

# INNOVATION AND TECHNOLOGY TRANSFER

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## Note to readers

Under its SPRINT Programme the Commission has drawn up a series of initiatives to promote the more rapid dissemination of new technologies in the Community and to bring together those active in the field of innovation for common action at European level. Of course, the process of innovation comprises a multitude of facets, and some of these are difficult to address by political means. For example, Industrial Design, Industrial Property Rights and Contract Research are keywords for important components of the innovation process which so far saw only little European cooperation.

In cooperation with the relevant institutions, therefore, the Commission will in the next months hold some major events on these three important aspects of the innovation process: 1. For the second time the **European Community Design Prize** will be awarded in spring 1990. Its purpose is to demonstrate the economic benefit of good design and to illustrate the different ways it can contribute to entrepreneurial success. The prize is a reward to encourage small and medium-sized businesses in particular. 2. The **first conference of the European Association of Contract Research Organisations (EACRO)** sponsored by the CEC will be organised on 25-27.2.1990 in Amsterdam. It will emphasize the role of CROs in improving the competitiveness of European industry by converting the results of R&D at national and European level into practical know-how. 3. **PATINNOVA '90**, to be held in May 1990 in Madrid, will also be a **first European congress** focusing on the links between **patents and innovation**. It will be a forum for discussion on how to promote innovation by means of the patent system.

In this issue of I&TT you will find more information on these three important events, which form part of the Commission's support to industry and researchers so that they can better face the challenges of the Single Market.

A. S. Strub  
Director for Exploitation of Research, Technological Development, Technology Transfer and Innovation

**RESEARCH COUNCIL:****WIDE CONSENSUS ON THE ESSENTIAL CONTENT OF THE R&D  
FRAMEWORK PROGRAMME 1990 — 1994**

The Research Council of 17 October 1989 in Luxembourg with **Mr H. Curien**, the French Minister for Research and Technology, in the chair, and in the presence of European Commission Vice-President **Mr F. M. Pandolfi**, devoted most of its session to the **Framework Programme for Community R&D actions (1990-1994)** (see I&TT, 4/89, page 2).

It was an important interim Council session on the way towards an agreement on the crucial problem of the decision-making and budgetary procedures of the 1990-94 Framework Programme. Substantial progress was made concerning the preparation of the next Council meeting scheduled for 15 December 1989, which should result in the adoption, in unanimity, of the 'common position' on this third research Framework Programme.



*Vice-President F. M. Pandolfi together with Prof. A. Albertini (left), University of Brescia, at a recent meeting on the Commission's R&D policy in Brescia.*

**OUTSIDE SUPPORT SOUGHT FOR PRODUCTION OF 'INNOVATION AND  
TECHNOLOGY TRANSFER'**

Over the past year, the amount of work involved in producing the Newsletter 'Innovation and Technology Transfer' (I&TT) has increased considerably, and the relevant services within the Commission now find it necessary to seek outside help for some of this work (design, editing, lay-out, writing, etc.).

We therefore wish to learn about institutions and/or persons capable for carrying out such work. Interested bodies are invited to make themselves known, so that a eventually forthcoming call for tenders could be addressed to them.

If you are interested please submit information on your institution to the following address:

Mr A. v. Witzleben, Commission of the European Communities, DG XIII-C, JMO B4/091, L-2920 Luxembourg.

**DIRECTORY OF CONTRACT RESEARCH ORGANIZATIONS IN THE EEC**

Edited by R. Miège / I. Traill

This first major survey and Directory of over 150 European Contract Research Organisations (CROs) has been published by DG XIII as part of its innovation promotion activities under the SPRINT Programme.

The report analyses for the **first time the nature and structure of contract research** in each of the EEC Member States and points out the vital role of CROs in technology transfer.

It further recommends strengthening of cooperation between the CROs at the European level.

Following these recommendations, the European Association of Contract Research Organisations has been formed by the associations of CROs in France and Britain in conjunction with major CROs in Germany, the Netherlands and Italy (see page 31).

Please send a copy of the publication 'Contract Research Organisations in the EEC' EUR 12112, ISBN EN-92-825-9766-0, FR-92-825-9767-9 (price 40 ECU) in English , French  to:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

**Please return to:** Office for Official Publications, 2, rue de Mercier, L-2985 Luxembourg

## SCIENCE - STIMULATION OF INTERNATIONAL COOPERATION AND INTERCHANGE NEEDED BY EUROPEAN RESEARCHERS

The SCIENCE plan consists of a range of activities selected on the basis of their scientific and technical quality, which will gradually be extended. The overall objective is **to improve the efficacy of scientific and technological research** in all the Member States and to contribute thereby to the reduction of scientific and technical development disparities between the different Member States of the European Community. It covers all fields of science and technology (the exact and natural sciences). Four forms of support are being used:

### 1. Research bursaries

Financial support granted to scientists to enable them to acquire additional training by participating in a research project in a laboratory in a Community country other than their own.

### 2. Research grants

These cover the cost to the laboratories concerned of the transfer or secondment of a research scientist from one Community country to another.

### 3. Twinning of the laboratories in different countries

This enables researchers who are working in isolation in an advanced field in several Community countries to pool their efforts.

### 4. Development of multidisciplinary, multinational operations

This would, by virtue of the financial resources made available, enable the associated research teams to have enough resources (including equipment) and bring together the best expertise available in different countries and disciplines.

In 1988 a total of 448 proposals for the support of twinings and operations were received, representing more than 160 million ECU. Of these, 114 were accepted for a total of 36 million ECU. Applications for the various SCIENCE schemes can be put forward at any time.

Further information and the application package (please indicate language) can be obtained from: Mr C. White, Commission of the European Communities, DG XII/H/1, MO75 4/9, 200, rue de la Loi, B-1040 Brussels, Tel.: (32) 2 235.53.69, Tlx: 21877 COM-EUR B, Fax: (32) 2 236.33.07.



SCIENCE PLAN  
(1988-1992)  
GUIDE FOR APPLICANTS  
COMMISSION OF THE EUROPEAN COMMUNITIES

## TRANSNATIONAL COOPERATION BETWEEN EUROPEAN RESEARCHERS IN ECONOMICS FIRST AWARDS UNDER THE SPES PROGRAMME



SPES  
1989-1992

From a list of 126 proposals the Commission has awarded the first 21 research contracts under the new Stimulation Programme for Economic Science (SPES) which was launched earlier this year **to promote transnational cooperation and interchange between European researchers in economics.**

Five of these projects concern the **impact of 1992** (international trade, multinational corporations, structural change in industry, macro-economic policy and monetary integration, and financial and monetary integration in Europe). Three projects are of **policy interest to the Community** (trade with newly industrialized countries, the rules of macro-economic policy coordination, and the impact of changes in indirect taxation).

Others concern important **issues of theory and applied analysis** (game theory of markets and organizations, the impact of demographic variables on savings, wealth and consumption, environmental economics, the greenhouse effect and European growth).

The complete list of issues and further information on SPES can be obtained from Mr R. Thomas, Commission of the European Communities, DG XII, MO75 04/24, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.47.07, Tlx: 21877 COMEUR B, Fax: (32) 2 236.33.07.

## NEW NEWSLETTER ON EAST-WEST-SOUTH RESEARCH COOPERATION ON TECHNOLOGY TRANSFER

The Research Policy Institute of the University of Lund (Sweden) publishes a new quarterly **Newsletter on East-West-South research cooperation on technology transfer.** It reports on technology-oriented initiatives in the EFTA Member States, in the eastern European countries, in Africa and Latin America.

Copies can be received free of charge from Mr Claes Brundenius, Research Policy Institute, Box 2017, S-22002 Lund, Tel.: (46) 46 107.617, Fax: (46) 46 146.986, Tlx: 33533 Luniver S.

## FIRST EUROPEAN COMMUNITY CONTEST FOR YOUNG SCIENTISTS

— PROF. FASELLA, DIRECTOR-GENERAL OF DG XII, AWARDS 20 PRIZES —

Twenty talented young scientists were awarded prizes in the **first European Community Contest for Young Scientists**. They were selected from a total of 53 finalists who had already won national contests in the twelve Member States, Austria, Norway and Switzerland.

The Commission organized the contest in order to **encourage the research interests of young people** in Europe and to promote the ideal of scientific exchange. The Chairman of the independent jury was **Sir Peter Swinnerton-Dyer**, a mathematician from Cambridge University who is also Chairman of the Committee for the European Development of Science and Technology (CODEST), a body which advises the Commission. The awards were presented by **Prof. Paolo Maria Fasella**, Director-General for Science, Research and Development, at the Palais des Académies in Brussels.

### First Prizes: Certificate of Distinction (5000 ECU)

- Denmark - Mogens MARKUSSEN (20) Eyewriter, an eye-operated control unit
- Germany - Stephan SCHLITTER (19) Conducting polymers in batteries
- Ireland - Grace O'CONNOR (16) & Sinead FINN (17) A crop-fractionating industry
- Italy - Lina TOMASELLA (21) Toxicity of colour dyes used as tracers
- United Kingdom - Jean-Pierre WYSS (20), Matthias Zimmerman (20) and Elmar ARTHO (16) Computer recognition of hand-written signs.

For further information, please contact Mr A. Pozzo, Commission of the European Communities, DG XII-H, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.40.67, Tlx: 21877 COMEUR B, Fax: (32) 2 235.06.56.

## HIGH-DEFINITION TELEVISION ON THE COUNCIL AGENDA

In preparing for the 1990 meeting of the International Radio Consultative Committee (CCIR), the Council of Telecommunications Ministers, in its meeting of 7 November 1989, adopted a decision on common action to be taken by the Member States with respect to the **adoption of a single world-wide High-definition Television (HDTV) production standard** by the CCIR Plenary Assembly in 1990.

The common action to be taken by the Member States will be based on the proposal arising from the EUREKA 95 project and will be carried out, after consultation between Member States and the Commission, at the meetings to be held to prepare the Recommendation concerning a single world-wide HDTV production standard. **High-Definition Television (HDTV) is of strategic importance for the European consumer electronics industry, its supporting industrial base, and for the European television and film industries;** a single world-wide High-Definition Television standard for programme production and for the international exchange of programmes is urgently required for the development and commercialization of equipment and programme material.

Within the EUREKA framework, European industry has developed the relevant parameters for such a single world-wide production standard, and prototype equipment built to this standard has been successfully demonstrated. The present Council decision is directly related to previous discussions held at the level of Heads of States and Government. In fact, the European Council, at its December 1988 meeting in Rhodes, already attached great importance to the promotion of the European HDTV system in the context of the Community's emerging audio-visual policy.

Further information can be obtained from: Mr Yves Domzalski, CEC, DG XIII/E/5, BRE 6/91, 200, rue de la Loi, B-1040 Brussels, Tel.: (32) 2 235.30.53, Tlx: 21877 COMEUR B, Fax: (32) 2 236.27.23.

## EUROPEAN UNION OF SCIENCE JOURNALISTS' ASSOCIATIONS (EUSJA)

The European Union of Science Journalists' Associations (EUSJA), founded on 8 March 1971, is the **confederation of national associations of science journalists** in Europe.

EUSJA has the following aims:

- a. to alert national and international authorities, scientists and public opinion to the **importance of the development of scientific and technological information;**
- b. to provide better **information on the development and application of science and technology;**
- c. to promote **contacts** both between the **various associations of scientific journalists** and **between journalists engaged in explaining scientific and technological issues** to the public.

Today EUSJA comprises the national associations of 16 countries (the EEC Member States except Luxembourg and Greece, but with Austria, Finland, Israel, Norway and Switzerland), representing more than 2200 journalists engaged in reporting about science and technology.

For further information regarding EUSJA and its activities, please contact: EUSJA, c/o Dr E. Bock, 11, av. Saint Dominique, B-1950 Kraainem, Tel.: (32) 2 235.41.32, Tlx: 21877 COMEUR B, Fax: (32) 2 236.20.07.

## TEDIS FACTSHEETS ON ELECTRONIC DATA INTERCHANGE NOW AVAILABLE

For centuries paper documents have formed the basis of commercial transactions. Today, in most cases, these commercial documents are processed electronically then sent by post! Prepared at the speed of light, they are dispatched over one million times more slowly.

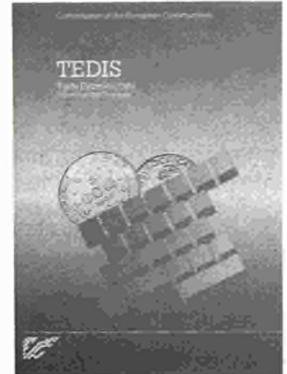
**Electronic data interchange (EDI)**, or the electronic transfer of commercial and administrative data, **involves the exchange of information and messages between trading partners** via electronic means of communication. EDI is carried out either from computer to computer, through the exchange of magnetic media, or via telecommunications networks.

To stimulate EDI the Commission of the European Communities has drawn up a Community action plan related to the electronic transfer of trade data (see also I&TT, 4/89, page 7).

The **objectives** of this plan — **TEDIS** (Trade electronic data interchange systems) — are:

- to **avoid a proliferation of closed trade EDI systems**;
- to promote the **creation and the establishment of trade EDI systems**;
- to **increase the awareness** of the European telematic equipment and services industry;
- to **support the common use of international and European standards**.

Further information on TEDIS and the factsheets (please indicate language) can be obtained from Mr H. Wakeling or Mr E. Peeters, Commission of the European Communities, DG XIII/D/5, ART 3/20, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.50.27 or 235.73.30, Tlx: 21877 COMEUR B, Fax: (32) 2 235.02.99.



## EEC-EFTA: THE COMMISSION PROPOSES EFTA ASSOCIATION WITH THE TEDIS PROGRAMME (ELECTRONIC TRANSFER OF TRADE DATA)

The CEC is proposing the conclusion of **agreements with EFTA countries** on the electronic transfer of data for trade use through communication networks (TEDIS) (see page 6 of Official Journal C 285 of 11.11.1989).

The electronic transfer of data appears to be a field particularly appropriate for cooperation between the Community and EFTA, notably due to the close cooperation that already exists in the field of standardisation of customs and administrative procedures, as well as the mutual interest in avoiding the creation of new obstacles to trade.

JUST PUBLISHED:

### REPORT ON THE STATE OF IMPLEMENTATION OF THE COMMISSION'S 'GREEN PAPER' ON TELECOMMUNICATIONS

Access to information has become the key to prosperity and growth. Information is the basic input of the emerging service economy, linking industry, services and markets. New information technology and telecommunications services are being developed daily. The emerging service economy **depends increasingly on telecommunications as its basic infrastructure**, providing the means to transport and trade the range of other services. The economic benefits for Europe of 1992 will thus depend in large measure on completing the internal market for the telecommunications sector.



The Commission's June 1987 **Green Paper on telecommunications** (COM (87) 290, Brussels, 30 June 1987) sets out to propose a programme for the Community, in the light of national developments - a programme of regulatory change to meet the twin challenges of 1992 and technological development. The present report summarizes the overall objectives and proposals of the 'Green Paper' and reports on progress in their implementation.

**Order form:** Please send me a copy of the publication '**Telecommunications Green Paper - Report on the state of implementation**'.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Postal Code: \_\_\_\_\_ Town: \_\_\_\_\_ Country: \_\_\_\_\_

Please return to Mr J. Rosenbaum, Commission of the European Communities, DG XIII-E, J-37 O1/23, 200, rue de la Loi, B-1040 Brussels, Tel.: (32) 2 235.92.35 / 235.05.60, Tlx: 21877 COMEUR B, Fax: (32) 2 236.27.23.

COMMISSION OF THE EUROPEAN COMMUNITIES — JOINT RESEARCH CENTRE, ISPRA (VA), ITALY

**EUROPEAN MICROWAVE SIGNATURE LABORATORY**

The Joint Research Centre of the Commission of the European Communities has just signed a contract with SIEMENS AG for the construction at its Centre at Ispra, Italy, of a new, innovative and unique facility for Europe: **the European Microwave Signature Laboratory**.

In 1986 the JRC started a research project on **microwave remote sensing**, in close collaboration with national institutions in the EEC Member States (see I&TT, 3/89, page 18). Microwave remote sensing differs from what are now traditional methods of remote sensing, i.e. satellite photographs of the earth's surface, by its inherent capability to operate regardless of adverse visibility due to climatic conditions, such as cloud-cover. The ERS-1 (European Remote Sensing) satellite to be launched by the European Space Agency in late 1990, equipped with Synthetic Aperture Radars, will introduce the microwave capability into remote sensing, allowing study and technical application in a continuous and uninterrupted way.

