1988, he was a visiting scholar at the University of California in Los Angeles and Carnegie Mellon University.

Prof. Pan, the recipient of 10 state awards, has over 120 publications to his credit. He and his research group have completed approximately 15 national research projects.

Further Congress Information

During the September **IFIP** General Assembly, **Dr. Walter Grafendorfer** (A) and **Mrs. Maria Toth** (H), co-chairs of the Organizing Committee, reported the following news:

- Over 600 people, from 61 countries, had requested information: 84 from Austria, 78 from Germany, 54 from the U.S., and 46 from the U.K. — but only 14 from Hungary and 9 from Japan.
- The tutorials, to be held preceding and following the regular Congress program, will be offered at a very nominal fee (if any) to Congress registrants.
- Abstracts of all accepted papers will be available to everyone on the WorldWide Web prior to the Congress. Full papers will be available on the Web to all registrants. (A password will be provided.)
- Instead of the proceedings being published and marketed by Chapman & Hall, the **IFIP** publisher, they will be published by the Austrian Computer Society, for distribution to the participants. (The proceedings of one of the component conferences, SEC'98, *will* be published by C&H.) All Congress participants will also receive a CD-ROM, donated by SONY DADC, Austria, containing the proceedings of all of the conferences.
- The original plan to have all Congress participants travel by boat from Vienna to Budapest on the Wednesday of the Congress week has been modified, in order to reduce the travel time to a reasonable amount, and now combines train and boat travel between the cities.

Further information about the Congress can be found on the WorldWide Web at

http://www.ocg.or.at/ifip98.html or
http://www.njszt.iif.hu/ifip98.html

or from the two host societies:

Austrian Computer Society
Wollzeile 1-3
A-1010 Vienna, Austria
tel: + 43 1 5120235, fax: + 43 1 5120235 9
e-mail: ifip98@ocg.or.at

and

John v. Neumann Computer Society
Bathori u. 16
H-1054 Budapest, Hungary
tel: +36 1 3329 390 or +36 1 3329 349
fax: +36 1 3318 140.
e-mail: ifip98@neumann.hu
http://www.njszt.iif.hu

Little Action Was Taken by the General Assembly with Regard to Strategic Planning

Little action was taken at the September General Assembly (GA) in Canela regarding the strategic planning process initiated by the 1996 GA, which commissioned a Strategic Planning Committee, headed by **Prof. Ashley Goldsworthy** (AUS), an **IFIP** vice-president, to make recommendations on issues concerning the future strategic directions of **IFIP.** In order to move the strategic planning process forward in Canberra, the entire GA devoted an afternoon to a "brainstorming" session that resulted in a list of "visions" for the future of **IFIP. Prof. Goldsworthy's** committee was to take these visions into account during its future deliberations. In the March 1997 Council meeting in Bratislava, the following three objectives were agreed upon:

1. Identify the three most important needs of Member societies that should be satisfied by IFIP, (The IFIP president would write to solicit suggestions from the Member societies.)
2. Ensure that within IFIP there are internationally recognised technical bodies to address the most important and leading-edge issues in information technology (IT).
3. Develop and conduct a range of conferences that are seen as leading edge in their specific fields, and establish IFIP as a leading source of IT publications worldwide.

A working group reported back to the Bratislava Council with a proposal that included formation of a group to initiate new conferences. The Council approved their plan; however, no action has been taken on this proposal so far. Other working groups were to make proposals a month later with regard to the other issues.

At the 1997 GA, **Prof. Goldsworthy** presented a progress report in which he said that little had been learned from the responses of the Member societies to the president's request for suggestions.

IFIP Services

A working group concerned with establishing **IFIP** as a source of services made the following suggestion.

We propose:

1. an IFIP electronic shop in which products (such as books and journals), whether from IFIP or Member societies, can be offered for sale to the wider informatics community...;
2. a conference diary (together with a separate Call for Papers diary) to which all Member societies can post entries for any event of international interest, with URLs whenever possible...;

continued on page 11

Conference on the Globalization of Manufacturing Will Be Held in Italy in 1998

The ninth PROLAMAT conference will expand the traditional design and manufacturing issues of this conference series to include the concept of teams and virtual enterprises that come together in space and time to develop new products and bring them to global markets. Manufacturing issues and information models have long been part of concurrent engineering; they are increasingly important in new-product innovation and in the development of manufacturing plans and processes that span multiple companies and multiple time zones.

The PROLAMAT conferences are international events, well known for demonstrating and evaluating activities and progress in the field of discrete manufacturing. Traditionally held every three years, they cover the entire area of advanced software technology for design and discrete manufacturing. PROLAMAT '98 will be held in Trento, Italy, 9-11 September 1998. It will be sponsored by the **IFIP** Working Groups on Computer-Aided Design (WG5.2) and Computer-Aided Manufacturing (WG5.3). **Prof. Gianni Jacucci** (I) is Conference chair, and **Mr. M. Marchese (I)** is chair of the Organizing Committee.

The Conference will be based on three tracks, as follows.

Track 1 — *Sharing experience from telecommunication use in industry for agility and innovation:*
Globalization of product opportunities and manufacturing processes, along with advances in digital communications, are enabling and demanding agility and rapid enterprise innovation. A number of industries have been driven to exploit emerging telecommunication technologies as an important tool for meeting these demands. A major goal of PROLAMAT '98 is to complement the more traditional academic presentations with this separate track devoted to sharing industrial experience and determining the implications of emerging digital communications for discrete manufacturing in the 21st century.