The operation of the Microwave Signature Laboratory at Ispra will be used for interpretation of microwave signals which are reflected from a given target. This is essential for the creation of operational systems for various applications of future active remote sensing programmes, and for indicating to the user community how to transform interests, expressed in general terms, into properly defined technical specifications.

Other potential uses of the laboratory, of interest to other research organisations and industry alike, are: Radar Cross, Section Measurement, Antenna and Radiation Measurement, Electromagnetic Compatibility and Determination of Material Properties. All these aspects are of strong commercial importance to industrial customers, who have already expressed considerable interest in utilizing the facility.

Further information can be obtained from Mrs M. Piera Moretti, Joint Research Centre, Ispra Establishment, I-21020 Ispra (Varese), Tel.: (39) 332 78.91.11, Tlx: 380042 / 3800058 EUR I.

## COMMISSION APPROVES 163 PROJECTS UNDER THE BRITE/EURAM PROGRAMME (STRENGTHENING OF THE TECHNOLOGICAL BASIS OF INDUSTRY)



The Commission has approved **163 research projects** selected from 645 proposals under the BRITE/EURAM research programme. Launched at the beginning of the year, this programme is intended **to strengthen the technological basis of European industry, notably in traditional sectors** (motor cars, machine tools, construction, textiles, etc.). Most are projects for applied research involving cooperation with at least two enterprises from two different member countries covering a wide range of technology applied to the manufacturing industry and the sector of advanced materials. Eleven projects, most in the field of materials, consist of research of a more fundamental nature and will essentially be carried out by universities.

In addition, **60 'feasibility premiums'** have been awarded **to aid SMEs** to demonstrate the feasibility of a new apparatus, system, process or concept in different sectors of industrial technology and advanced materials. The goal is to help them prove their capacity to potential partners (typically large companies) for future BRITE/EURAM research proposals.

A new call for proposals under the BRITE/EURAM Programme is expected to be launched in the first half of 1990.

For further information on the BRITE/EURAM Programme please contact: Commission of the European Communities, DG XII, Mr W. van der Eijk (**Production and Materials Technology**), MO75 02/37, Tel.: (32) 235.59.60, Fax: (32) 2 235.80.46, Mr J. Wurm, (**Materials Research**), MO75 01/52, Tel.: (32) 2 235.52.90, Fax: (32) 2 235.80.46, Mr H. Allgeier (**Aeronautics R&D**), MO75 06/26, Tel.: (32) 2 235.40.55, Fax: (32) 2 235.06.56, 200, rue de la Loi, B-1049 Brussels, Tlx: 21877 COMEUR B.

A complete list of the projects selected can be obtained from Mrs A. Dissy, Commission of the European Communities, DG XII, SDME 01/34, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.64.19, Tlx: 21877 COMEUR B, Fax: (32) 2 235.88.65.

## R&T PROGRAMME IN THE FIELD OF AERONAUTICS

### - PROGRESS REPORT -

The first **Community aeronautical research and technology programme** being implemented in Area 5 of BRITE/EURAM has passed its first major milestone, the selection of projects to be undertaken.

The call for projects attracted a big response from international consortia of European aircraft, aeroengine and equipment industries, research organisations and universities. A number of the consortia included partners from EFTA countries.

For this two-year programme, 112 proposals were received addressing the four technical areas of the programme — **aerodynamics, acoustics, airborne systems and equipment and propulsion**. Following a rigorous technical evaluation 27 projects, representing some 70 million ECU of work, were selected for implementation, subject to negotiation of suitable contracts. Contract negotiation is now in progress and the first projects will start before the end of 1989.

Further information on the Aeronautics Programme can be obtained from: Mr H. J. Allgeier, Commission of the European Communities, DG XII-H, 200, rue de la Loi, B-1040 Brussels, Tel.: (32) 2 235.40.55, Tlx: 21877 COMEUR B, Fax: (32) 2 235.06.56.

## EIGHTEEN YEARS OF SUCCESSFUL JOINT RESEARCH IN EUROPE: COST RESEARCH COVERS TEN PROJECT AREAS

COST is the abbreviation of the French '**CO**opération européenne dans le domaine de la **R**echerche **S**cientifique et **T**echnique'. In English this means European Cooperation in the field of Scientific and Technological Research.

For almost eighteen years COST has stood for **joint cross-frontier research** in Europe. This goes beyond the countries of the European Communities, since from the outset it has been meant to cover the whole of Europe. Nineteen European countries, including the 12 EEC members, have taken part in the very wide range of COST projects. Some of these have awakened so much scientific and technological interest that they have spawned national or Community research programmes because their contribution to technological change in the world has become increasingly significant. Unlike the EC R&D programmes, COST projects are being implemented as concerted activities on an 'à la carte' base. So far about 55 COST projects have been completed or are still in progress. COST began in 1970, and the participant countries have so far invested more than 150 million ECU in its projects.



The Commission of the European Communities has assumed responsibility for **coordinating the COST projects**, so as to avoid any unnecessary friction which might hamper the cooperation: a special group of European officials has been attached to it and a Secretariat set up. Each COST project is coordinated by a Committee in the form of an equal partnership.

Any country can join at any time by signing a memorandum of understanding (MDE), which is the only legal framework required. All COST projects must fall within one of the following areas:

- |                      |                            |                          |
|----------------------|----------------------------|--------------------------|
| — data processing    | — metallurgy and materials | — food technology        |
| — telecommunications | — environmental protection | — social engineering and |
| — transport          | — meteorology              | industrial safety        |
| — oceanography       | — agriculture              |                          |



Further information on COST, including the user's guide and the annual report for 1988, can be obtained from Mr K. Pithan, Commission of the European Communities, DG XII/G/1, SDME 03/82, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.76.69, Tlx: 21877 COMEUR B, Fax: (32) 2 235.76.69.

### A REVIEW OF COST COOPERATION SINCE ITS BEGINNINGS

This report traces the **history of COST**, i.e. its origins and how it came into existence and developed, and looks at **its various components**, how it operates and is organized, the dynamism it has generated, and how it fits into, and what its limits are, in the new context of European scientific cooperation. This review also includes a **general panorama and a summary of COST activities** and the initial concrete results obtained. It concludes with a number of proposals regarding the future of the cooperation.

Order form: Please send me a copy of the **Review of COST Cooperation** (EUR 11640 EN - price ECU 13.75).

Name: \_\_\_\_\_ Address: \_\_\_\_\_

Postal Code: \_\_\_\_\_ Town: \_\_\_\_\_ Country: \_\_\_\_\_

Please return to Sales Department, Office for Official Publications, 2, rue Mercier, L-2985 Luxembourg.

### COST PARTICIPANTS ARE READY FOR THE LAUNCHING OF FOUR NEW ACTIONS

Participants in **European cooperation in the field of scientific and technical research (COST)** are preparing to sign statements of intent for the implementation of **four new COST actions**:

1. COST action No 230 concerning **stereoscopic television**: this action is primarily concerned with developing the methods, standards and technology to be used for acquisition and display plans, as well as for coding and transmission of stereoscopic television signals (3D TV).
2. COST action No 232 concerning **speech recognition on telephone lines**. This technology allows conversion of a spoken sound, word or sentence into text. As follow-up to COST action No 209 'Communication between man and machines by vocal signals', the content of action 232 will be oriented further towards basic research strategies.
3. COST action No 233 concerning the **prosody of synthetic speech** is intended to improve this form of communication.
4. COST action No 92 concerning **metabolic and physiological aspects of fibre in foodstuffs**. Fibre plays an important role in diets recommended for the treatment or prevention of certain serious illnesses such as arteriosclerosis, hypertension, diabetes and obesity. It is now a question of establishing the correlations existing between physiological effects and the chemical, physical and structural properties of foods, to obtain, on this basis, optimal food quality.

## DECOMMISSIONING OF NUCLEAR INSTALLATIONS

### INTERNATIONAL CONFERENCE HELD IN BRUSSELS

The Commission held an international **conference on the decommissioning of nuclear installations** in Brussels on 24-27 October 1989. The conference attracted about 400 participants from the Community Member States as well as the United States, Japan and the Soviet Union.

When nuclear power plants reach the end of their life, the radioactive components must be dismantled, volume-reduced, suitably packed and stored in a final radioactive waste repository. During the conference the results of the 1983-88 Community research programme on the decommissioning of nuclear installations were presented and discussed.

Further information on the conference and the programme on decommissioning can be obtained from Mr K. Pflugrad, CEC, DG XII, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.84.25, Tlx: 21877 COMEUR B, Fax: (32) 2 236.20.06.

### EUROPEAN CONSENSUS CONFERENCE ON PHARMACOGENETICS

#### 'CRITERIA FOR THE CHOICE AND DEFINITION OF HEALTHY VOLUNTEERS AND/OR PATIENTS FOR PHASE I AND II STUDIES IN DRUG DEVELOPMENT'

A consensus conference reflecting on the activities of **COST Project B 1** (Chairman **Prof. Bechtel**, France) was held in Besançon, France on October 24-25, 1989. The project has mainly been active within the field of pharmacogenetics — the study of genetic influences on drug metabolism and action. A number of so-called genetic polymorphisms have been found to exist with regard to the clearance of the drugs through metabolism from the body. This is because the liver enzymes responsible for the metabolic conversion are composed of different sub-units of isoenzymes with different structure and activity. The composition of these isoenzymes is under genetic control.

At the meeting, leading European scientists discussed various aspects of pharmacogenetics. These aspects ranged from gene mutations responsible for the slow metabolism, through enzymatic properties and methodological questions to the potential clinical relevance of the interplay between genetic and environmental factors. Industrial interests were mentioned in a session on the relevance of pharmacogenetics for drug development. Participation included university departments as well as the pharmaceutical industry and drug regulatory agencies.

A volume containing the papers presented at the conference and part of the discussions will be published as report EUR 12379 in the near future.

For further information, please contact Mr K. Pithan, Commission of the European Communities, DG XII/G/1, SDME 03/81, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.76.69, Tlx: 21877 COMEUR B, Fax: (32) 2 235.01.45.

## IRDAC NEWS ON EUROPEAN RESEARCH POLICY



IRDAC is the Committee for Research and Development advising the Commission on devising and implementing R&D activities of particular interest to industry. IRDAC News reports on the activities of IRDAC.

It can be obtained from Mr R. Bryssinck, IRDAC NEWS office, 1, rue Defacqz, B.O. Box 12, B-1050 Brussels, Tel.: (32) 2 537.93.56, Tlx: 20468 B, Fax: (32) 2 344.12.70.



### NEW R&D PROGRAMMES ADOPTED

The cooperation procedure with the European Parliament having been concluded, the R&D Council has finally adopted the following programmes:

- 1990 - 1992 programme in the area of **raw material**; the financial grant amounts to 45 million ECU for the three years.
- The dual **STEP-EPOCH** programme concerning: a) science and technology for environmental protection (STEP, lasting 4 years with 75 million ECU); b) climatology and natural disasters (EPOCH, lasting 4 years, with 40 million ECU).

## EUROPEAN COMMUNITY ENVIRONMENTAL LEGISLATION 1967-1987

The Fourth Environmental Action Programme 1987-1992 states as one of its top priorities the **correct application by all Member States of European directives for the protection of the environment**. This goal is to be pursued with increased vigour by the Commission of the European Communities, and it is to this end that **this legislation has been collected together in four volumes** in the nine languages of the Community.

The responsible authorities in each Member State, the organisations for the protection of the environment, and the public in general, will thus have a useful reference for the various directives and find what has been achieved until now for the European environment.

Contact: Mr Pleinevaux (see address on next page)

**INFORMATION ON THE STATE OF THE ENVIRONMENT IN THE COMMUNITY:**

**COMMISSION PROPOSES CONTINUATION OF CORINE PROGRAMME**

The Commission has proposed to continue the CORINE Programme concerning an 'experimental project for gathering, coordinating and ensuring the consistency of information on the state of the environment and natural resources' in the Community, which was approved by the Council on 27 June 1985, for a period up to the end of 1988 (OJ 476 of 6.7.1985).

CORINE has three central objectives:

- a. gathering of **information on the state of the environment** for a certain number of priority Community applications;
- b. **coordination of initiatives** in Member States or at international level to improve information;
- c. **ensuring consistency of nomenclatures**, definitions, etc. and, generally, creating the conditions necessary to ensure comparability of data.

The Commission has now proposed to continue CORINE up to the end of 1990 with an additional budget of 7.5 million ECU (OJ C 269 of 21.10.1989) to bridge the transition period up to the establishment of a European Environment Agency (see next article).



**COMMISSION PROPOSES A EUROPEAN ENVIRONMENT AGENCY**

The Commission has proposed a Council Regulation for the establishment of a **European Environment Agency (EEA)** and a **European Environment Monitoring and Information Network (EEMIN)** entrusted with and responsible for continuing, as appropriate, the work undertaken by the Commission under its CORINE Programme (COM (89) 303 fin of 12.7.1989).

The EEA and the EEMIN should provide the Community and the Member States **with the technical and scientific support** necessary to both **protect and improve the state of environment**; EEA and EEMIN should pursue the following objectives:

- supply of **necessary information** to devise effective measures in the field of the environment;
- to make available **technical, scientific, and economic information** to assist the Commission in implementing its environmental policy;
- to promote suitable measures for **forecasting** in the field of the environment;
- to promote the **harmonisation and comparability** of data on the environment at European and international level.

Further information on the Commission's environmental policy can be obtained from Mr C. Pleinevaux, Commission of the European Communities, DG XI, GUIM 04/22, 200, rue de la Loi, B-1040 Brussels, Tel.: (32) 2 235.39.60, Tlx: 21877 COMEUR B, Fax: (32) 2 236.27.26.

THE EUROPEAN AND THEIR ENVIRONMENT IN 1988



**Just published: A COMPREHENSIVE, UP-TO-DATE ACCOUNT OF THE COMMUNITY'S ENVIRONMENTAL POLICY**

**THE ENVIRONMENTAL POLICY OF THE EUROPEAN COMMUNITIES**

by Stanley P. Johnson, G. Corcelle

International Environmental Law Policy Series
The Environmental Policy of the European Communities
Stanley P. Johnson Guy Corcelle
Preface by Jacques Delors, President of the Commission of the European Community
Graham & Trotman

As EC Commission President Jacques Delors says in his preface, this book illustrates the **increasingly important dimension of Community activities in the area of the environment**, as acknowledged by the Single European Act. He stresses the Community's contribution in the progress of environmental policy in Europe and throughout the world. In the first section of the book the authors look at the **six main areas** (water, air, waste management, chemical products, noise, flora and fauna). The second part is devoted to the **specific aspects** of Community policy: preventive action, economic aspects, research, international conventions, integration with other policies, aid, nuclear safety, application of directives, the Single European Act.

Kluwer Academic Publishers Group, ISBN 1-85333-225-9, Falcon House, Queen Square, UK-Lancaster LA1 1RN, 1989, 349 pp., Price: £47.50.

**ENVIRONMENTAL TECHNOLOGIES: NETT PROVIDES NEW SERVICES - SPECIAL ISSUE OF NETT-INFO AVAILABLE -**

Being conscious of the rapidly growing importance of environmental protection, the best way to prevent or cure environmental problems is to **apply appropriate environmental technology**. Making available information and contacts on environmental technologies is the business of **NETT** (see I&TT, 3/89, page 7). It's new services are reported in a special issue of **NETT-Info**. They will provide users with access to a wide range of useful databases and related services.

For a specimen copy of NETT Info and for further details please contact the NETT Secretariat, 25, Square de Meeûs, B-1040 Brussels, Tel.: (32) 2 511.24.62, Fax: (32) 2 511.25.22.



## AGRICULTURAL RESEARCH: THE COUNCIL HAS APPROVED ITS COMMON POSITION ON A PROGRAMME IN THE AREA OF AGRICULTURAL COMPETITIVENESS

The Council of Ministers reached a common position on a technological R&D programme in the area of **agricultural competitiveness and the management of agricultural resources** for the years 1989-1993.

With a sum of 55 million ECU for the five years, this programme's **main aims** are:

- to help farmers **adapt to the new situation** created by over-production;
- to **maintain income** from farms and encourage structural reforms;
- to organise and **improve the agricultural situation**, in line with the market situation;
- to **conserve natural resources** and the landscape;
- to develop **services and infrastructures for farming information**.

A **call for proposals** under this programme was published in Official Journal C 269 of 21.10.1989. Proposals for the first selection must reach the Commission by 19.1.1990.

Further information on the programme and the call for proposals can be obtained from: Mrs A. Dumoulin, Commission of the European Communities, DG VII/F/II-3, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.89.39, Tlx: 22037 AGREC B, Fax: (32) 2 236.30.29 (further information is also given in Official Journal C 284 of 10.11.89).



### FLAIR (Food-Linked Agro-Industrial Research)



FLAIR (Food-Linked Agro-Industrial Research) is a Community R&D Programme with the following objectives:

- to promote **food industry efficiency and competitiveness**;
- to **improve food safety and quality** for the consumer;
- to **reinforce the scientific and technical infrastructures serving the European food industry**.

The Programme emphasises **food quality**. Pre-competitive R&D which promotes or involves small and medium-sized enterprises and/or which promotes cooperation between participants and consumer protection groups will be encouraged. In addition, FLAIR offers grants for training/mobility.

Further to a Call for Proposals, some 58 Declarations of Intent for Concerted Actions were received. A decision on which proposed themes will be supported should be taken early in January 1990. For shared-cost R&D more than 100 proposals were received, including more than 600 participants from all parts of the food sector and from 16 countries. A decision on the selected proposals should again be taken in early January.

Further information on FLAIR can be obtained from Mr P. F. Rexen, Commission of the European Communities, DG XII/F/3, SDME 03/73, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 236.31.64 / 236.09.73, Tlx: 21877 COMEUR B, Fax: (32) 2 236.20.07 / 236.01.45 5.

## NEW AWARDS FOR AGRO-INDUSTRIAL RESEARCH

### — 23 COLLABORATIVE PROJECTS SOON TO BE STARTED UNDER ECLAIR —

ECLAIR, the Commission's new initiative to encourage agro-industrial research in the Community, has made a quick start with the selection of **23 collaborative projects to receive support from Community funds**.

These projects will cover all links in the agro-industrial chain from agricultural inputs and production to the industrial transformation and processing of agricultural produce; from the development of new crop species to new market outlets for more traditional agricultural products. They will bring together around 200 organisations from both the public and private sectors in the pursuit of common research objectives. Participants include industrial firms (especially SMEs), universities, research institutes and even agricultural cooperatives. Most of them have never received or applied for EC research funding before.

A list of the projects selected and further information on ECLAIR can be obtained from Mr P. F. Rexen, Commission of the European Communities, DG XII/F/3, SDME 03/73, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 236.31.64 / 236.09.73, Tlx: 21877 COMEUR B, Fax: (32) 2 236.20.07 / 236.01.45.

## RESEARCH DIGEST ON SOLAR ENERGY APPLICATIONS TO BUILDINGS

In the Commission's current programme of research and development on **solar energy applications to buildings** considerable effort is being made to improve the flow of research results to the design and construction professionals.

This Research Digest is one part of this technology transfer drive. It is being circulated to those concerned with building design and construction in the EC and to energy researchers.

Copies can be obtained from Mr J. Owen Lewis, Energy Research Group, School of Architecture, University College Dublin, Richview, Clonskeagh, IRL-Dublin 14.

## 350 MIO ECU FOR THE PROMOTION OF ENERGY TECHNOLOGIES 1990-92: AGREEMENT ON THERMIE PROGRAMME

The 'Energy' Council held on 30 October in Luxembourg agreed on the main thrusts of the **THERMIE Programme for the promotion of energy technologies for Europe**. Planned for a period of five years, this programme will take the place of the 'energy demonstration projects' and 'hydrocarbon technologies' programmes once these expire (31 December 1989).

The aim of THERMIE is the promotion of advanced technologies in the energy sector in order to contribute to achieving the energy objectives involving mainly security and diversification of supplies. With financial support, it will favour the implementation of innovative technologies in order to demonstrate their industrial and commercial viability and to encourage their dissemination throughout the Community.

The **areas concerned** are: the rational use of energy; renewable energy sources; solid fuels; hydrocarbons. The projects should preserve and improve the quality of the environment. A consensus was reached in favour of 350 million ECU for the first three years, which is in line with the 700 million ECU planned for the whole five-year period (see also page 21 'Calls for Proposals').

Further information on THERMIE can be obtained from Mr M. Gowen, Commission of the European Communities, DG XVII/E/2, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 236.04.36, Tlx: 21877 COMEUR B, Fax: (32) 2 235.01.50.

## REWARD - RECYCLING OF WASTE

### — CALL FOR PROPOSALS EXPECTED SOON —

REWARD has just come into force (see page 8) and will run until 31 December 1992; hence, it will be a **continuation of the ongoing Programme 'Recycling and Utilization of Waste' (1986-1989)**.

The **objectives** of REWARD are as follows:

- to **increase the rate of recycling and utilization of waste** through the development of economically viable technologies;
- to **improve the management of raw materials** and energy resources;
- to **alleviate** the problems of **waste disposal** and of **environmental pollution**;
- to **promote** industrial competitiveness through the development of **innovative technologies**, the **utilization of recycled materials** and the **promotion of recyclable materials**;
- to contribute to **increased coordination of pertinent R&D activities** within Europe.

A **call for proposals** will be launched by the end of 1989. The deadline for submission of proposals is expected by mid of march 1990.

Further information may be obtained from: Mr P. L'Hermite, Commission of the European Communities, DG XII/E/1, 200, rue de la Loi, B-1040 Brussels, Tel.: (32) 2 235.51.63, Tlx: 21877 COMEUR B, Fax: (32) 2 236.30.24.

## RADIATION PROTECTION PROGRAMME (1990-1991)

Radiation protection research deals with a series of complex problems, the solutions to which require that information from quite different subject areas be integrated by means of a multidisciplinary research programme. The Radiation Protection Programme has been formulated to be a comprehensive and balanced research approach essentially comprising **three basic elements**: A) Determination of human exposure to radiation and radioactivity, B) Consequences of radiation exposure to man; their assessment, prevention and treatment, and C) Risks and management of radiation exposure. The Commission has launched a **Call for Proposals** under this programme. Proposals may be submitted up to 31.1.1990.

The information package can be obtained from Mr G. Gerber, Commission of the European Communities, DG XII/D/3, ARTS 02/48, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.40.45, Tlx: 21877 COMEUR B, Fax: (32) 2 236.20.06.

## PROGRAMME ON DECOMMISSIONING OF NUCLEAR INSTALLATIONS

Following the 1984-1988 programme of research on the decommissioning of nuclear installations, the Commission of the European Communities is required to conduct a further shared-cost research programme on the decommissioning of nuclear installations, over a five-year period starting on 1 January 1989. The main objective of the programme is to **reinforce the scientific and technical basis necessary to strengthen the safety and protection aspects of the decommissioning**.

The information package can be obtained from Mr B. Huber, Commission of the European Communities, DG XII/D/4, ARTS 02/37, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.40.84, Fax: (32) 2 236.20.06.

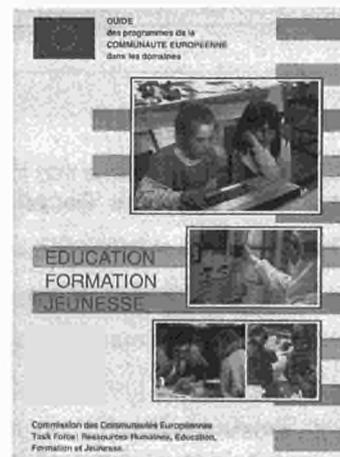


## CONCLUSION OF THE COUNCIL ON COOPERATION AND COMMUNITY POLICY IN THE FIELD OF EDUCATION IN THE RUN-UP TO 1993

In view of the fundamental role that **education and training play** in the economic, social and cultural development of the Member States of the Community itself, the Council of Ministers meeting of 6.10.1989 agreed on **five objectives** as a basis for future cooperation activities:

- **A multicultural Europe** based on:
  - strengthening young people's sense of belonging to a European Community;
  - the progressive achievement of genuine multilingualism;
  - taking the variety of cultural approaches into account; — drawing educational establishments closer together.
- **A mobile Europe** ensured by:
  - the free movement of persons and ideas; — support for the organization of youth exchanges;
  - providing teachers with the opportunity to teach temporarily in educational establishments of other Member States.
- **A Europe of training** for all based on:
  - the offer of high-quality education to all young people; — the development of appropriate teaching for disadvantaged children;
  - equality of access to high-quality education.
- **A Europe of skills** secured by:
  - constantly improving the quality of basic education;
  - providing young people with a better preparation for working life;
  - developing all the educational sectors which are vital for the future of Europe;
  - adapting the content and methods of training to technological change;
  - improving the initial and continuing training of teaching staff.
- **A Europe open to the world**, which seeks to:
  - intensify cooperation with international organizations dealing with education and training;
  - strengthen links with other countries and evolve new forms of mutual support with developing countries.

For further information, please contact: EURYDICE - Le Réseau d'Information sur l'Éducation dans la Communauté Européenne, 17, rue Archimède, Bte 17, B-1040 Brussels, Fax: (32) 2 230.65.62.



### NEW GUIDE ON COMMUNITY PROGRAMMES IN THE FIELD OF EDUCATION

This new guide contains information on the following programmes and initiatives: **ERASMUS, LINGUA, YOUTH EXCHANGES, EURYDICE, PETRA, EUTOTECNET, IRIS, CEDEFOP, FREEDOM OF MOVEMENT.**

✂ .....

**Order form:** Please send me a copy of the **Guide on Community Programmes in the Field of Education**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Postal Code: \_\_\_\_\_ Town: \_\_\_\_\_ Country: \_\_\_\_\_

Please return to EURYDICE (see address above).

✂ .....

### THE JEAN MONNET ACTION:

#### **TEACHING ON EUROPEAN INTEGRATION IN THE UNIVERSITY**

On 28 June 1989 the Commission of the European Communities adopted the '**JEAN MONNET ACTION**', which seeks to promote courses and teaching on European integration for university and higher education institutions.

The JEAN MONNET ACTION is co-financing '**European chairs**', which means

- professorships and specific EC courses
- research projects on European integration in the framework of the 'European chairs' and EC courses.

The JEAN MONNET ACTION will concentrate on the **social sciences, law, economics, politics and history**. An amount of 1 million ECU has been allocated for the 1990 pilot year. The Commission will run the JEAN MONNET ACTION in cooperation with an academic advisory body, '**THE EUROPEAN UNIVERSITY COUNCIL FOR THE JEAN MONNET ACTION**', representing the Liaison Committee of the National Conferences of Rectors and Presidents of Universities of the Member States, the European University Institute of Florence (EUI) and the representatives of the European Community Studies Association (ECSA).

For further information please contact: Mrs A. van Miert, Commission of the European Communities, DG X, University Information, BERL 2/110, 200, rue de la Loi, B-1040 Brussels, Tel.: (32) 2 235.20.77, Tlx: 21877 COMEUR B, Fax: (32) 2 236.07.52 / 235.01.42.

COMETT II: CALL FOR PROPOSALS

COOPERATION BETWEEN UNIVERSITIES AND INDUSTRY ON TRAINING IN THE FIELD OF TECHNOLOGY

COMETT primarily seeks to develop **cooperation between the academic and industrial sectors** by creating an infrastructure for this sort of cooperative relationship. A **call for tenders** is published in Official Journal C 292 of 28.11.1989, with the deadline for involvement in the programme being 28.2.1990. Proposals for the **following schemes** are invited:

- the creation, development and reinforcement of **University Industry Training Partnerships (UITPs)** to establish a European network;
- **transnational exchanges** of the following types: a) Integrated Student Placements of 3 to 12 months duration, b) Advanced Training Placements of 6 to 24 months duration and c) Personnel Exchanges between Universities and Enterprises;
- **joint training actions** of the following types: a) Short Training Courses, b) Joint Training Projects (training materials, courses, multimedia systems), c) Joint Training Pilot Projects;
- **Complementary measures** - preparatory visits.

For further information please contact: Mrs D. de Smedt, COMETT, Technical Assistance Unit, 71, av. de Cortenberg, B-1040 Brussels, Tel.: (32) 2 733.97.55, Fax: (32) 2 734.56.41.



Order form: Please send me the **COMETT**

**VADEMECUM**

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**APPLICATION PACKAGE**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

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To be returned to the address above.

NEW ERASMUS NEWSLETTER AND INFORMATION BROCHURE

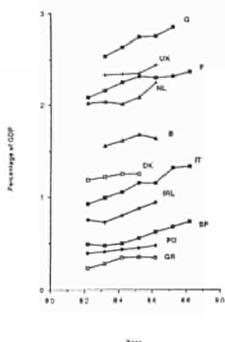


ERASMUS, the programme for **student mobility**, has four lines of action: the setting-up of a European network of cooperation between universities, direct financial support for students, improved academic recognition of diplomas and periods of study through the introduction of a system of transferrable course credits, and complementary measures (support for university associations, ERASMUS award, conferences, etc.).

An **ERASMUS newsletter** is now available, three issues a year (9 ECU). It can be obtained from the Erasmus Bureau, 15, rue d'Arlon, B-1040 Brussels, Tel.: (32) 2 233.01.11, Fax: (32) 2 233.01.50, Tlx: 63528. From this address you can also obtain the **ERASMUS brochure** and the **application package** for the current call for proposals (see page 21 and I&TT 4/89, page 8).

Just published:

COMPARATIVE ANALYSIS OF THE NATIONAL S/T POLICIES OF THE MEMBER STATES OF THE EUROPEAN COMMUNITY



This study is an input to the undertaking, by the Commission, of a **comparative analysis and synthesis of the national scientific and technical policies** of the Member States of the European Community.

Copies can be obtained free of charge from Mr I. Saragossi, CEC, DG XII/H/5, MO75 07/1, 200, rue de la Loi, B-1040 Brussels, Tel.: (32) 2 235.55.17, Tlx: 21877 COMEUR B, Fax: (32) 2 235.06.56.

Figure: Trends in gross expenditure on R&D as a percentage of national Gross Domestic Product

## FAST - LIST OF PUBLICATIONS

Order form (please tick):

Results and recommendations from the FAST II Programme - 'Science, Technology and Society - European Priorities', summary report (short version), March 1989, 11 p.

The FAST II Programme (1984-1987) - Results and recommendations' Volume 1: A synthesis report 'Science, Technology and Society - European priorities', 151 p., December 1988

J. Lee - 'The Impact of Technology on the alternative uses for land' - April 1986 - 172 p.

R. Gwyn - 'Visions and Scenarios for Education and Teacher Training' - February 1987 - 130 p.

BETA - 'Nouveaux matériaux - Rapport final' - April 1987 - 400 p.

P. Brödner (ed) - 'Options for 'New production systems': CHIM (Computer and human integrated manufacturing)' - February 1987 - 195 p.

V. De Keyser - 'Interactions hommes - machines' - Mai 1987 - 90 p.

T. R. Gormley, G. Downey, D. O'Beirne - 'Food and Health in the year 2010' - July 1987 - 45 p.

D. Normandin - 'La forêt agricole dans la Communauté Européenne - Eléments statistiques d'appréciation de la situation' - 83 p. - Décembre 1987

W. Wobbe - Integration and Convergence of Technologies: The move towards optomatronics: An opportunity for a European Industrial Strategy?, March 1988

W. Kleinhans - The agro-chemo-energy complex, Brussels, November 1987

Complete list of FAST publications

Name: \_\_\_\_\_ Address: \_\_\_\_\_

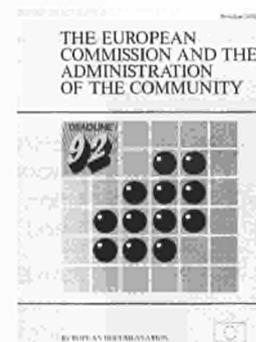
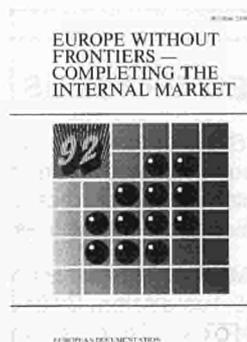
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The above publications can be obtained free of charge from Mrs A. de Greef, CEC, DG XII/H/3, MO75 5/31, 200, rue de la Loi, B-1040 Brussels, Tel.: (32) 2235.97.55, Tlx: 21877 COMEUR B, Fax: (32) 2 236.06.56.6

## NEW PUBLICATIONS ON THE SINGLE MARKET AND THE ADMINISTRATION 55 OF THE COMMISSION OF THE EUROPEAN COMMUNITIES

### 1. EUROPE WITHOUT FRONTIERS - COMPLETING THE INTERNAL MARKET (third edition)

This leaflet sets out to explain the main aspects of the Community's **internal market programme** and show what progress has been made. Thanks to the Single European Act and its new decision-making procedures, nearly half the programme has now been completed. Similarly, the structural funds have been reformed to promote economic cohesion in Europe.