Track 2 — *Human and machine communications, modeling, standard representations, reuse:*
People, not machines, design new products and make manufacturing systems work. Increasingly, groups of people are required to design new products and bring them to market. Requirements for agility and the suitability of specific manufacturing processes must be matched with the culture and knowledge base of the work force. World class processes have floundered when this was not done. Information and communication systems can either amplify or reduce the magnitude of differences across cultures or engineering disciplines. Researchers specializing in knowledge representation, modeling, communications, standardization, and reuse are invited to share their experiences and research perspectives.

Track 3 — *The impact of telecommunication and agility on software technology for discrete manufacturing:*
Even in today's post-industrial information society, machines — not people — ultimately make the products that humans have designed and will use. Digital telecommunication has become an enabling technology for agile organizations and an important tool driving some enterprise innovation. What are the implications of these profound changes in communication technology for discrete manufacturing? Which old assumptions must be rethought, and what totally new opportunities now exist? How have software tools for discrete manufacturing evolved during these past three years? The Conference as a whole, and this track in particular, will attempt to answer these far-reaching questions.

For further information, one may contact

Mara Gruber
Laboratorio di Ingegneria Informatica
via F. Zeni, 8
38068—Rovereto (TN), Italy
e-mail: prolamat@lii.unitn.it
tel: +39.464.443.134 or +39. 464.443.140
fax: +39.464.443.141
http://www.lii.unitnit/prolamat/

IFIP COUNCIL

Executive Board

K. Bauknecht	President	CH 95-98
P. Bollerslev	Pres.-Elect	DK 97-98
A.W. Goldsworthy	Vice-Pres.	AUS 95-98
W. Brauer	Vice-Pres.	D 95-98
C. Guy	Vice-Pres.	ZA 97-00
W. Grafendorfer	Vice-Pres.	A 97-99
G.J. Morris	Secretary	GB 96-99
D. Khakhar	Treasurer	S 96-99

Trustees

M. Gottlieb	IL	95-98
R. Johnson	GB	95-98
R. Reis	BR	96-99
X. Yan	PRC	96-99
J. Granado	P	97-00
R. Aiken	USA	97-00
M. Goyal	IND	97-00
T. Miura	J	97-98

New Officers and Chairs Chosen in Brazil

The following new officers were elected by the September **IFIP** General Assembly in Canela, Brazil:

President-Elect:
Dir. Peter Bollerslev (DK)

Vice-Presidents:
Mr. Christopher Guy (ZA, 3-year term)
Dr. Walter Grafendorfer (A, 2 years)

Trustees (3-year terms):
Mr. Jose Granado (P)
Prof. Robert Aiken (USA)
Dr. Mohan Goyal (IND)
Dr. Takeo Miura (J, 1 year)

The following individuals were appointed by **Prof. Kurt Bauknecht** (CH), president of **IFIP,** to chair **IFIP** bodies:

Technical Assembly:
Prof. Wilfried Brauer (D)
Activity Management Board:
Prof. Robert Aiken (USA)
Admissions Committee:
Prof. Xiaolang Yan (PRC)
Congress Committee:
Mr. Christopher Guy (ZA)
Developing Countries Support Comm.:
Dr. Mohan Goyal (IND)
Finance Committee:
Mr. Jose Granado (P)
Internal Awards Committee:
Mr. Graham Morris (GB)
Marketing Committee:
Mr. Moshe Gottlieb (IL)
Nominations for Officers:
Mr. Graham Morris (GB)
Nominations for Trustees:
Prof. Ricardo Reis (BR)
Publications Committee:
Dr. Roger Johnson (GB)
Statutes and Bylaws Committee:
Prof. Pierre Bobillier (CH) ■

TECHNICAL COMMITTEE CHAIRMEN

TC1:	G. Ausiello	97-99
TC2:	R. Kurki-Suonio	FIN 97-00
TC3:	B. Samways	GB 97-99
TC5:	G. Doumeingts	F 96-99
TC6:	0. Spaniol	D 92-97
TC7:	P. Kall	CH 95-98
TC8:	B. Glasson	AUS 96-98
TC9:	P. Jaervinen	FIN 96-98
TC10:	J.-C. Laprie	F 96-99
TC11:	B. von Solms	ZA 94-98
TC12:	B. Neumann	D 97-00
TC13 :	J. Hammond	AUS 95-98

New Form of **IFIP** Membership Proposed

International Professional Society

*by Dr. Bruce Shriver (USA) **

The nature of **IFIP** and its mission as well as those of numerous professional societies have changed since their creation. Some professional societies have remained national in scope; others have become regional in scope; while others have become truly international in scope. **IFIP** cannot, nor should it, compete with these organizations, but it should complement their missions in service to the worldwide computing community.

I propose that the **IFIP** General Assembly (GA) consider the creation of a new category of membership: the International Professional Society (IPS) Member, the qualifications for which should be determined by the GA. IPSs should be full **IFIP** members, with seats on the GA, paying full dues, appointing Technical Committee (TC) representatives, and so on. IPS membership should be advertised internationally, and societies should be invited to apply through **IFIP's** Admissions Committee.

At present, **IFIP** Full Members are individual professional societies, national academies of science, or federations of diverse specialty professional societies (in some cases having been formed solely for the purpose of maintaining Membership in **IFIP).** What I believe is needed now is a new organizational form that recognizes the existence of truly international, individual-member professional societies: the IPS.

What Is an IPS?

An International Professional Society has the following characteristics:

- It has a significant number of its members, both as a percentage and as an absolute number, in many countries worldwide.
- It provides, on an ongoing basis, a number of its services, both as a percentage and as an absolute number, in many countries worldwide.
- It has international representation on its governing boards, editorial boards, conference boards, and similar bodies.