### 2. THE EUROPEAN COMMISSION AND THE ADMINISTRATION OF THE COMMUNITY

This booklet seeks to reply to the many questions about the **European public service**, with reference to the European Commission, which is the largest of the Community institutions.

These two publications can be obtained free of charge from the Office for Official Publications, 2, rue Mercier, L-2985 Luxembourg, or the press and information offices of the CEC (see page 39).



## CONFERENCE ON RADIOACTIVE WASTE

The Conference aims to present the main achievements of the third Community research programme in the field of radioactive waste management (1985-89) and to promote a thorough discussion of these results in order to take advantage of the widest international experience in this field.

Further information can be obtained from Mr L. Cecille, Commission of the European Communities, DG XII/D/2, ARTS-LUX 2/16, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.75.88, Tlx: 21877 COMEUR B, Fax: (32) 2 236.20.06.

## FAST: FORECASTING AND ASSESSMENT FOR PRIORITIES IDENTIFICATION IN THE AREA OF RESEARCH AND DEVELOPMENT

FAST is a research programme of the European Communities. Its task is to **analyse the role of scientific and technological change for the long-term economic and social development** of European society and to **identify European priorities** for immediate action in the area of research and technological development.

FAST II (1984-1988) focused on **five** major problem areas:

- the relationship between technology, work and employment;
- the transformation of services and new technology;
- the function of communication;
- the future of the European food system;
- the integrated development of natural renewable resources.

Special attention was also devoted to **transsectoral topics**: how macro-economic theories and policies integrate technological innovations; the globalisation of technology and economy and world strategic alliances; the long-term strategic capabilities of European firms in high-tech sectors; prospects for R&D funding in the 1990s; the institutionalisation and use of technology assessment in government at regional, national and international level. Since 1989 FAST forms part of the MONITOR Programme (see article below).

For further information please contact Mr R. Petrella, DG XII/H/3, MO 75 06/21, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.79.87, Tlx: 21877 COMEUR B, Fax: (32) 2 235.06.56.

### MONITOR - IDENTIFYING NEW PRIORITIES FOR COMMUNITY R&D

The purpose of the programme is to be instrumental in **identifying new directions and priorities for Community research and technological development policy** and to highlight the relationships between it and other common policies. MONITOR has the following programmes: **SAST** (Strategic Analysis in Science and Technology), **FAST** (Forecasting and Assessment in Science and Technology), **SPEAR** (Activities in Support of the Evaluation of R&D Programmes).

The information package on **MONITOR** can be obtained from Mr H. J. Allgeier, Commission of the European Communities, DG XII-H, 200, rue de la Loi, B-1040 Brussels, Tel.: (32) 2 235.40.55, Tlx: 21877 COMEUR B, Fax: (32) 2 235.06.56.



### COMMISSION TACKLES LANGUAGE BARRIERS: EUROTRA A EUROPEAN APPROACH TO MACHINE TRANSLATION

In June 1989 the Council of the EC approved the additional finance necessary for the completion of the **EUROTRA Programme**, which has been running since 1982. Its aims are:

- research and development of a **prototype machine translation system** of advanced design for all official languages of the EC.
- creation of a **'critical mass' of expertise** on machine translation and in all Member States of the EC.

EUROTRA is designed for the nine official languages of the Community, thus representing 72 language pairs. Since 1986 groups within each of the member countries have been fully operational and have been engaged in research and development work. Each research team is responsible for analysis and synthesis of and transfer into its own language.

The programme is agreed by all 12 Member States and is being carried out in 19 sites with a total staff of approximately 200 people, more than 80 % of whom are computational linguists, linguists, translators, computer scientists and mathematicians. The groups are locally linked to universities and nationally managed by a head of research.

For further information on **EUROTRA**, please contact Mr Gasset Collantes, Commission of the European Communities, DG XIII-B, B4/008, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-4668, Tlx: 3423 / 3446 COMEUR LU, Fax: (352) 4301-3909.

### MACHINE TRANSLATION SUMMIT II - PROCEEDINGS NOW AVAILABLE

In I&TT 2/89 we published the announcement of the **congress on machine translation** which was held in Munich on 16-18 August 1989. The proceedings of this conference are now available. If you are interested in a copy (DM 100), please contact Mrs H. Stohl-Goebel, Deutsche Gesellschaft für Dokumentation e.V. (DGD), Westendstraße 19, D-6000 Frankfurt/M. 1, Tel.: (49) 69 740.805.

## A new instrument for economic cooperation in the Community: *THE EUROPEAN ECONOMIC INTEREST GROUPING (EEIG)*

Since 1 July 1989 a **new instrument facilitating cross-frontier cooperation** has been available to firms within the Community engaged in certain joint activities such as research and development, purchasing, production, sales, computerized data processing and the formation of multidisciplinary consortia to tender for public or private contracts.

Known as the **European Economic Interest Grouping (EEIG)**, this new instrument was created on 25 July 1985 by Regulation No 2137/85 of the Council of Ministers of the European Community (OJ, No L 199, 31.7.1985), acting on the basis of a proposal from the European Commission. The Commission's intention was to create a **new entity**, directly incorporated into Community law and **aimed specifically at transnational cooperation**. The formula for the European Economic Interest Grouping answers the need of companies anxious to collaborate on a transnational scale. Up to now their efforts were discouraged by the absence of a suitable legal instrument. The new instrument for cooperation, in the form of the EEIG, should be employed in widely differing fields and help European firms to improve their competitiveness. It is therefore part of the large European market of 1992.

The **brochure 'The European Economic Interest Grouping'** can be obtained from the press and information offices of the CEC (see page 39). Further information on the EEIG is available from the **Euroguichets**, an address list of which can be obtained from Mr R. Schneider, Commission of the European Communities, DG XXIII, ARLN 05/30, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.63.22, Tlx: 21877 COMEUR B, Fax: (32) 2 236.12.41.

The Newsletter **News from DG XV** reports on the Commission's policy in the fields of **financial institutions and company law**. It can be obtained from Mrs G. Halberstadt, Commission of the European Communities, DG XV, SDME R2/32, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.18.85, Tlx: 21877 COMEUR B, Fax: (32) 2 235.65.00.



## SUBCONTRACTING: A STRATEGY FOR THE 1992 ENTERPRISE

Companies confronted with the need to improve their competitiveness are turning increasingly to **subcontracting as a winning strategy**. Estimated at 40 % only a few years ago, the percentage of outside procurement (purchase or subcontracting) by the major groups is now put at around 60 %. In Japan it is as much as 80 %.

The Commission, in a communication which it adopted this August and sent to the Twelve, takes the view that the competitiveness of EC enterprises, in such key sectors as aircraft, motor cars, electronics, transport equipment and energy production, will be partly determined by the technological capacity and competitiveness of their European subcontractors, most of which are small and medium-sized enterprises (SMEs).

The Commission is proposing, in coordination with national or regional initiatives, to **foster the development of subcontracting in the Community** along three main lines: the development of an environment favourable to subcontracting; the improvement of information and communication between principals and subcontractors; the promotion of subcontracting and of relations based on partnership (for example by establishing a European information centre for subcontracting).

Further information can be obtained from: Mrs M. Pariat, Commission of the European Communities, DG XXIII, 80, rue d'Arlon, B-1040 Brussels, Tel.: (32) 2 235.31.88, Tlx: 21877 COMEUR B, Fax: (32) 2 236.25.72.

## CALLS FOR PROPOSALS DOCUMENTATION

**Guidelines for applicants** can be ordered for the following programmes:

- STEP** (see I&TT, 4/89, page 3): STEP Programme, Commission of the European Communities, DG XII/E/1, 75, rue Montoyer, B-1040 Brussels, Tlx: 21877 COMEUR B, Fax: (32) 2 236.30.24.
- BRIDGE** (see I&TT, 4/89, page 11): Mr D. de Nettancourt, Commission of the European Communities, DG XII/F/2, SDME 03/67, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.40.44, Tlx 21877 COMEUR B, Fax: (32) 2 236.30.08.

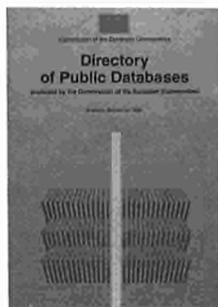


STEP



BRIDGE



**NEW: DIRECTORY OF PUBLIC DATABASES PRODUCED BY THE CEC**

The Commission of the European Communities is potentially one of the **biggest providers** (and also users) of **databases** in the world. Of the 50 databases produced by the Commission, 30 are already open to the public. They cover almost all fields of Community interest, e.g. agriculture, environment, new technologies, law. This coverage has recently been enriched with 'INFO 92', the new database on the completion of the single market.

This first edition of the Directory reflects an effort to provide an overview of the ever-increasing number of EC Commission databases available for public access which have been produced by or for the Commission. It contains three parts: the index, the database descriptions, a detailed list of hosts and distributors who offer access to the databases.

Copies of the directory (in English only) can be obtained from Mr A. Berger, Commission of the European Communities, DG IX/F/4, ARLN 3/4, 200, rue de la Loi, B-1040 Brussels, Tel.: (32) 2 235.75.52, Tlx: 21877 COMEUR B, Fax: (32) 2 236.06.24.

**NEW COMMISSION SERVICE NOW AVAILABLE:****ACCESS TO JAPANESE SCIENTIFIC AND TECHNICAL INFORMATION**

Industry in Japan benefits from direct access to numerous sources of European scientific and technical information. They are very well informed on what we are doing in Europe. Europeans **encounter considerable difficulty in accessing the same information originating in Japan**. The first difficulty is the barrier raised by language and script. Bearing in mind the broad range of Japanese information at the disposal of more and more Europeans users, the Commission of the European Communities has just launched a **new project** aimed at assisting European researchers and industry **to obtain scientific and technical information in Japan**. The project involves the presence in Japan of a contractor responsible for **collecting documents and preparing abstracts in Japanese**. The abstracts are translated (machine translation) into English and handled in Europe by a specialist unit responsible for the dissemination of abstracts to European users.

Further information on the project can be obtained from: Mr P. P. Rotondò, CEC, DG XIII/B/3, Jean Monnet Building, B4/026, L-2920 Luxembourg, Tel.: (352) 4301-3166, Fax: (352) 4301-3909, Tlx: 3423/3446 COMEUR LU.

**QUICK ACCESS TO PUBLIC TENDERS:****TED — DATABASE ON PUBLIC WORKS, SUPPLY AND SERVICE CONTRACTS**

TED provides quick access to public tenders in more than 80 countries. In particular it contains all tenders for public works, supply and service contracts exceeding a value of ECU 200 000 (for public works: ECU 5 000 000) in the EC Member States. TED non also gives details of successful bidders for public tenders. For more information on how TED could help your business, fill out the coupon below.



To ECHO, P.O. Box 2373, L-1023 Luxembourg, Tel.: (352) 488.041, Fax: (352) 488.040, Tlx: 2181.

Please send me details of the tenders database TED

Name: \_\_\_\_\_ Company \_\_\_\_\_

Address: \_\_\_\_\_

Postal Code : \_\_\_\_\_ Town: \_\_\_\_\_ Country: \_\_\_\_\_

**NEW INFORMATION MARKET OBSERVATORY SUMMARY REPORTS NOW AVAILABLE**

The **Information Market Observatory (IMO)** reports No 5 (June 1989) and No 6 (September 1989) are now available. They form part of the IMPACT Programme and provide a statistical analysis of the worldwide supply of professional database services. The main conclusions are:

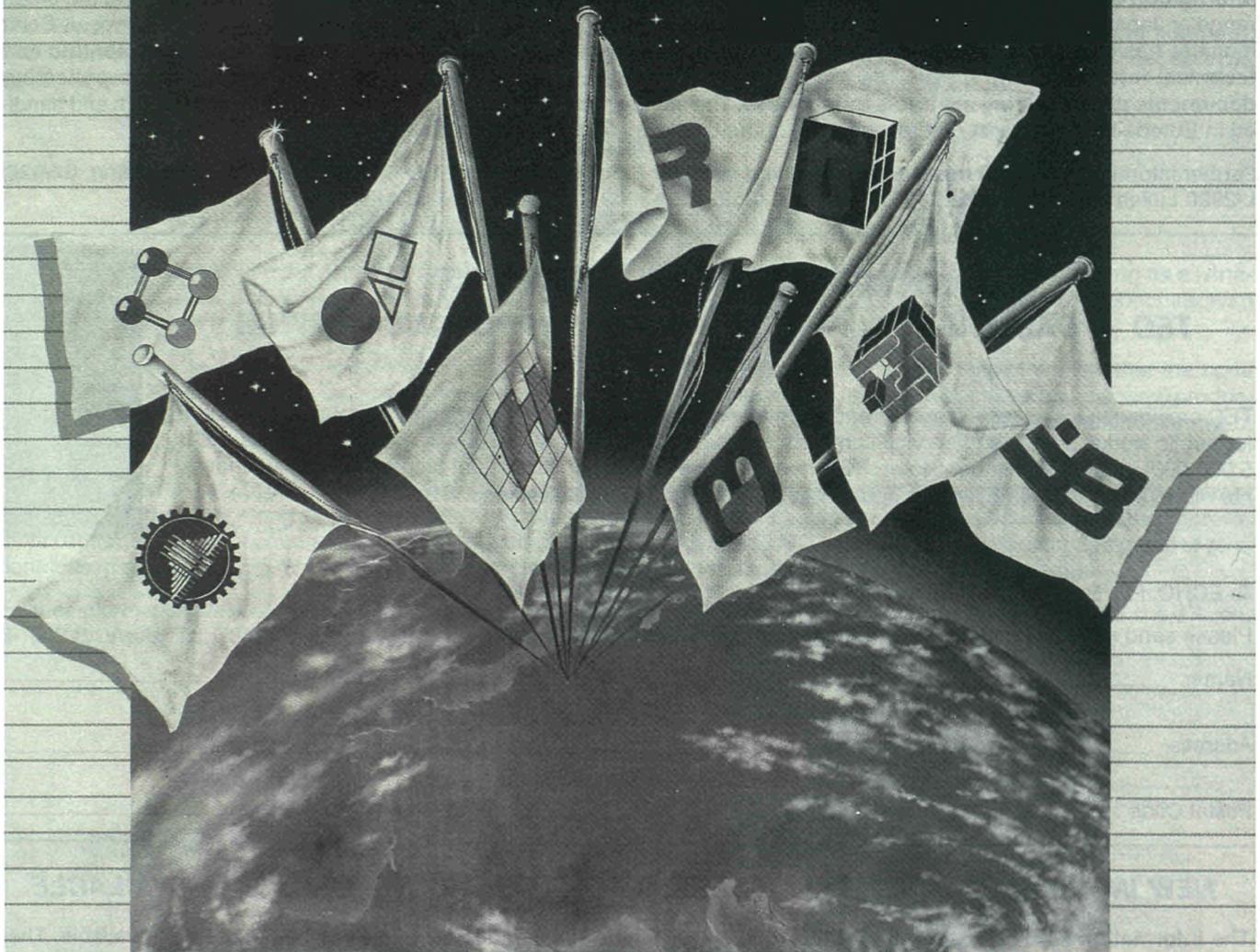
- recent market surveys **revise upwards the size of the CD-ROM market**;
- the worldwide **market amounted to \$ 406 million in 1988** for an estimated installed base of 170 000 drives;
- **in-house publishing** represents a significant part of the market;
- **GATEWAYS** — the growing trend in database distribution;
- the **number of gateways has been growing** steadily from 35 in 1985 to 44 in 1986 and 56 in 1987;
- **over one-third** of European information specialists **were using gateways** in 1988.

Copies of the Information Market Observatory reports can be obtained from Mr S. Lustac, Commission of the European Communities, DG XIII-B, B4/016, Jean Monnet Building, L-2920 Luxembourg, Tlx: 3423 / 3446 COMEUR LU, Fax: (352) 4301-2847.

# EUROTECH 90

24-28/4/1990

BRUSSELS



TENTOONSTELLINGSPARK  
VAN BRUSSEL



PARC DES EXPOSITIONS DE  
BRUXELLES

EUROTECH '90, Brussels, Organiser: Foire Internationale de Bruxelles V.Z.W., Place de Belgique, B-1020 Brussels, Tel.: (32) 2 478.48.60, Tlx: 23643 foire b, Fax: (32) 2 478.80.23. **Information on the participation of the CEC** at Eurotech can be obtained from Mr F. Engels, Commission of the European Communities, DG XIII/C/2, B4/106, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-2356, Tlx: 3423 / 3446 COMEUR LU, Fax: (352) 4301-4129.

# COSINE - ADVANCED COMMUNICATIONS NETWORK

## COOPERATION FOR OPEN SYSTEMS INTERCONNECTION NETWORKING IN EUROPE

COSINE - 'Cooperation for Open Systems Interconnection Networking in Europe' - is a EUREKA project. COSINE was set up to establish an **advanced communications network** for the hundreds of scientific and industrial research institutes all over Europe. COSINE strives to make present-day research networks in Europe interwork. A language researcher in Helsinki should be able to work as easily with his colleague in Valencia as with his neighbour next door. The Commission supports the COSINE project as part of both the VALUE and the ESPRIT Programmes.



### PILOT INTERNATIONAL RESEARCH NETWORK INFRASTRUCTURE CONTRACT SIGNED AS PART OF THE IMPLEMENTATION OF COSINE

A contract for the provision of a **pilot Europe-wide interconnection of computer networks for researchers** has been signed between the Commission, representing the partners in the EUREKA COSINE project, and PTT Telecom of the Netherlands.

Responsibility for technical aspects has been given to **RARE, the European association of users and providers of research networks** (see article below). The research networks will be connected to this backbone network via 64 kbps X.25 access points, with a possibility for later upgrading to a speed of 2 mbps. The countries to be interconnected are Austria, Belgium (also providing access for Luxembourg), Denmark, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden (providing a connection to the other Nordic countries Finland, Iceland and Norway), Switzerland, the United Kingdom and Yugoslavia.

According to RARE's specifications, the pilot service will use data communication protocols that conform to current standards and improve connectivity between the organizations participating in RARE. A number of the most important aspects of the management of pan-European X.25 interconnections will also be investigated.

Additional information on this project, the COSINE Users' Meeting, or any other aspect of COSINE can be obtained from COSINE Policy Group Secretariat, Mr N. Newman, Commission of the European Communities, DG XIII/A/2, A-25 5/12, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 236.05.22, Tlx: 21877 COMEUR B, Fax: (32) 2 235.06.55 or from the RARE Secretariat (see article below).

### RARE DEFINES EUROPEAN HIGH-SPEED NETWORKING STRATEGY

The **RARE Association** (Réseaux Associés pour la Recherche Européenne) recently adopted a number of documents representing the **current thinking and strategy relating to European high-speed networking** (2 mbps and higher rates) for the academic and research community.

The proposed **'European High-Speed Networking Initiative'** caters for a European high-speed backbone linking national, regional or disciplinary high-speed networks. Data rates of 2 mbps are already feasible across Europe, says the report, and active planning should start immediately to define such an infrastructure and its evolution to 140 mbps within a few years and to the range of Gigabits/second by the end of the decade.

Such a project fits in with current activities, such as RACE or EBIT, supported by the Commission of the European Communities (DG XIII), the European Telecommunication Agencies and European industry. A number of regional networks and scientific communities, such as high-energy physics or aerospace research, have the capabilities and needs to use such high-speed networks as of now.

RARE, Réseaux Associés pour la Recherche Européenne, RARE Secretariat, P.O. Box 41.882, NL-1009 DB Amsterdam, Tel.: (31) 20 592.50.78, Fax: (31) 20 592.51.55, Tlx: 10262 hef nl.

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### IES NEWSLETTER ORDER FORM

The **IES NEWS** newsletter provides regular information on the **progress of the ESPRIT Programme** and its range of initiatives such as the COSINE project. It can be ordered from: European Institute for Information Management, 13, rue de Bragance, L-1255 Luxembourg, Fax: (352) 44.73.52.

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I wish to order . . . . . copies of IES News

Name: \_\_\_\_\_ Institution: \_\_\_\_\_

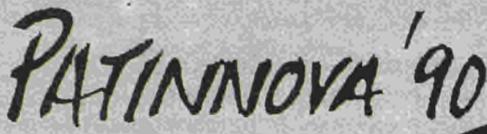
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## STRATEGIES FOR THE PROTECTION OF INNOVATION: PATINNOVA '90



MADRID

1<sup>st</sup> European Conference  
on  
Patent and Innovation

»PATINNOVA«

Madrid, 21 – 23 May 1990, Palacio de Congresos

– STRATEGIES FOR THE PROTECTION OF INNOVATION –



Commission of the European Communities  
Directorate – General XIII – C



ifo-Institut für Wirtschaftsforschung, München

PATINNOVA '90 will be the **first European congress** dealing with **patent and innovation matters**. It will focus on how to promote innovation and accelerate the spread of new technologies by means of the patent system. Its overall objective is to **improve general awareness of the economic and marketing importance of the patent system**. PATINNOVA '90 will illustrate the potential benefits at all levels that 'best practice' in the field of industrial property rights can bring to industry by means of case studies and model simulation.

The **following issues** will be addressed:

- **protection and filing policies** for technical innovations as part of the systematic marketing of technology;
- the **role of patent attorneys** and other patent consultants in filing and protection strategies;
- **patent-assisted marketing** of inventions from university and research institutions;
- strategies for avoiding and solving **patent disputes and litigation**;
- **requirements to be met in future** by the system of industrial property rights and by the patent system in particular.

The draft programme for PATINNOVA '90 can be obtained on **written request** from: Dr A. v. Witzleben, CEC, DG XIII/C/1, B4/091 Jean Monnet Building, L-2920 Luxembourg, Tlx: 2423 / 3446 COMEUR LU, Fax: (352) 4301-4129

Name: \_\_\_\_\_

Profession/Institution: \_\_\_\_\_

Address: \_\_\_\_\_

Postal Code: \_\_\_\_\_ Town: \_\_\_\_\_ Country: \_\_\_\_\_

Date: \_\_\_\_\_ Signature: \_\_\_\_\_

## PATINNOVA '90 — CALL FOR SCIENTIFIC CONTRIBUTIONS

In connection with the organisation of PATINNOVA '90, the Commission intends to **publish a collection of articles** on the topics to be addressed. This publication is designed to give a **comprehensive view of the state of scientific discussion**. Interested persons, enterprises and research institutions are therefore invited to submit **abstracts** of possible contributions (max. 2 pages) to the **IFO Institut für Wirtschaftsforschung**, München by 15.1.1990 (Dr U. Täger, IFO-Institut, Postfach 860460, D-8000 München 86, PATINNOVA '90, Tel.: (49) 89 92.24-0, Tlx: 522.269, Fax: (49) 89 985.369). Authors of selected contributions will be asked to submit their final articles by 30.3.1990. If possible, please announce your intention to write a contribution as soon as possible (by phone or fax).

## SOON TO BE PUBLISHED: GUIDE TO EUROPEAN COMMUNITY RESEARCH

*A Manual for Applicants*

The Commission of the European Communities intends to publish the **first comprehensive manual containing information on both the legal, administrative and technical aspects and the contents of all R&D programmes**. At a time of ever increasing interest in the technological elements of the European Single Market, the Commission will fill an information gap often expressed by interested parties, particularly SMEs and research institutions. The manual will be available in January 1990.

Order Form: Please send a copy of the Guide to European Community Research to (in DE  EN  FR  IT ):

Name: \_\_\_\_\_ Address: \_\_\_\_\_

Postal Code: \_\_\_\_\_ Town: \_\_\_\_\_ Country: \_\_\_\_\_

Please return to Mrs A. Dissy, Commission of the European Communities, DG XII, SDME 1/34, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.64.19, Tlx: 21877 COMEUR B, Fax: (32) 2 235.88.65.

**COMMUNITY RESEARCH AND DEVELOPMENT PROGRAMMES**  
**DEADLINES FOR THE NEXT CALLS FOR PROPOSALS**

Programme	Directorate-General responsible	Deadline
<b>BRIDGE</b> — Biotechnology research for innovation (see page 16 and I&TT, 4/89, page 11)	XII	15.12.1989
Primary raw materials: <b>FOREST</b> (see I&TT, 4/89, page 3)	XII	15.12.1989
<b>STEP</b> — Research in the field of environmental protection (see I&TT, 4/89, page 3)	XII	29.12.1989
<b>STD — SCIENCE AND TECHNOLOGY FOR DEVELOPMENT</b>	XII	31.12.1989
<b>ERASMUS</b> — grants for students not participating in an inter-university cooperation programme (ICP) (see page 13)	TFHR	1.1.1990
<b>AGRICULTURAL RESEARCH</b> (see page 10)	VI	19.01.1990
<b>RADIATION PROTECTION</b> (see page 11)	XII	31.01.1990
<b>PRIMARY RAW MATERIALS</b> and recycling of non-ferrous and strategic metals (see I&TT, 4/89, page 3)	XII	31.01.1990
<b>COMETT II</b> — technological training (see page 13)	TFHR	28.02.1990
<b>SPES</b> — A plan to stimulate cooperation in economic sciences (see page 3)	XII	no deadline
<b>SCIENCE</b> — Plan to stimulate the international cooperation and interchange needed by European researchers (see page 3)	XII	no deadline
<b>REWARD</b> — Recycling of Waste (see page 11)	XII	15.03.1990 (to be confirmed)
<b>ESPRIT</b> (see I&TT, 4/89, page 6)	XIII	10.01.1990
<b>BCR</b> (Metrology and Reference Materials)	XII	no deadline
<b>MONITOR</b> : Expression of interest (see page 15)	XII	no deadline

Application forms can be obtained from the Directorate-Generals concerned (Commission of the European Communities, DG ..., 200, rue de la Loi, B-1049 Brussels); TFHR stands for Task Force Human Resources.

Programme	FORTHCOMING CALLS	Call expected
<b>ESPRIT II</b> — IPS (Information processing systems) — CIM (Computer integrated manufacturing) — OBS (Office and business systems)		January 1990
<b>FAR</b> - Fisheries & Aquaculture Research (see I&TT, 4/89, page 11)		beginning 1990
<b>BRITE-EURAM</b> - industrial technologies and advanced materials (see page 6)		beginning 1990
<b>THERMIE</b> - ENERGY DEMONSTRATION PROJECTS (see page 11)		beginning 1990
<b>RADIOACTIVE WASTE</b> (see page 14)		beginning 1990

The information above is a sort of early warning system. The dates indicated may change and are not definitive. 'I&TT' declines all responsibility for any changes. Proposals should be prepared well in advance of this deadline in order to avoid last-minute problems. Proposers should consult the programme managers for advice on questions of presentation.

## INNOVATIONS FROM COMMUNITY R&D

Under this section 'Innovation and Technology Transfer' reports regularly on recent innovations stemming from Community-funded research.

### REDUCTION OF SOLVENT VAPOUR EMISSIONS BY THE FOOD INDUSTRY

The emission of solvent vapours by industry is quite often an environmental nuisance. Lecithin, a natural product consisting of phospholipids, esters and phosphates, is extracted from soya oil by Duphar BV by using a solvent extraction process employing acetone. The white, granular product is used as a food additive, where it is a useful emulsifying agent.

In order to reduce the emission of acetone vapour to the air, Duphar BV has, in the framework of the Community's DG XI environment programme, developed a **fluidized-bed reduced-pressure batch-drying process which recycles 90% of the solvent** and thereby reduces acetone vapour emissions.

Lecithin is particularly sensitive to moisture and excessive heat; so the drying process, to remove both water and acetone from the granules, must be carried out with great care. In the Duphar BV patented process this is facilitated by using superheated vapour to fluidize the bed.



In a demonstration plant co-financed by the Community's environment programme, solvent loss to the atmosphere was reduced from about 100 litres/hour to less than 5 litres/hour and **air pollution was reduced by 90%**. In addition to this environmental advantage the new process has **economic advantages**, since the reduction in acetone consumption pays for the extra capital investment in three to four years. A full-scale production plant went into operation in 1988. The process also shows potential for application to other processes such as sugar pellet production and tablet coating, so commercialization prospects are good.

Further information may be obtained from: DUPHAR BV, C. J. van Houtenlaan, 36, 1381 CP Weesp, NETHERLANDS, Tel.: 02940 79911.

### PAN-TERRE:

#### ACOUSTIC AND THERMAL INSULATING PANELLING MADE OF WASTE PAPER

Pan-Terre is a **structural board made from a mixture of waste paper and straw**. It is self-supporting and combines physical and ecological features with acoustic and thermal insulating qualities in such a way that it has become a popular material in France and Belgium for prefabricated modular construction and interior renovation. It competes favourably with plasterboard and chipboard because of its lighter weight, superior strength and easier fitting.

Specialized uses featuring Pan-Terre's acoustic qualities satisfy the highest standards. Office partitions, movable walls, floating floors, acoustic baffles and sound-proofing enclosures for machinery are all popular items.

The goal of the project was to **design a natural, multi-purpose product using recycled raw materials and straightforward technology**. Ingredients such as formaldehyde, asbestos and phosphogypsum — typically used in comparable products — were ruled out from the start.

The features of Pan-Terre are:

- (i) its acoustic and thermal insulating qualities;
- (ii) its ease of installation and assembly;
- (iii) its entirely natural structure (without any chemical binders, which are nowadays under attack for their side-effects);
- (iv) its finish, which allows it to be used directly as a finishing surface.

Pan-Terre was awarded the 'clou d'or' at the 1987 Bâtimat Exhibition in Paris for its usefulness, its ease of installation and handling and its appearance. Manufacturing tests have shown that it is possible to produce panelling with comparable qualities from rice husks, coffee parchment, sugar cane bagasse or any other fibrous waste material. The technology which has been developed can thus be applied anywhere in the world. Full-scale testing of the production process for Pan-Terre panelling has proved successful and the market potential is exceptional.

Further information may be obtained from: Pan-Terre SA, Parc Industriel des Hauts Sarts, 4<sup>ème</sup> avenue 40, B-4400 Herstal, Tel. (32) 41 48 08 78 or 41 48 24 62 or MASA Industrias Metalúrgicas sarl, Apart. 41, P-3751 Agueda Codex, Tel. 64 460 or 64 461



## AFTER APPROVAL OF THE VALUE PROGRAMME: NEW CONSULTATIVE COMMITTEE CONVENED

Under the chairmanship of **Mr Parajón Colada**, Deputy Director-General of DG XIII, the second meeting of the new Consultative Committee on the VALUE Programme was convened in Luxembourg on 23 and 24 October 1989. Among the topics discussed was the **technical implementation of the VALUE Programme** and the various initiatives carried out under this programme, such as the **COSINE project** (see page ..), the **CORDIS data base** (see I&TT 2/89, page 23), the **publications** (see page ..) and the **exploitation activities of Community-funded R&D results**.