One example of an organization that might qualify as an IPS is the U.S. IEEE (Institute of Electrical and Electronics Engineers) Computer Society, which has 100,000 members, 40% of which are non-U.S. members, in 147 countries. It holds 122 conferences annually, of which 31 are non-U.S. Another example is the U.S. ACM (Association for Computing Machinery), with 83,000 members, of which 30% are non-U.S., in 121 countries. It holds 142 conferences annually, of which 44 are non-U.S. The British Computer Society and some Japanese societies might also be considered IPSs.

Alternatives

An alternative to full Membership in **IFIP** might be Affiliate Membership, with no seat on the GA and no other voice in governance, which would be inappropriate for organizations that represent so many of the world's computer professionals. Another possibility would be related to a previous proposal for multiple Memberships from one country. This too would be inappropriate for IPSs, which are international — not national — societies, even though they have their headquarters in one country.

Consequently, I request that the GA consider establishing this new category of IPS Member.

[The preceding is the text of a presentation made to the September GA in Canela, following which the president, **Prof. Kurt Bauknecht** (CH), appointed a committee to consider the proposal and report back to the March 1998 Council in Manchester, England, and the September GA in Budapest, Hungary. Among the questions that this committee will surely consider are the following:

- What should be the qualifications for an IPS Member (size, composition, international makeup, etc.)
- What rights and responsibilities should an IPS Member have within **IFIP?**
- What dues should an IPS Member pay?
- If a society that is presently an **IFIP** Member became an IPS, would there be any other society in the country able to represent the country in **IFIP,** and interested in doing so?
- Would the present Affiliate Members of **IFIP** qualify as IPSs?

These questions are related to the ones raised with regard to the proposal concerning multiple Members from one country, considered at the 1996 GA in Canberra (see the article on page 5 of the December 1996 ***IFIP*** *Newsletter).* **Prof. Bauknecht** wrote all Members to solicit their views about multiple membership, in preparation for a discussion at the 1997 GA. The responses were roughly evenly divided between those favoring single and those favoring multiple memberships. The issue of multiple memberships was not raised at the 1997 GA. — Editor] ■

• former chair of the U.S. Member society in **IFIP** and vice-chair of the International Program Committee for **IFIP** Congress '98

IFIP *Supporters Are Recognized*

Because of their generous financial support of the 1998 World Computer Congress, the following institutions are gratefully recognized as **IFIP** Supporters:

Austrian Federal Ministry for Science and Transport

Hungarian Ministry for Culture and Education

City of Vienna

Oracle Corporation

Vienna Tourist Board

Outstanding Service Awards Bestowed

In September, the **IFIP** General Assembly (GA) voted to grant Outstanding Service Awards to six **IFIP** volunteers. The Awards are granted for services rendered to **IFIP** by Technical Committee (TC) and Working Group (WG) members, on recommendation of the TC chairman and approval by the Internal Awards Committee. Eligible for nomination are TC and WG members not normally eligible for the Silver Core Award. The following were so recognized:

TC9: **Ms. Diane Whitehouse (GB)**
TC 11: Prof. Reinhard Posch (A)
Dr. Willis Ware (USA)
Mr. John Beatson (NZ)
Mr. Willie List (GB)
Mr. Jan Carlsen (DK) ■

IFIP WG1.4 Scholarships

*by Prof. Carl Smith (USA)**

An article in the June *IFIP Newsletter* (page 6) discussed **IFIP** awards, including the prizes given by the **IFIP** Working Group on Computational Learning Theory (WG1.4) to student authors from economically disadvantaged countries. The $500 (U.S.) awards are intended to assist the students in defraying travel costs to attend scientific conferences. This article gives further information about our experience.

The first award was made to **Juris Smortrovs,** from the Institute of Mathematics and Computer Science of the University of Latvia, for his paper "Closedness Properties in Team Learning of Recursive Functions" at the EuroCOLT meeting in Israel in March. The selection of the recipient was easy, as the paper by **Smortrovs** was ranked very highly by the program committee, and the paper had their unanimous support. The WG1.4 decision was also unanimous.

We had a very different experience with the second award, to be given at the COLT meeting in July. There were no student authors from disadvantaged countries who had papers accepted. We discussed giving the award to a nonstudent from a disadvantaged country or to a student from a nondisadvantaged country. In the end, we decided not to give an award.

There were student authors from disadvantaged countries of two papers accepted for the ALT meeting in Japan in October. The program committee took a vote on the two papers and advised the WG, which agreed without dissent and made the award to **N.V. Vinodchandran** of the Institute for Mathematical Sciences in India for his paper with **V. Avind.**

We hope to continue this program in the future. ■

* chairman of WG 1.4

PUBLICATIONS continued from page 7

pricing scheme that would provide financial incentives to those organizers willing to agree to a no-returns policy but allow others to return unused books for a refund.

Once more, electronic publication (EP) was discussed. Despite the importance of EP to **IFIP** [see the articles in the December 1996 ***IFIP*** *Newsletter* (page 11) and the September 1997 issue (page 6)], no plans have been formulated by **IFIP.** Instead, the PC is encouraging C&H to take the initiative in behalf of **IFIP.** One **IFIP** book is now available on the WorldWide Web (see page 5 of the September *Newsletter),* and C&H plans to put additional books on-line and to monitor the impact of this on the sales of the books.