*Mr Parajón Collada, Deputy Director-General of DG XIII (centre), flanked by Mr Strub, Director of DG XIII-C, and Mr Durvy (secretary of the new VALUE Committee and head of DG XIII/C/2).*

### LIST OF THE MEMBERS OF THE VALUE CONSULTATIVE COMMITTEE

- Dr D. HISCOCKS, Department of Energy (UK)
- Dr Peter BROOKE, Department of Trade and Industry (UK)
- Dr W. K. VIETSCH, Ministerie van de Wetenschappen (NL)
- Mr M. C. F. VAN DEN BOSCH, Ministerie van Economische Zaken (NL)
- Mr Luis CRESPO, Centro para el Desarrollo Tecnológico Industrial, Ministerio de Industria y Energía (E)
- Mr Antonio CORTÉS, Secretaría General del Plan Nacional de Investigación y Desarrollo (E)
- Mr M. BALLARIN, Ministerio di Ricerca Scientifica (I)
- Mrs Danielle MAZZONIS, E.N.E.A. (I)
- Prof. ALCIVIADES PAYATAKES, University of Patras (GR)
- Mrs Angela ARABATZI, General Secretariat of research and technology (GR)
- Mr Nicolas de KERMADEC, Chef du Département Valorisation de la Recherche, ANVAR (F)
- Mr J. JOLY, Ministère de l'Industrie (F)
- Mr Paul LENERT, Mr Pierre DECKER, Ministère de l'Education Nationale et de la Jeunesse (L)
- Mrs Susanne I. RASMUSSEN, Mr A. KORSGAARD, Directorate for Research EEC Section, Ministry of Education (DK)
- Dr K. HALPIN, Dr O. Mc BREEN, EOLAS, Irish Science and Technology Agency (IRL)
- Mr Stephan KERN, Bundesministerium für Forschung und Technologie (D)
- Dr Jürgen WÜST, Kernforschungszentrum Karlsruhe (D)
- Mr LEGROS, Mr VAN GESTEL, Services de Programmation de la Politique Scientifique (B)
- Ms Maria Herminia SEABRA DE ANDRADE, Adjunta do Secretário de Estado da Ciência e Tecnologia (P)
- Mr Joao DUARTE CUNHA, Investigador Principal do LNEC, Departamento de Informática (P)



Further information on the VALUE Programme can be obtained from Mr J. N. Durvy, Commission of the European Communities, DG XIII/C/2, JMO B4/107, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-3610, Fax: (352) 4301-4129, Tlx: 3423 / 3446 COMEUR LU.

## KEM-TEK '89



The Commission participated in the 8th international fair for plant and equipment for the **biotechnological, chemical and food industries**, which took place in November 1989 in Copenhagen. At its stand 15 products from Community research were presented, which all attracted interest from numerous professional users.



*DG XIII-C's stand at KEM-TEK '89*

Further information on these products can be obtained from Mr F. Engels, Commission of the European Communities, DG XIII/C/2, B4/106, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-2356, Tlx: 3423 / 3446 COMEUR LU, Fax: (352) 4301-4129.

The catalogue on KEM-TEK '89 can be obtained from Mr M. Leipold, Commission of the European Communities, DG XIII/C/2, B4/086, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-2936, Tlx: 3423 / 3446 COMEUR LU, Fax: (352) 4301-4129.

**PROTEAS DATABASE ENTERS SECOND PHASE OF DEVELOPMENT**

**PROMOTING THE COMMERCIAL EXPLOITATION OF COMMUNITY R&D PROJECTS**

Under its VALUE Programme the Commission supports the development of a database project, **PROTEAS**, containing **European R&D results**. The aim of PROTEAS is to **promote the commercial exploitation of research results** by providing high-quality information to the European organisations which are in a position to offer various types of support. This support might include, for example, research collaboration, financial support, or a manufacturing or licence agreement.

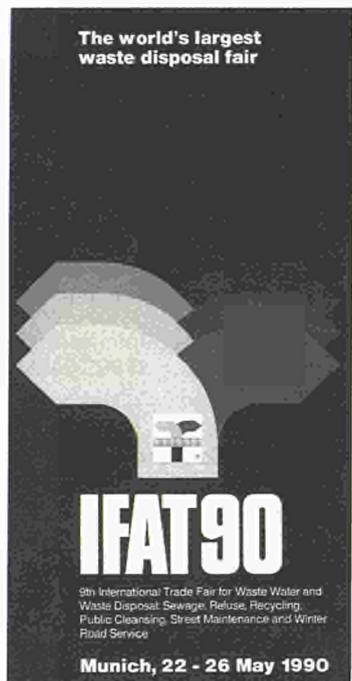
An experimental entry form and database structure have been designed to cover all aspects of R&D under the main categories of Biology and Medicine, Materials and Industrial Manufacturing Technologies, and Energy and the Environment. A system of codes has been developed to facilitate submission of entries to the database from multilingual sources.

**PROTEAS**

Data collection has recently started to cover all sectors of technology. In Sprint 1990, PROTEAS will be included in **CORDIS**, the **Community R&D Information Service**, which is being set up under the VALUE Programme to disseminate comprehensive details on the Community R&D Programmes, their projects, and other associated information (see I&TT, 2/89, page 23).

The long-term aims of PROTEAS are to provide high-quality information on European R&D results, including not only those arising from projects funded by the CEC but also those funded by other national, international or independent sources.

For further information, please contact Mrs M. Campbell, Longman Cartermill Ltd, St Andrews, UK-Fife, Tel.: (44) 334 77.60, Fax: (44) 334 77.180.



**FAIR ON WASTE DISPOSAL: IFAT '90**

IFAT 90 is a comprehensive showplace for environmental protection. Nowhere is the range of products offered by the waste disposal industry more comprehensive than at IFA 90: only two years away from the launch of the European single market, almost 1 000 organizations from 23 countries will be presenting their full range of products in a space of over 100,000 sq.m. — processes, plant, machinery, vehicles, and equipment for sewer construction and renovation, sewage and sludge treatment, solid waste disposal, recycling, reprocessing and decontamination, municipal cleansing, and winter road services, as well as numerous services to the waste industry.

**IFAT '90, 9th International Trade Fair for Waste Water and Waste Disposal, Munich, 22-26 May, 1990;** Organizer: Münchener Messe- und Ausstellungsgesellschaft mbH, Messegelände, Postfach 12 10 09, D-8000 München 12, Tel.: (49) 89 51.07-0, Tlx: 5212086 ameg d, Fax: (49) 89 51.07-172. **Information on the participation of the CEC at IFAT can be obtained from Mr F. Engels, Commission of the European Communities, DG XIII/C/2, B4/106, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-2356, Tlx: 3423 / 3446 COMEUR LU, Fax: (352) 4301-4129.**

**INFORMATION ON MATERIALS: PROTOTYPE DATA BASES NOW AVAILABLE**

Information on materials is of strategic importance for the industrial development of new products. In this context, the Commission of the European Communities has carried out a **European Materials Data Base Demonstrator Programme**. Eleven computerised materials data systems have been selected in such a way as to constitute a prototype for a European network. This prototype should allow trials to be carried out in the areas of harmonization, integration and public awareness.

A brochure, available free, has been published in the nine Community languages; it describes the different elements of the programme and presents the eleven data banks which are taking part.



PROGRAMA-DEMOSTRACIÓN EUROPEO SOBRE BANCOS DE DATOS FACTUALES DE MATERIALES

Comisión de las Comunidades Europeas  
DG XIII (Iniciativas comunitarias de información e innovación)



PROGRAMME EUROPEEN D'INFORMATION ET DE SENSIBILISATION AUX BANQUES DE DONNEES MATERIAUX

Commission des Communautés Européennes  
D.G. XIII (Initiatives communautaires de l'information et de l'innovation)



TOWARDS A MATERIALS INFORMATION SERVICE FOR EUROPE THE CEC MATERIALS DATABANK DEMONSTRATOR PROGRAMME

Commission of the European Communities  
D.G. XIII (Initiatives communautaires de l'information et de l'innovation)

Further information and the brochure (please indicate language) can be obtained from Mr G. Heine, Commission of the European Communities, DG XIII, C4/11, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-3620, Tlx: 3423 / 3446 COMEUR LU, Fax: (532) 4301-3827.

## SUBMILLISECOND SIX-WAVELENGTH PYROMETER FOR HIGH-TEMPERATURE MEASUREMENTS IN THE RANGE 2000° to 5000° K

The first prototype of the pyrometer was invented and developed by a research group at the Joint Research Centre Transuranium Institute, in Karlsruhe (J.-P. Kiernaut, R. Beukers, W. Heinz, R. Selfslag, M. Hoch, R. W. Ohse under the responsibility of Mr L. Ronchi).

The need to measure temperatures under the extreme conditions of large heating and cooling rates, large temperature gradients, and unknown emissivities has led to the development of a high-speed multi-wavelength pyrometer with a microsecond temporal and 50  $\mu\text{m}$  spatial resolution. Measurements at six wavelengths were chosen to determine the spectral emissivity as a function of temperature and wavelength and to evaluate the total emissivity. Test measurements on three calibrated tungsten-ribbon lamps were carried out. The true temperature, the spectral and total emissivities have been determined in the steady-state mode at different calibrated radiance temperatures and in good agreement with the literature values.

The main requirements of optical pyrometry for thermophysical property studies of refractory materials under transient laser pulse heating conditions up to 5000Å K are:

- high temperature resolution, of the order of 30° K at 5000° K;
- microsecond time resolution;
- high spatial resolution;
- simultaneous pyrometric measurements at different wavelengths to determine the variation of spectral emissivity with wavelength and temperature, and to calculate the total emissivity.

### Optical concept

A schematic display of the experimental set-up is shown in figure 1. An image of the heated surface is formed on a microaperture at the entrance of the pyrometer (first field stop) which is imaged on a second aperture (main field stop). The microaperture diameter of the field stop and the magnification of the imaging system determine the spatial resolution of the device. The image of the effective aperture stop is produced by a lens placed behind the main field stop on the entrance of the glass-fibre system. The light is then split and conducted through a glass-fibre system and six interference filters onto the six detectors. The transmissivity of each interference filter is between 40 and 50 %, while the half-width is 10 nm.

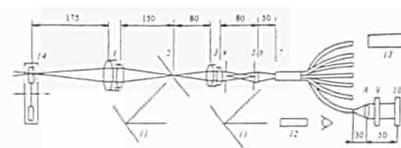


Figure 1

Optical display of the six-wavelength pyrometer using silicon photovoltaic detectors (all dimensions are in mm): 1 entrance objective of the pyrometer ( $f = 90\text{-}120$  mm); 2 first field stop (diameter 1.5 mm); 3 intermediate lens ( $f = 80$  mm); 4 effective aperture stop; 5 main field stop (diameter 1.0 mm); 6 field lens producing an image of the effective aperture stop on the fibre-glass bundle; 7 fibre-glass bundle used to split the light; 8 lenses for focusing the light on the detector and producing parallel light beams through the interference filter ( $f = 30$  mm); 9 interference filter (6x); 10 detector (6x); 11 and 12 mirrors and telescope for observing the image obtained on the microaperture 2 and on the entrance of the glass-fibre bundle; 13 HeNe alignment laser; 14 wheel with grey filters (transmission = 80 %, 50 %, 30 %, 10 %, 1 %, 0.5 %).

### Analog six-channel data acquisition system and computing facility

Simultaneous signal recording with high time resolution calls for an analog multi-channel data acquisition system, storage, and computing facility. The six voltage signals produced by the photodetectors of the pyrometer are fed into a data acquisition system consisting of a 12-bit analog-to-digital converter with 16 input channels interfaced to a PDP 11/34 computer for further data processing. The direct memory access option can also be selected for fast block transfers directly to the memory of the computer. The programmable gain of the analog-to-digital converter can be set to a gain of 1, 2, 4 or 8, thereby increasing the dynamic range of the converter. The analog input and system accuracy is 0.03 %, and the noise at the output  $\pm 1/4$  of the least significant bit. The conversion time per channel is 10  $\mu\text{s}$ , implying a maximum of 16 000 scans per second (corresponding to approximately 100 000 recordings per second). In practice, however, temperature measurements are required at most every millisecond over a range of 1 s.

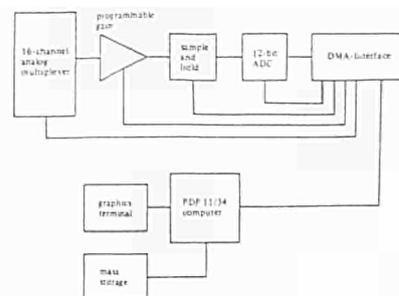


Figure 2: Block diagram of the data acquisition system for the six-wavelength pyrometer

The aim is to conclude a **technology transfer contract** with a specialised firm and with the financial aid of the VALUE Programme. This aid should permit development of an industrial prototype, which is to be marketed within two years.

Further information can be obtained from Mr P. Herzberger, Commission of the European Communities, DG XIII/C/2, B4/111, Jean Monnet Building. L-2920 Luxembourg. Tel.: (352) 4301-2953/-3453. Tlx: 3423 / 3446 COMEUR LU. Fax: (352) 4301-4129.

PATENT APPLICATIONS RECENTLY PUBLISHED

The Patent Applications shown in this section concern Inventions resulting from EC-funded or cost-shared EC Contract Research

PROCESS FOR MODIFICATION OF A MOLECULAR SIEVE

**Inventors:** P. DE BIEVRE, E.F. VANSANT, J. VERBIEST  
**Ref:** EUR PAT 2243

This new procedure has the advantage over existing ones that it does not involve the use of gaseous reactants requiring careful and complex processing. Therefore, its industrial application is simple, safe, and economic.

The first essential step of the process consists in dry (powder) mixing the molecular sieve with a modifying agent able to polymerize at elevated temperature and containing at least one weak acid and/or a salt or derivative of a weak acid of at least one of the elements of Groups II, IV or V.

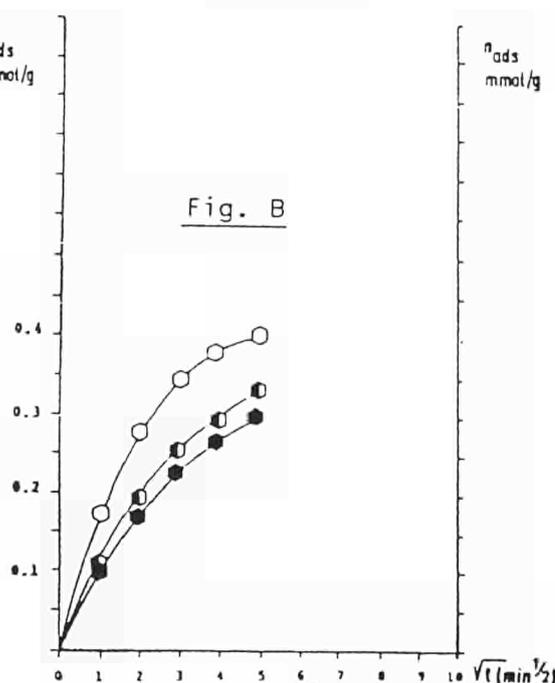
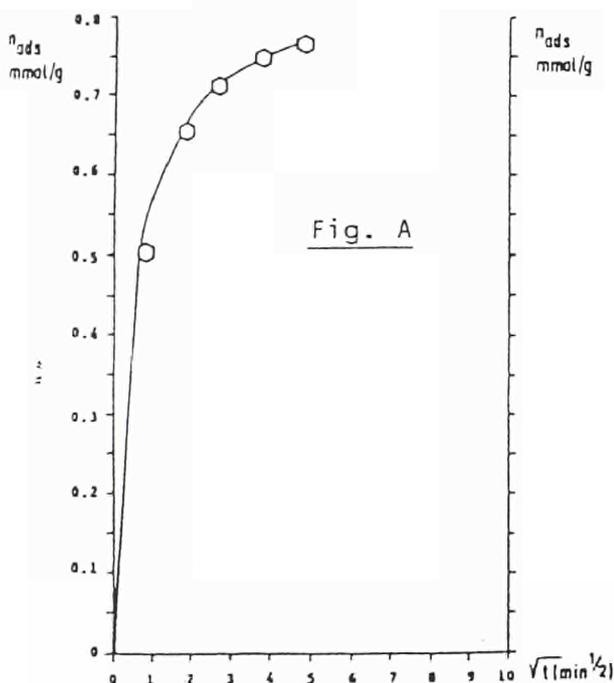
The modifying agent may be chosen from the group of boric acid, silicic acid, acids of phosphorus and salts thereof such as  $H_3BO_3$ ,  $NaH_2PO_2$ ,  $Na_4P_2O_7 \cdot 10H_2O$ ,  $K_3PO_4$ ,  $(NH_4)_2HPO_2$ ,  $Na_2B_4O_7 \cdot 10H_2O$ , and  $Si(OH)_4$ .