Other publication matters discussed in Canela included the following:

- The camera-ready copy of only one out of four **IFIP** conferences is delivered by the editors to C&H on time.
- The high cost of C&H books was raised, and it was pointed out that large, nonprofit organizations like the U.S. IEEE are able to publish low-cost books because they pay no royalties and are able to advertise these books for free in their magazines.
- The GA agreed to guarantee payment to C&H for proceedings of conferences in which the organizers are late in payment, for one reason or the other. ■

STRATEGIC PLANNING continued from page 8

3. IFIP could offer to publish books for Member societies...;
4. IFIP to maintain lists of e-mail lists available within IFIP Member societies, which could be used by other Member societies to publicize events, publications, etc.;
5. IFIP to maintain a worldwide list of special interest groups, together with URLs and/or e-mail addresses, again for publicity purposes.

We believe these and other similar simple schemes would provide real "worldwide added value" by IFIP to its Member societies.

Monetary issues were also addressed. No action was taken by the GA on this proposal. Another working group presented a report with few specifics.

Prof. Goldsworthy closed his written report with the following: "we really need to progress these matters with some expedition. We must convert the Action Plan into some action if we hope to achieve the Vision we have set ourselves." Unfortunately, no action was taken. ■

IFIP PowerPoint Presentation Is Now Available

A nine-slide PowerPoint* presentation about **IFIP** is now available on the Internet. This presentation, which displays facts about IFIP's organization and activities, can be downloaded from the **IFIP** Web home page at

http://www.ifip.or.at

or directly from ftp at:

//ftp.ifip.or.at/pub/presentation/pres.html

One can easily tailor the presentation so as to retain the basic information on **IFIP** and its activities yet include new slides for **IFIP** Member societies, Technical Committees, Working Groups, or whatever else one wishes to include. The result can serve as a useful marketing tool during technical events and exhibits. **IFIP** volunteers are encouraged to download, improve, and enhance it as appropriate. ■

* PowerPoint is a Microsoft PC program that displays "slides" on the PC monitor.

CALLS FOR PAPERS

Seventh IFIP/ICCC Conf. on Information Networks and Data Communications — INDC'98
15-17 Jun 98, Aveiro, **Portugal**
papers due: 9 Jan 98
contact: Prof. Dr. Jose Ruela
INESC
Pr. da Republica, 93
4000, Porto, Portugal
tel: +351 2 209 42 36
e-mail: jruela@inescn.pt

15th **World Computer Congress (IFIP Congress '98)**
31 Aug — 4 Sep 98, Vienna, Austria, and Budapest, Hungary
papers due: 16 Jan 98
(for all component conferences)
contact: (see the article **on** the Congress on page 8)

Twelfth **IFIP** WG11.3 Work. Conf. on **Database Security**
15-17 Jul 98, Chalkidiki, Greece
papers due: 10 Mar 1998
contact: Prof. Sushil Jajodia
Mail Stop 4A4
George Mason University
Fairfax, VA 22030-4444, U.S.A.
tel: +1 703-993-1653
fax: +1 703-993-1638
e-mail: jajodia@gmu.edu
http://www.isse.gmu.edu/ csis/faculty/jajodia.html

Will event organizers please **send** calls for papers to both the **IFIP** Secretariat and the *Newsletter* editor. Note that calls cannot be listed in this column until the events have been approved by **IFIP.** ■

GA continued from page 7

• The Council voted to abolish the Council meetings held in conjunction with the GA, since these meetings are, in general, very brief and consider little more than approving the minutes of the preceding Council meeting and deciding where to hold future Council meetings.

• It was pointed out several times **how** well the Secretariat is functioning.

President Bauknecht adjourned the GA with many thanks to the Brazilian hosts. The facilities were ideal, the supporting staff was very helpful and cordial, and the hospitality was lavish. (Although the hospitality far exceeded the **IFIP** guidelines, nobody was heard to complain!) ■

FUTURE IFIP MEETINGS

GENERAL ASSEMBLY AND COUNCIL (and related meetings)

Council	1-5 Mar 98 (Sun.—Thurs.)	Manchester, U.K.
GA	5-8 Sep 98 (Sat.—Tues.)	Budapest, Hungary
Council	28 Feb — 4 Mar 99 (Sun.—Thurs.)	New Delhi, India (tentative)
GA	5-9 Sep 99 (Sun.—Thurs.)	Kuala Lumpur (Cyberjaya), Malaysia
Council	Mar 00	Rome, Italy (tentative)
GA	contiguous to **IFIP** Congress '00	Beijing, China

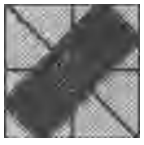
TECHNICAL COMMITTEE AND WORKING GROUP MEETINGS

TC1	29 Mar 98	Lisbon, Portugal
WG1.1	autumn 98	Berkeley, CA, U.S.A.
WG1.3	4 Apr 98	Lisbon, Portugal
TC2	12-13 Jun 98	Shelter Island, NY, U.S.A.
WG2.1	5-9 Jan 98	Oxford, U.K.
	Sep 98	Beijing, China
WG2.2	Jun 98	Shelter Island, NY, U.S.A.
WG2.3	Jun 98	Bloomington, IN, U.S.A.
WG2.4	Feb 98	Berlin, Germany
WG2.5	May or Sep 98	Patras, Greece
WG2.6	May 98	L' Aquila, Italy
	15-18 Dec 98	New Zealand
WG2.7/WG13.4	14-19 Apr 98	Los Angeles, CA, U.S.A.
WG2.9	Sep 98	Vienna, Austria, or Budapest, Hungary
	Jan 99	Dublin, Ireland
TC3	29-30 Aug 98	Vienna, Austria
	99	Copenhagen, Denmark
WG5.10	Jun 98	Hannover, Germany
TC6	3-4 Apr 98	Ladenburg, Germany
	24-25 Oct 98	Tunisia
	Apr 99	Copenhagen, Denmark
	3-4 Sep 99	Budapest, Hungary
TC7	21 Apr 98	Chemnitz, Germany
	12-16 Jul 99	Cambridge, U.K.
WG7.2	20-24 Apr 98	Chemnitz, Germany
	28 Apr — 1 May 98	Daytona Beach, FL, U.S.A.
	19-22 Jun 98	Hanghzhou, China
	17--21 Aug 98	Montreal, Canada
	31 Aug — 6 Sep 98	Moscow, Russia
WG7.5	11-13 May 98	Krakow, Poland
WG7.7	24-27 Mar 98	Neubiberg, Germany
	23-28 Aug 98	Prague, Czech Republic
TC8	29-30 Aug 98	Vienna, Austria
	99	Israel
WG8.1	15-17 Jul 98	Beijing, China
WG8.2	14 Dec 97 (with ICIS)	Atlanta, GA, U.S.A.
	10-12 Dec 98	Helsinki, Finland
	22-26 May 99	St. Louis, MO, U.S.A.
	May/Jun 00	Aalborg, Denmark
WG8.3	12-15 Jul 98	Bled, Slovenia
WG8.6	10-12 Dec 98	Helsinki, Finland
WG8.7	13 Dec 97	Atlanta, GA, U.S.A.
	Jan 98 (with HICSS)	Hawaii, U.S.A.
TC9	29-30 Aug 98	Geneva, Switzerland
WG9.2	10-11 Jan 98	Namur, Belgium
	6-7 Jun 98	Farnborough, U.K.
SIG9.2.2	11-12 Jan 98	Namur, Belgium
WG9.4	18-20 Feb 98	Bangkok, Thailand
WG9.5	26-28 Aug 98 (with HCC-5)	Geneva, Switzerland
TC 10	5 Sep 98	Budapest, Hungary
	30-31 Aug 99	Toulouse, France
WG10.4	Jun 98	Munich, Germany
	Jun 99	Madison, WI, U.S.A.
	Jun 00	New York, NY, U.S.A.
TC11	Sept 98	Vienna, Austria, or Budapest, Hungary
TC 12	Sept 98	Vienna, Austria, or Budapest, Hungary
WG13.4/WG2.7	14-19 Apr 98	Los Angeles, CA, U.S.A.

ESSENTIAL READING IN COMPUTER SYSTEMS TECHNOLOGY

Published by CHAPMAN & HALL on behalf of the

International Federation for Information Processing (IFIP)



Advances in Hardware Design and Verification

Edited by **H.F. Li and D.K. Probst,** both of the Department of Computer Science, Concordia University, Quebec, Canada

CHARME '97 is the ninth in a series of working conferences devoted to the development and use of formal techniques in digital hardware design and verification. This series is held in collaboration with IFIP WG 10.5.

Sept 1997: *234x 156: 330pp: 50 line illus: Hardback: 0-412-81330-0: £65.00*

Hardware Description Languages and their Applications

Specification, modelling, verification and synthesis of microelectronic systems

Edited by **C. Delgado Kloos,** Universidad Carlos III de Madrid, Spain and **E. Cerny,** University of Montreal, Canada

In the past few decades, Computer Hardware Description Languages (CHDLs) have been a rapidly expanding subject area due to a number of factors, including the advancing complexity of digital electronics, the increasing prevalence of programmable and generic components of software-hardware and the migration of VLSI design to high level synthesis based on HDLs. Currently the subject has reached the consolidation phase in which languages and standards are being increasingly used, at the same time as the scope is being broadened to additional application areas. This book presents the latest developments in this area and provides a forum from which readers can learn from the past and look forward to what the future holds.

Apr 1997: *234x* 156: 360pp: 98 *line illus: Hardback: 0-412-78810-1: £75.00*

VLSI: Integrated Systems on Silicon

R.A. Reis, Institute de Informatica, Universidade Federal do Rio Grande do Sul, Brazil and **L. Claesen,** IMEC/Katholieke Universiteit Leuven, Belgium

This book discusses the evolution of VLSI technology to the point where complete systems are integrated on a single chip: including ASICUs, embedded processing hardware and software control, analog and digital signal processing, sensors and actuators. The book presents innovative developments addressing the conception, design, CAD and realisation of such new systems.

Aug 1997: *234x 156: 584pp: Hardback: 0-412-82370-5: £120.00*

Software Engineering for Parallel and Distributed Systems

Edited by **I. Jelly,** Sheffield Hallam University, UK, **I. Gorton,** University of New South Wales, Australia and **P. Croll,** University of Sheffield, UK

A wide range of modern computer applications require the performance and flexibility of parallel and distributed systems. Better software support is required if the technical advances in these systems are to be fully exploited by commerce and industry. This involves the provision of specialised techniques and tools as well as the integration of standard software engineering methods. This book reflects current advances in this area, and addresses issues of theory and practice with contributions from academia and industry. It is the aim of the book to provide a focus for information on this developing field which will be of use to both researchers and practitioners.

Mar 1996: 234x 156: *352pp: 100 line illus: Hardback: 0-412-75740-0: £59.00*

Logic and Architecture Synthesis

Edited by **G. Saucier,** Institut National Polytechnic de Grenoble, France and **A. Mignotte,** Universite Claude Bernard, France

This book describes several methods and systems solving one of the highlighted problems within computer aided design, namely architectural and logic synthesis. The book emphasises the most recent technologies in high level synthesis, concentrating on applicative studies and practical constraints or criteria during synthesis. *Logic* and *Architecture Synthesis* concentrates on the practical problems involving automatic synthesis of designs. It is essential reading for researchers and CAD Managers working in this area.