After the dry mixing of both starting materials, liquid is added to form a slurry or paste which will then be subjected to thermal treatment at 250°C (or more). The process can be applied in many variations with respect to the particle size of the powders or to the ratios 'molecular sieve/modifying agent' or 'added liquid/powder mixture'.

To give an example (Figures A and B, below), where  $H_3BO_3$  is the modifying agent, 3g of the parent sample (CaM CM782) are mixed with 0.15g of  $H_3BO_3$ -powder. After addition of 3ml of  $H_2O$ , the slurry is air-dried for 1 hour at 105°C. Then the dried sample is heated up in air for 2 hours at 400°C. The remaining 2g of the sample will then be vacuum-dehydrated overnight at temperatures varying according to each of the following starting powder particle sizes: Fraction  $> 800 \mu m = 463^\circ C$ , Fraction  $250-800 \mu m = 450^\circ C$ , Fraction  $< 150 \mu m = 454^\circ C$ . Fig. A shows the adsorption behaviour of the parent sample tested for  $CH_4$  at 0°C, and Fig. B the  $CH_4$  adsorption kinetics depending on the different particle sizes and dehydration temperatures applied during the modifying process.

Fig.A

Fig.B



	$CH_4$
PARENT	○
	◐

	$CH_4$
$> 800 \mu m$	○
$250 - 800 \mu m$	◐
$< 150 \mu m$	●

Further information on the patent application above can be obtained from Ms L. Gerlach, Commission of the European Communities, DG XIII/C/1, B4/068, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-2922, Tlx: 24223 / 3446 COMEUR LU, Fax: (352) 4301-4129.

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Further information can be obtained from Mr N. Campling, Patent Information Directorate, European Patent Office, Erhardstraße 27, D-8000 München 2, Tel.: (49) 89 239.925.50, Fax: (49) 89 239.951.43.



**INNOVATION ÉNERGETIQUE ET INDUSTRIE AGRO-ALIMENTAIRE**

**ENERGY INNOVATION AND THE AGRO-FOOD INDUSTRY**

AMIENS, MARCH 21-23, 1990  
Economic efficiency, technological efficiency, energy efficiency.

From March 21 to 23 1990, the French Agency for Energy Management and the Commission of the European Communities will be holding an international seminar, bringing together decision-makers, high level technical staff and researchers from the entire agro-food industry. The objective of the seminar, which will be focusing on drying, concentration and dehydration techniques is to pinpoint the factors of success - economic efficiency, technological efficiency and energy efficiency - and to lay the foundations for the promotion of those factors.

AMIENS, 21-23 MARS 1990  
Efficacité économique, efficacité technologique, efficacité énergétique.

Du 21 au 23 mars 1990, l'Agence Française pour la Maîtrise de l'Énergie et la Commission des Communautés Européennes organisent un colloque international, rassemblement de décideurs, de chercheurs et de responsables techniques dans le domaine Agro-Alimentaire, afin de favoriser la diffusion des facteurs-clés de succès d'efficacité économique, d'efficacité technologique et d'efficacité énergétique, et ce notamment autour de techniques de séchage, concentration, déshydratation.

Le colloque "Innovation Énergétique et Industrie Agro-Alimentaire" est organisé par :  
The conference on "Energy Innovation and the Agro-Food Industry" is organized by :

La Commission des Communautés Européennes  
- the Commission of the European Communities



- l'Agence Française pour la Maîtrise de l'Énergie  
- French Agency for Energy Management

Avec la coopération scientifique du Centre de Valorisation des Glucides et Produits Naturels  
With the scientific cooperation of Center for Valorization of Carbohydrates and Natural Products

et la participation de (with the participation of)

• L'ARIAP (Association Régionale des Industries Agro-Alimentaires de Picardie)  
• L'APRIA (Association pour la Promotion des Industries Agro-Alimentaires)

et ses, le conseil (and with the support of)

• le Conseil Régional de Picardie • de la Chambre Régionale de Commerce et d'Industrie • de la Chambre Régionale d'Agriculture

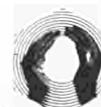
For further information, please contact: Mr. Christian FABRY, Agence Française pour la Maîtrise de l'Énergie, Délégation Régionale PICARDIE, 2, rue Delpech, F-80000 AMIENS (France), Tel. (33) 22.45.18.90, Fax: (33) 22.45.19.47.

**MEI90**

ENERGY MANAGEMENT IN INDUSTRY AND THE TERTIARY SECTOR ENGINEERING AND SERVICES  
MAITRISE DE L'ENERGIE DANS L'INDUSTRIE ET LE TERTIAIRE L'INGENIERIE ET LES SERVICES

APRIL 23-27, 1990 23 - 27 AVRIL 1990  
CNIT - PARIS LA DEFENSE CNIT PARIS LA DEFENSE

Europe's only international forum on energy management  
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MEI 90 is organized by the AGENCE FRANÇAISE POUR LA MAÎTRISE DE L'ÉNERGIE (French Agency for Energy Management)

Further information: Mr G. Molina, CEC, DG XVII/D/1, TERY 6/4, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.15.24, Tlx: 21877 COMEUR B, Fax: (32) 2 235.01.50.

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**SEMINARS AND CONFERENCES ON ENERGY EFFICIENCY**

**EUROPEAN SEMINAR ON ENERGY EFFICIENCY IN THE FOUNDRY SECTOR**

**Venue:** The Conference Centre, Bilbao, Spain, June 1990 (date to be confirmed).

Organised jointly by the Commission of the European Communities, Directorate-General for Energy, the Basque Enterprise for Energy, the International Fair of Bilbao.

The aim of the seminar is to disseminate the energy saving techniques for waste heat from foundries that have been learned through the Energy Demonstration Programme and to foster new and innovative ideas that can be pursued by companies in the foundry sector. The seminar will cover the following topics: direct and indirect heat recovery, process optimisation and the Energy Demonstration Programme.

**Further information:** Mr G. Molina, Commission of the European Communities, DG XVII/D/1, Terv 6/4, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.15.24, Tlx: 21877 COMEUR B, Fax: (32) 2 235.01.50.

**FIRST ANNOUNCEMENTS**

**EUROPEAN SEMINAR ON COMPUTER-ASSISTED ENERGY MANAGEMENT**

**Venue:** Paris, 23-27 April 1990

This Seminar, which is part of the MEI 90 Event (see page 27), aims at presenting the latest developments in computer-assisted energy management in Europe.

Organised jointly between the Commission of the European Communities, Directorate-General for Energy and Agence Française pour la Maîtrise de l'Énergie (AFME).

**Further information:** Mr G. Molina (see address above)

**EUROPEAN WORKSHOP ON WASTE HEAT RECOVERY FROM GLASS FURNACES**

**Venue:** Savona, Italy, 14 March 1990

This workshop aims to present the results of a successful EC funded Demonstration Project carried out by Vitrofil S.p.A. The workshop will also include a site visit to the company's plant at Valdo Ligure.

Organised jointly by the Commission of the European Communities, Directorate-General for Energy and Vitrofil S.p.A.

**Further information:** Mr R. Gardner, Commission of the European Communities, DG XVII/D/1, Terv 8/5, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.96.33, Tlx: 21877 COMEUR B, Fax: (32) 2 235.01.50.

**FIRST EAST-WEST EUROPEAN CONFERENCE ON  
QUALITY AND TRAINING**

**BUDAPEST, 18th — 19th JANUARY 1990**

In cooperation with the Ministry of Education and the State Office for Wages and Labour, Hungary and CEDEFOP (Centre Européen pour le Développement de la Formation Professionnelle of the European Commission) the European Institute for Vocational Training is organizing the **first East — West European conference on Quality and Training** to offer General Managers, Personnel and Training Managers, Professors, Trainers and all those involved in training and education the opportunity

- to **study the East European training and education system** and the level of qualifications
- to meet and **exchange ideas and experience** with colleagues from East European countries.

Each East European country is sending 10 to 20 delegates to the conference. Eminent speakers from East and West will highlight particular aspects of training and education in East and West. Workshops and round tables will offer the participants the opportunity to discuss some aspects in depth. There will be simultaneous translation in 5 languages, and an ample documentation on East European training and education systems will be available for the participants.

**For more information write to the IEFPP, 91 rue du Faubourg St. Honore, F-75008 Paris or give us a ring in Paris Tel 33 (1) 42 66 90 75, Fax 33 (1) 42 66 15 60 or in Belgium Tel 32 (16) 46 06 47, Fax 32 (16) 46 06 83.**

**CENTRE FOR EUROPEAN POLICY STUDIES:  
SERIES ON THE CHANGING ENVIRONMENT**

- Wednesday  
20th Dec. 1989  
13.15 - 14.45
- ENVIRONMENT AND ECONOMICS IN EUROPE '92. PRESENTATION OF THE TASK FORCE REPORT ON THE ENVIRONMENTAL DIMENSION OF THE INTERNAL MARKET**
- Speaker: Laurens-Jan Brinkhorst, Director-General, DG XI, Commission of the EC (to be confirmed)
- 
- Thursday  
11th Jan. 1990  
13.15 - 14.45
- THE GREEN LIGHT FOR CHANGE, PRESENTATION OF THE FINAL REPORT BY GREENPEACE ON STRUCTURAL CHANGES IN THE EC'S ENVIRONMENTAL POLICY**
- Speaker: Ernst Klatte and Jean-Pierre Hannequart, EEC Unit of GREENPEACE
- 
- Wednesday  
24th Jan. 1990  
13.15 - 14.45
- TOWARDS AN ENVIRONMENTAL MARKET ECONOMY**
- Speaker: Prof. Horst Siebert, President, Kiel Institute of World Economics
- 
- Date to be announced  
13.15 - 14.45
- ENERGY AND ENVIRONMENT. PRESENTATION OF THE COMMISSION'S COMMUNICATION**
- Speaker: Peter Faross, DG XVII, Commission of the EC

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Please return to Centre for European Policy Studies, 33 rue Ducale, B-1000 Brussels, Tel.: (32) 2 513 40 88, Fax.: (32) 2 511 59 60



COMMISSION OF THE EUROPEAN COMMUNITIES

**SIXTH EUROPEAN SYMPOSIUM ON ORGANIC MICROPOLLUTANTS IN THE AQUATIC ENVIRONMENT**

LISBON (PORTUGAL)  
22-24 May 1990

DIRECÇÃO GERAL DA QUALIDADE DO AMBIENTE E INSTITUTO HIDROGRÁFICO, LISBOA

First announcement

**SYMPOSIUM ON ORGANIC MICROPOLLUTANTS IN THE AQUATIC ENVIRONMENT**

The Symposium is organized by the Commission of the European Communities DG XI (Environment) and the Instituto Hidrográfico, Lisbon, with the assistance of a Scientific Committee within the framework of the Concerted Action 'Organic Micropollutants in the Aquatic Environment' (COST 641). It will take place from 22 to 24 May 1990 in Lisbon, Portugal, at the Lisboa Sheraton Hotel, Rua Latino Coelho 1, P-1097 Lisboa Codex, Tel.: (352) 1 575.751, Tlx: 12774.

The programme will cover the following topics:

1. Analytical Methodologies and Data Treatment
2. Transport and Distribution
3. Transformation Reactions in the Aquatic Environment
4. Behaviour of Organic Micropollutants in Water Treatment Processes

Further information can be obtained from Mr G. Angeletti, CEC, DG XII/E/1, SDME 03/55, 200, rue de la Loi, B-1040 Brussels, Tel.: (32) 2 235.84.32, Tlx: 21877 COMEUR B, Fax: (32) 2 236.30.24.

## 9th E.C. PHOTOVOLTAIC SOLAR ENERGY CONFERENCE

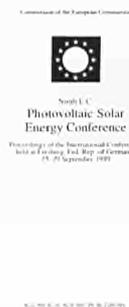
Proceedings of the International Conference held at Freiburg, Fed. Rep. of Germany, 25-29 September 1989.

Edited by W. Palz, G. T. Wrixon, P. Helm

With the growing utilization and importance of **photovoltaics** in developing countries, it was felt to be timely to have this topic as one of the major themes of this conference. In addition, since the **cost, reliability and efficiency** of subsystems play an ever increasing role in determining the overall performance of complete PV systems, this topic has also been chosen as a major theme.

Publication arrangements: Commission of the European Communities, DG XIII-C, EUR 12422, ISBN 0-7923-0497-7, 1989 ECSC, EEC, EAEC, Brussels and Luxembourg

Published by Kluwer Academic Publishers, P.O. Box 17, NL-3300 AA Dordrecht



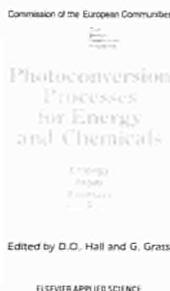
## RESEARCH AND DEVELOPMENT OF HIGH-TEMPERATURE MATERIALS FOR INDUSTRY

Coordinating Editor: E. Bullock. Co-Editors: R. Brunetaud, J. F. Condé, S. R. Keown, S. F. Pugh

This book is the result of a study carried out by the Joint Research Centre, Petten Establishment, The Netherlands, and reviews **materials requirements in high-temperature technologies** from the point of view of:

- potential and performance limits of new and conventional high-temperature materials;
- operational constraints imposed by high-temperature technologies and identification of materials shortfalls.

CEC, DG XIII-C, Luxembourg, EUR 12374, ISBN 1-85166-419-X, 1989 ECSC, EEC, EAEC, Brussels and Luxembourg, Published by Elsevier Science Publishers Ltd, Crown House, Linton Road, Barking, Essex IG11 8JU, UK



## PHOTOCONVERSION PROCESSES FOR ENERGY AND CHEMICALS

by D. O. Hall, G. Grassi

The increased concern for the **environment and the role of renewable fuels**, especially hydrogen in the long term, are important factors in the worldwide interest in photoproduction of hydrogen. All the papers presented, along with recommendations for future research, feature in these proceedings of the final workshop of the four-year (1985-1989) non-nuclear R&D programme for the development of renewable energy sources funded by Directorate-General Science, Research and Development (DG XII) of the Commission of the European Communities.

Publication arrangements: CEC, DG XIII-C, ISBN 1-85166-424-6, 1989 ECSC, EEC, EAEC, Brussels and Luxembourg, Published by Elsevier Science Publishers Ltd, Crown House, Linton Road, Barking, UK-Essex IG11 8JU

## COGNITIVE PSYCHOLOGY — Research Directions in Cognitive Science

Edited by A. Baddeley, N. O. Bersen

The present volume on Cognitive Psychology is one in a series of five presenting the findings of a **joint European study in cognitive science 1987-88**. The study was organised and funded as a collaborative network by the research unit FAST (Forecast and Assessment in Science and Technology) of the EC and comprised about 35 scientists from the core disciplines of cognitive science. The research disciplines represented in the network were: cognitive psychology, logic and linguistics, cognitive neuroscience, human-computer interaction, and artificial intelligence.

Publication arrangements: Commission of the European Communities, DG XIII-C, EUR 11116 Vol. 1, ISBN 0-86377-111-4

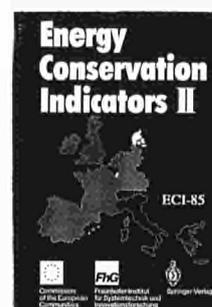
Published by Lawrence Erlbaum Associates Ltd, 27, Palmeira Mansions, Church Road, Hove, East Sussex, BN3 2FA, UK, 1989

## ENERGY CONSERVATION INDICATORS II

by T. Morovic, G. Gerritse, G. Jaeckel, E. Jochem, W. Mannsbart, H. Poppe, B. Witt

Energy Conservation Indicators II presents the results of a methodology that **breaks down energy consumption data into their component parts** which depend on annual weather fluctuations, the business cycle, economic growth, structural changes in the economy, and energy efficiency. It has been applied for the first time to all EC Member States for the period 1979 to 1985.