Aug 1995: 234x 156: *408pp: 100 line illus: Hardback: 0-412-72690-4: £65.00*

Electronic Design Automation Frameworks

Edited by **F.J. Rammig,** University GH Paderborn, Germany and **F.R. Wagner,** Institute de Informatica, Universidade Federal do Rio Grande do Sul, Brazil

Design frameworks have become an important infrastructure for building complex design systems. Electronic *Design Automation Frameworks* presents a state-of-the-art review of the latest research results covering this topic; results which are also of value for other design frameworks. The book contains the selected proceedings of the Fourth International Working Conference on Electronic Design Frameworks, organized by the International Federation for Information Processing and held in Gramado, Brazil, in November 1994.

Jun 1995: 234x 156: 296pp: *100 line illus: Hardback: 0-412-71010-2: £65.00*

35% discount available to members of IFIP ffiliated societies}

Chapman & Hall
an imprint of
Thomson Science

Essential Reading in Human-Computer Interaction

Published by CHAPMAN & HALL on behalf of the International Federation for Information Processing (IFIP)

Human-Computer Interaction

INTERACT '97

Edited by **S. Howard,** School of Computer Science and Engineering, Swinburne University of Technology, Victoria, Australia, **J. Hammond,** School of Computer Sciences, University of Technology, Sydney, New South Wales, Australia, **Gitte Lindgaard,** Gitte Lindgaard and Associates, Australia

This is the proceedings of the TC13 flagship conference, held biennially. It reflects the state-of-the-art in HCI in 1997. It covers a broad range of the most important developments in HCI, focusing on international issues in theory, interface tools and architecture, HCI applications and HCI development issues.

- **presents the state-of-the-art in HCI**
- **will be of interest to everyone involved in the introduction of IT**

July 1997: 246x 173: 736pp: *302 line illus*
Hardback: 0-412-80950-8: £115.00

Human-Computer Interaction

INTERACT '95

Edited by **K. Nordby,** Telenor Research, Kjeller, Norway, **P. Helmersen,** Telenor Research, Kjeller, Norway, **D.J. Gilmore,** Department of Psychology, University of Nottingham, UK, **S.A. Arnesen,** Telenor IT, Lillehammer, Norway

This book provides one of the best currently available overviews of human-computer interaction across different cultures, disciplines and countries. It contains the selected proceedings of Interact '95 - the Fifth International Conference on Human-Computer Interaction - arranged by the International Federation for Information Processing and held in Lillehammer, Norway, in June 1995.

- **the first publication to solicit papers explicitly on case studies, application and practice - fully hands-on approach**
- **authors from many different cultural backgrounds provide a worldwide perspective**
- **ideal for academics as well as those in industry and commerce**

Contents: Keynote addresses. Research and theory. Symposium I: Tools for working with guidelines. Symposium II: Computer-aided building of interactive application. Case studies: Application and practice. HCI: Education

June 1995: 246x 189: 456pp:
100 line illus: 4 halftone illus:
Hardback: 0-412-71790- 5:f90.00

Chapman & Hall
an imprint of
Thomson Science

Design Principles for Interactive Software

Edited by **G. Cockton,** Glasgow University, Glasgow, UK
C. Gram, Technical University **of** Denmark, Lyngby, Denmark

The book addresses the crucial intersection of Human-Computer Interaction (HCI) and Software engineering. It examines quality from the perspectives of both HCI and Software Engineering, and then systematically develops and illustrates a framework for reasoning about the interaction between quality concerns from HCI and Software Engineering on the one hand, and critical aspects of software development such as the choice of software architecture and the deployment of software tools. The book presents a framework for future research and development, both in academia and industry, into specialised software architectures, methods and tools for high quality interactive systems. Likely developments over the next few years depend mostly on the development of better formal approaches to the definition of practical and relevant software properties, better ways of describing and comparing software architectures, and more rigorous and reflective approaches to requirements definition for software tools. The book develops key concepts for guiding the application of these developments to the production of high quality interactive software.

- **features the first conceptual framework relating predictable aspects of quality for user interfaces to key elements of software development**
- **the framework is based on key quality issues**
- **an extensive range of properties from HCI and software enginneering is considered**
- **the framework is continually tested against a representative range of examples from research and industrial practice**
- **the framework is also applied to a demanding case study with real-time, safety-critical and multi-user aspects.**

Contents: Foreword. Preface. The context of interactive systems development. External properties: the user's perspective. Internal properties: the software developer's perspective. Software architecture models. Tools and materials. Example: interface for air traffic controllers. Conclusions. Glossary. Summary tables. References. Index.

July 1996: 234x 156: 264pp: 26 *line illus*
Hardback: 0-412-72470-7: £29.95

35% discount available to members of IFIP affiliated societies

Ethics of Computing

Codes, spaces for discussion and law

J. Berleur, Professor, Computer Science Faculty, University of Namur, Belgium

K. Brunnstein, Faculty of Informatics, University of Hamburg, Germany

This major reference work represents the first attempt to confront, on a world-wide basis, the way computer associations face up to their own responsibilities in an age increasingly dominated by information and communication technology. The book deals with the codes of ethics and conduct, and related issues. It is the first book to deal with "homogenous codes" namely codes of national computer societies. Some thirty codes are compared and analysed in depth. To put these into perspective, there are discussion papers covering the methodological, philosophical and organisational issues.

- **clarifies the key issues of the 'ethics of computing'**
- **first book to analyse codes of ethics/conduct of over 30 computer societies**
- **covers the methodological, philosophical and organizational issues**

Contents: Foreword. Preface. Promoting discussion within IFIP. Codes, comments and other contributions. IFIP National Societies codes and comments. IFIP affiliate member societies codes. Other codes and comments. Other contributions. Conclusion.

April 1996: 234x 156: *approx. 344pp: 1 line illus:*
Hardback: 0-412-72620-3: f50.00

Engineering for HCI

C. Unger, Practische Informatik II, University of Hagen, Germany

L.J. Bass, Software Engineering Institute, Carnegie-Mellon University, Pittsburgh, USA

The volume contains all papers presented at the Working Conference on Engineering for Human-Computer Interaction (EHCI'95), grouped into the topic areas Formal Methods, Tools, Multimedia, Architecture, CSCW, and Design. It includes transcripts of all discussions among the presenters and the conference participants. It further contains the results of several mini-workshops held during the conference on topics like the Human Context, How to make Formal Methods Useful, Rapid Implementation and Development, Usability Testing, CSCW Mini Scenarios.

- **topical discussion of important research results**
- **international scope**

Contents: Preface. Part One: New Technology. Part Two: Tools and techniques. Part Three: Formal methods. Part Four: Multi-user interface architectures and tools. Part Five: User interface design and Software engineering. Part Six: Mini-workshop reports. Index of contributors. Keyword index.

January 1996: 234x 156: 384pp *:100 line illus*
Hardback: 0-412-72180-5159.00

Event	Date	Location	Sponsored by	Org. Contact
IFIP Work. Conf. on Programming Concepts & Methods	8-12.6.1998	Shelter Isl., NY, USA	IFIP WG2.2/2.3	Fax: +1 516 6328334 sas@cs.sunysb.edu
7th IFIP/ICCC Conf. on Inform. Networks and Data Communications	15-17.6.1998	Aveiro, P	IFIP TC6, ICCC, Univ. of Aveiro INESC, API	Fax: +351 34 370545 [illegible]
Workshop on Control of Distributed Parameter & Stochastic Systems	19-22.6.1998	Hanghzhou, PRC	IFIP WG7.2, Chin. Natl. Science Found., Zheijang Univ., Fudan Univ.	Fax: +1 804 9824555 il2v@virginia.edu
IFAC Symposium on Information Control in Manufacturing	24-26.6.1998	Nancy-Metz, F	IFAC, IFIP TC5, AFCET, CIRP, CNRS, INRIA	Fax: +33 383 912390 incom98@cran.u-nancy.fr
Intl. Work. Conf. on Information Technology in Educational Management	6-10.7.1998	South Bristol, M e, USA	IFIP WG3.7, OR/Ed Lab., Univ. of Maine & South. Maine, Maine Dept of Education	Fax: +1 919 7455771 nidrg+2@tunty.ncsu.edu
Asia-Pacific Conference on Human-Computer Interaction	15-17.7.1998	Hayama-machi, Kanagawa, J	IPSJ, IFIP TC13	Fax: +81 53 4781481 PFD00343@niftyserve.or.jp
Work.Conf. on Information Systems in the WWW Environment	15-17.7.1998	Beijing, PRC	IFIP WG8.1	Fax: +86 01 62515332 mgfang@public.bta.net.cn
12th IFIP WG11.3 Work. Conf. on Database Security	15-17.7.1998	Chalkidiki, GR	MEP WG11.3	Fax: +1 518 2764033 spoonerd@cs.rpi.edu
Optimal Control of PDE's	17-21.8.1998	Montreal, CDN	IFIP WG7.2, CRM, Univ. of Montreal	Fax: +1 804 9824555 il2v@virginia.edu
Work. Conf. on Educating Professionals for Network-Centric Organizations	23-28.8.1998	Saitama, J	IFIP WG3.4, Jap.Soc. of Educ. Techn., Jap. Soc. f. Inf. Systems	Fax: +61 3 92446928 pjuliff@deakin.edu.au
Prague Stochastics '98 - Section on Stochastic Programming	23-28.8.1998	Prague, CZ	Charles Univ., IFIP WG7.7	Fax: +420 2 6884702 stoch98@utia.cas.cz
11th Intl. Workshop on Testing of Communication Systems	31.8.-2.9.1998	Tomsk, RUS	IFIP WG6.1	yevtushenko@elefot.tsu. tomsk. su
Intl. Conf. dedicated to the 90th Anniv. of L.S. Pantryagin	31.8.-6.9.1998	Moscow, RUS	RAS, IFIP TC7, Math. Steklov Inst., Moscow State Univ.	Fax: +1 804 982 4555 il2v@virginia.edu
IFIP Congress '98: Fifteenth World Computer Congress	31.8.-4.9.1998	Vienna/Budapest, A/H	IFIP	Fax: +43 1 51202359 ifip98@ocg.org.at
Intl. Conf. on The Globalization of Manufacturing in the Digital Era of the 21st Century - Innovation, Agility & the Virtual Enterprise	9-11.9.1998	Trento, I	IFIP WG5.2/5.3, University of Trento	Fax: +39 464 443141 gianni@lii.unitn.it
Work. Conf. on Designing Effective & Usable Multimedia Systems	9-11.9.1998	Stuttgart, D	IFIP TC13, CEPIS	Fax: +44 171 4778411 a.g.sutcliffe@city.ac.uk
Work. Conf. on Engineering the Human Computer Interface	14-18.9.1998	Iraklion, GR	IFIP WG2.7, ICS-FORTH	Fax: +1 412 268 5758 ljb@sei.cmu.edu
Work. Conf. on Telematics - A new Dimension of Automation	28-30.9.1998	Vienna, A	IFAC, IFIP TC5	Fax: +43 1 50418359
Work. Conf. on Integrity & Internal Control in Information Systems	19-20.11.1998	Fairfax, VA, USA	IFIP WG11.5, IFAC, ACSA	Fax: +31 492 548636 strous@iaehv.nl
19th IFIP Conf. on System Modelling & Optimization	12-16.7.1999	Cambridge, GB	IFIP TC7	Fax: +44 1223 337918 m. j. d.powell@damtp. cam.ac.uk
Intl. Conf. Interact '99 - Human Computer Interaction	29.8.-3.9.1999	Edinburgh, GB	IFIP TC13	Fax: +44 1314513327 kilgour@bcs.org.uk

A schedule of administrative meetings can be found elsewhere in this *Newsletter.*

Calendar of Events

Event	Date	Location	Sponsored by	Org. Contact
1st IFIP WG11.5 Work. Conference on Integrity and Internal Control	4-5.12.1997	Zurich, CH	IFIP WG11.5	Fax: +31 492 548636 strous@iaehv.nl
Intl. Conf. on Information Systems	14-17.12.1997	Atlanta, GA, USA	IF I P TC8, Informs, ACM, AIS, IAIM, SIM	Fax: +1 404 651 3842 emclean@gsu.edu
Workshop on Exploring New Ideas, Methods and Problems in Inf. Syst. Res.	14.12.1997	Atlanta, GA, USA	'RP WG8.2	Fax: +1 630 2084782 nrusso@niu.edu
IFIP WG9.4 Work.Conf. on Implementation & Evaluation of Information Systems in Developing Countries	18-20.2.1998	Bangkok, THA	IFIP WG9.4	Fax: +44 171 9557385 c.avgerou@lse.ac.ulc
Work. Conf on Systems Implementation 2000: Languages, Methods & Tools	23-26.2.1998	Berlin, D	IFIP WG2.4, German Natl. Org.	Fax: +27 12 436454 jbishop@cs.up.ac.za
Intl. Colloquium Universal Machines and Computations	23-27.3.1998	Metz, F	Metz IU, IFIP TC1	Fax: +33 3 87315496 mcu98@iutuniv-metz.fr
Muenchener Stochastik-Tage	24-27.3.1998	Neubiberg, D	FAFU, IFIP WG7.7, Friends of the Univ., GAMM	Fax: +49 89 60044092/3560 kurtmarti@unibw-muenchen.de
4th Intl. Conference on Broadband Communications '98	1-3.4.1998	Stuttgart, D	IFIP WG6.2, IEEE, GI, ITG	kuehn@ind.uni-stuttgart.de
3rd Workshop on Personal Wireless Communication	8-9.4.1998	Tokyo, J	IFIP WG6.8, IPSJ, Min.of Post & Telecomm., Instof Electronics	Fax: +81 3 56843983 saito@sail.t.u-tokyo.ac.jp
IFIP WG7.2 Conf. on Optimal Control of PDE's	20-24.4.1998	Chemnitz, D	IFIP WG7.2, Univ. of Chemnitz	Fax: +1 804982 4555 i12v@virginia.edu
2nd Intl. Conf. on Information Infrastructure (Information Super Highway)	26-29.4.1998	Beijing, PRC	MEI, CAST, IFIP	Fax: +8610 68283458 mqzhou@public.bta.net. cn
Work. Conf. on Nonlinear Problems in Aviation and Aerospace	28.4.-1.5.1998	Daytona Beach, FL, USA	1FNA, IFIP TC7, Emory Riddle Aeronautical Univ.	Fax: +1 904 226 7050 siva@db.erau.edu
8th IFIP WG7.5 Work.Conf. on Reliability & Optimization of Structural Systems	11-13.5.1998	Krakow, PL	IFIP WG7.5, Wroclaw Univ. of Techn.	Fax: +13137644292 nowak@umich.edu
Work. Conf. on Design of Information Infrastructure & Systems f Manufacturing '98	18-22.5.1998	Fort Worth, TX, USA	IFIP WG5.7/5.3, Autom. & Robotics Inst./ Univ. of Texas at Arlington	Fax: +1 817 272 5952 jmills@arri.uta.edu
Work. Conf. on Intelligent Assembly & Disassembly	21-23.5.1998	Ljubljana, SLO	IFAC, IFIP TC5, IFORS	Fax: +386 61218567 dragica.noe@fs.uni-lisi
Intl. Conf. on Performance of Information & Communication Systems	25-28.5.1998	Lund, S	IFIP WG6.3, Lund Univ.	Fax: +46 46 145823 ulfk@tts.lth.se
4th IFIP 2.6 Work. Conf. on Visual Database Systems	27-29.5.1998	L' Aquila, I	1E? WG2.6	Fax: +41 21 6935195 spaccapietra@di.epfl.ch
1998 Intl. Workshop on Description Logics	30.5.-1.6.1998	Trento, I	IRST-ITC, IFIP TC12	Fax: +39 461 302040 franconi@irst.itc.it

(continued on page 15)

IFIP Congress '98 - 15th World Computer Congress	31.8.-4.9.1998	Vienna, A and Budapest, H	IFIP
IFIP Congress 2000 - 16th World Computer Congress	Sep 2000	Beijing, PRC	IFIP

This calendar information is furnished to the *Newsletter* by the Secretariat. It contains only approved IFIP events, arranged by the local Organizing Committees. IFIP does not assume any financial or legal liability. A schedule of IFIP administrative meetings can be found elsewhere in this *Newsletter.*