Commission of the European Communities, DG XIII-C, Scientific and Technical Communications Unit, Luxembourg, 1989, EUR 12281, ISBN 3-540-51294-2, Springer-Verlag Berlin, Heidelberg, New York, Tokyo

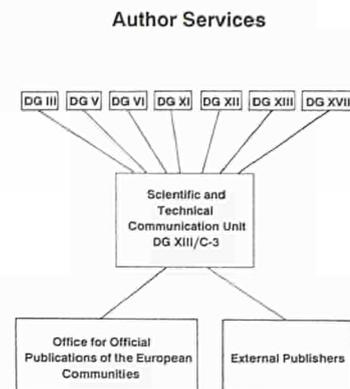


## DISSEMINATION OF COMMUNITY R&amp;D RESULTS

## — THE SCIENTIFIC AND TECHNICAL COMMUNICATION UNIT OF DG XIII —

The Commission's Scientific and Technical Communication Unit of Directorate C within DG XIII is entrusted with the **dissemination of the results of Community-funded R&D**. It collects information on the results of the multitude of research initiatives run by the Commission and seeks ways to make these known to researchers and other interested persons.

The principal method of dissemination is traditional publication on paper. In practice, DG XIII operates like an author's agent, setting-up the publication arrangements for documents that are sent to it from the various Directorates-General in charge of research activities (see figure 1). At the end of the process most of the documents are published under the imprint of the Office for Official Publications of the European Communities. The unit is currently handling **about 600 titles per year**. About 65 % of these are very specialised research reports, often the final reports of research projects, while a further 20 % or so are the proceedings of conferences, seminars and workshops. The remainder are a very mixed bag of different types of publication that includes atlases, research directories and reports of studies. About 85 % of them are published through the Office for Official Publications of the EC, and about 15 % through specialised scientific and technical publishers. So far DG XIII-C has produced about ten thousand publications (see figure 2).



EABS database	
Number of publications (books, proceedings and technical reports) by series title	
Physical Sciences	346
Technical Coal Research	436
Technical Steel Research	1 004
Energy	1 392
Nuclear Science and Technology	4 085
Industrial Processes	19
Transport Research	3
Biological Sciences	183
Medicine	80
Agriculture	205
Environment and Quality of Life	386
Radiation Protection	295
Industrial Health and Safety	142
Food - Science and Techniques	17
Resources	10
Innovation	22
Information Management	174
BCR Information	168
Science and Technology Policy	77
Miscellaneous	44
Information Technologies & Sciences	8
No series title	443
<b>Total</b>	<b>9 531</b>

Commission of the European Communities  
DG XIII/C-3 Scientific & Technical Communication

## EUROABSTRACTS AND EABS DATABASE

All the publications, whatever the publishing route, are recorded in a database known as **EABS**, and there is an associated monthly abstracting journal called **Euroabstracts**. Apart from bibliographic details and abstracts of the publications, EABS and Euroabstracts also include details collected by DG XIII of papers resulting from Community research that have been published in journals or presented at conferences. The EABS database contains nearly 50000 records (see figure 3) and is available on the ECHO host (see I&TT, 4/89, page 8). It will be one of the first databases to be included in the **CORDIS** service (see I&TT, 2/89, page 23).

ECHO users can order many of the documents listed in EABS, at the prices indicated in the 'RF' field of each EABS record.

For placing on-line orders, the following command for further information should be used:

EABS database	
Number of records by subject category	
General and miscellaneous	4 914
Chemistry	2 341
Earth sciences	818
Engineering and technology	4 089
Energy production, conversion and conservation	4 731
Life sciences	6 845
Materials	2 007
Mathematics, computers, telecommunications	2 303
Nuclear science and engineering	7 713
Physics	7 248
Coal research	2 444
Steel research	2 420
Industrial health and safety related to ECSC activities	1 470
<b>Total number of records</b>	<b>49 343</b>

Commission of the European Communities  
DG XIII/C-3 Scientific & Technical Communication

## INFO ORDER

## HOW TO CONNECT TO EABS

After entering your ECHO password, select the EABS database by typing the command:

BASE EABS or BASE E084.

Search can be free-text by descriptors or by author, by contract code or by publication type.

Further information on the above schemes can be obtained as follows:

## 1. DG XIII-C publications

from Dr E. Phillips, CEC, DG XIII/C/3, JMO B4/078, Tel. (352) 4301-2916, Tlx: 3423/3446 COMEUR LU, Fax: (352) 4301-4129

## 2. EABS and EUROABSTRACTS

from Dr R. Rapparini, CEC, DG XIII/C/3, JMO B4/089, Tel.: (352) 4301-2780, Tlx: 3423/3446, COMEUR LU, Fax: (352) 4301-4129 or ECHO Customer Service, P.O. Box 2373, L-1023 Luxembourg, Tel. (352) 488.041, Fax: (352) 488.040.

## THE EUROPEAN COMMUNITY AND THE PROBLEMS OF ITS WATERS



This publication shows how the Community is concerned to **improve and protect the way in which available water resources are used**. A large number of Community **directives** - on water for human consumption, surface and underground water, water for bathing, and water for rearing fish and shellfish - lay down objectives for the Member States regarding water quality and limits on the disposal of dangerous pollutants in water. The EC is also a signatory to various **international agreements** involving more countries than just the Member States, on such matters as hydrocarbon pollution in the North Sea and pollution in the Mediterranean (the Barcelona Convention). Lastly, it provides non-refundable subsidies and also loans in support of projects to increase water resources and improve the quality of the water.

Publication arrangements: Commission of the European Communities, DG XIII-C, EUR 12109, ISBN 92-825-9919-1

Office for Official Publications of the EC, Luxembourg, 1989, ECU 5, Office for Official Publications, 1989

## QUALITY OF SURFACE FRESH WATER

by S. A. Seges

Common Procedure for the Exchange of Information 1982-1986 Synthesis Report

This report summarises the information submitted by EC Member States on the **quality of surface water** and on the relevant tests conducted, for the years 1982-1986. It also draws conclusions about **general trends** in water quality at the various sampling and measurement stations. Maps show each of the measurement stations, while graphs show the temperature, flow rate and measured levels of conductivity, chloride, nitrate, ammonia, dissolved oxygen, BOD, orthophosphate, cadmium and faecal coliforms at each station.



This publication is available in **all Community languages**. EUR 12043 EN, 138 pp, ISBN 92-825-9760-1, ECU 13.75; 1989, Office for Official Publications, Rue Mercier, L-2985 Luxembourg

## IMPROVING GENETIC DISEASE RESISTANCE IN FARM ANIMALS

by A. J. Van der Zijpp, W. Sysbema

Improvement of genetic disease resistance in farm animals is an attractive preventive measure. Its advantages are consistency over generations and the decreased need for veterinary services. With the progress in immunology and molecular biology, especially with regard to the Major Histocompatibility Complex and disease associations, new horizons for research into genetic disease resistance in farm animals are emerging.

Publication arrangements: Commission of the European Communities, DG XIII-C, EUR 11964, ISBN 0-7923-0518-3, 1989 ECSC, EEC, EAEC, Brussels and Luxembourg

Published by Kluwer Academic Publishers, P.O. BOX 17, NL-3300 AA Dordrecht

## PROSPECTS FOR THE EUROPEAN FOOD SYSTEM

Edited by B. Traill

The food system in Europe comprises a significant sector of the economy and has a vital relationship with health. It can be viewed as an integrated whole in which developments in any one component may have repercussions for many others. This has been recognised for many years, and with the passing of time, relationships are becoming more complex, largely under the impact of new and developing technologies.

Commission of the European Communities, DG XIII-C, Luxembourg, EUR 12167, ISBN 1-85166-389-4, 1989 ECSC, EEC, EAEC, Brussels and Luxembourg

Published by Elsevier Science Publishers Ltd, Crown House, Linton Road, Essex IG11 8JU, UK



## CORE BIOLOGY OF PLANT BREEDING

by H. DICKINSON

A review prepared for the Commission of the European Communities, DG XII, Biotechnology Division, in preparation for the BRIDGE Programme (Biotechnology Research for Innovation, Development and Growth in Europe).

Copies can be obtained from Mr E. Magnien, Commission of the European Communities, DG XII/F/2, SDME 02/80, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.93.47, Tlx: 21877 COMEUR B, Fax: (32) 2 236.33.08.

## THE ROLE OF ACTIVE ELEMENTS IN THE OXIDATION BEHAVIOUR OF HIGH — TEMPERATURE METALS AND ALLOYS

by E. Lang

Metals and alloys rely for their application at high temperature on the formation and retention of oxide scales, which act as a barrier between the metallic substrate and the reactive species in the environment such as O, S, N, C, Cl, etc.

Publication arrangements: Commission of the European Communities, DG XIII-C, EUR 12327, ISBN 1-85166-420-3, 1989 ECSC, EEC, EAEC, Brussels and Luxembourg

Published by Elsevier Science Publishers Ltd, Crown House, Linton Road, Barking, UK-Essex IG11 8JU



## SPRINT, THE EUROPEAN PROGRAMME FOR INNOVATION AND TECHNOLOGY TRANSFER

### NOMINATIONS FOR THE EUROPEAN DESIGN PRIZE

*Fifty-two small and medium-sized companies compete for the second European Community Design Prize to be awarded in 1990*



Under its SPRINT Programme the Commission of the European Communities has been sponsoring a series of activities to **stimulate the use of design** throughout European industry (see I&TT, 4/88, page 30). These activities should demonstrate the economic benefits of good design and illustrate the different ways design can be used as a management tool by industry, especially in areas where the aspects of innovation and design converge. In this context the European Community Design Prize is a **reward to small and medium-sized companies** which have had a consistent application of the concepts of design and, therefore, project an image of quality worth emulating by other firms. Fifty-two small and medium-sized companies were nominated by design organizations from various EC Member States and are now competing for the **European Community Design Prize 1990**.

The companies nominated for the Prize have achieved design excellence in one or more of the fields of product, communication and environment design. All companies were nominated not for one, but for a series of accomplishments in these areas, including design management skills. Most of these companies have throughout their history used the talents of some of Europe's most renowned designers. Their activities also demonstrate that good design is a means of achieving excellence and economic benefits, regardless of the size of the firm involved.

An international jury met in Barcelona on 14 and 15 September 1989 with a view to selecting the winners of the European Community Design Prize 1990. This meeting was hosted by **Fundación BCD**, appointed organizers of the event. The candidates nominated for the second European Community Design Prize will be presented in an exhibition travelling throughout the EC Member States during 1990. The place and date for the announcement of the winners will be determined shortly.

Further information can be obtained from Mr E. Faroult, Commission of the European Communities, DG XIII/C/1, B4/075, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-4371, Tlx: 3423 / 3446 COMEUR LU, Fax: (532) 4301-4129.

### GREEN LIGHT FOR 47 NEW COOPERATION SPRINT PROJECTS

The European Community's SPRINT Programme (Strategic Programme for Innovation and Technology Transfer), managed by Directorate-General XIII of the European Commission, has launched its 90 million ECU main phase by agreeing support of 5.6 million ECU for **47 new cooperative projects** aimed at transnational technology transfer.

The projects were selected following a competitive call for proposals launched by the SPRINT Programme earlier this year. Nearly 300 proposals were evaluated in October by committees of experts from the Member States.

The projects selected fall into **two main categories** which form the mainstream activities of the SPRINT Programme:

- \* **Transnational Technology Transfer Networks** - groups of contractors in the field of technology transfer from different Member States with the common aim of securing technological cooperation agreements between their client companies (see lists of contractors in I&TT 3/88, 4/88, 1/89, 2/89). Typical examples include sector-specific projects such as that involving Science Park Maastricht (NL), Experteam Munich (D), Genetic Engineering Group (DK) and Bioresearch Ireland in the field of biotechnology, and generalised networks covering several sectors such as that involving CAD Côte d'Azur (F), EOMMEX (GR), Lothian Region Development Authority (UK), Soges Spa (I) and TVA Berlin (D).
- \* **Networks of Industrial Research Associations, Technical Institutes and similar bodies** working together on projects for disseminating innovations in their industrial sectors (see I&TT, 1/89, page 23). Examples include a project linking the Fluid Engineering Centre (BHRA) UK, EOLAS Ireland, CERG Grenoble (F), Risø National Laboratory (DK) and Trinity College Dublin (IR) to further the industrial application of Laser Doppler Anemometry, and collaboration between the Welding Institute Cambridge, CETRA (F), INSAMET San Sebastian (E), CRIF Liège (B), EOLAS Ireland and ISQ Lisbon (PO) to foster the dissemination of adhesives technology in sectors such as building and mechanical and civil engineering.

In addition, **40 technological conferences** to be organised in the Community during 1990-1991 will receive support in order to give them a European dimension.

In the next issues of I&TT we will publish the addresses of the various projects selected, as well as dates and venues of the conferences supported under SPRINT. The SPRINT Programme has also received proposals in response to a call for a number of **Specific Projects in Transnational Technology Transfer** of a significant scale which involve leading innovative firms, mostly in traditional industrial sectors, and which will have a demonstration value or could be replicated (see I&TT, 4/89, page 34).

For further information on SPRINT, please contact: Mr R. Miège, Commission of the European Communities, SPRINT Programme, DG XIII/C/1, Jean Monnet Building, B4/099, L-2920 Luxembourg, Tel.: (352) 4301-4180/4371, Fax: (352) 4301-4129, Tlx: 3423/3446 COMEUR LU.



on  
behalf  
of



Commission of the  
European Communities

Strategie  
**PR**ogramme for  
**IN**novation and  
Technology Transfer

**SPRINT TRANSNATIONAL PROFESSIONAL EXCHANGE SCHEME**

Business is based on good contacts - who you know you can work with successfully. The scheme is an excellent way of making these contacts and making things happen.

This scheme is one of several initiatives under the SPRINT Programme of the Commission of the European Communities aimed at networking technology-transfer and other innovation-support organisations across the Community.

**PURPOSE** The programme offers technology-transfer and other innovation-support organisations the opportunity to send a member of staff for between one week and three months to a technology-transfer or innovation-support organisation in another Member State of the Community to exchange practical experience with a view to longer-term cooperation between the visiting and host organisations.

**ELIGIBILITY** The scheme is open to all public or private organisations established in the European Community and specialised, in whole or in part, in the supply of advisory and other support services of a technical, commercial, financial or similar nature to firms for the purposes of innovation, technology transfer and the marketing of innovative products elsewhere in the Community.

**FINANCIAL SUPPORT** The Commission's SPRINT Programme contributes the following:

- A—one return journey (first-class rail, economy-class air);
- B—25 ECU per day of visit, paid to the visitor in partial defrayment of accommodation and out-of-pocket expenses;
- C—500 ECU per completed month (20 working days) of visit, paid to the host organisation in partial defrayment of overhead costs (available only for visits of at least one month's duration).

All payments are made after completion of the visit, following submission and acceptance of a summary report by the visitor (for A and B above) and host organisation (for C).

**APPLICATIONS** Apply using the form below (photocopy, if preferred) to TII.

Awards can be made only on the basis of complete applications. Therefore both the host and visitor should be specified as well as the dates and purpose of the visit.

Organisations wishing to visit or to act as hosts, but which do not yet have a partner, may also apply. They should specify the type of partner sought. TII will circulate their wishes to potentially suitable organisations known to it.

**- SPRINT PROFESSIONAL EXCHANGE SCHEME -  
- APPLICATION FORM -**

(Return to: TII, 3 rue des Capucins, L-1313 Luxembourg)  
tel. : 352 - 46 30 35 fax : 352 - 46 21 85

The visitor and the host should each complete the appropriate part of the form.

<b>VISITOR</b>	<b>HOST</b>
NAME AND FIRST NAME _____	NAME AND FIRST NAME _____
FUNCTION _____	FUNCTION _____
ORGANISATION _____	ORGANISATION _____
ADDRESS _____ _____	ADDRESS _____ _____
TEL. _____ FAX _____ TELEX _____	TEL. _____ FAX _____ TELEX _____
ORGANISATION'S TECHNOLOGY TRANSFER/ INNOVATION SUPPORT ACTIVITIES:  _____	ORGANISATION'S TECHNOLOGY TRANSFER/ INNOVATION SUPPORT ACTIVITIES:  _____
DATES OF VISIT:  SPECIFIC AIMS OF VISIT:  _____	
Date: ..... Signature .....	Date: ..... Signature .....

**CONTRACT RESEARCH:**

**INTEREST GROWS IN FIRST EACRO CONFERENCE**

The organisers of the **First Conference of the European Association of Contract Research Organisations (EACRO)**, to be held at the RAI Congress Centre Amsterdam on 25-27 February 1990, have received over 200 enquiries since the first announcement was mailed in October. This congress is sponsored and organized jointly by the **SPRINT** Programme of DG XIII of the Commission and by **EACRO**.

The first aim of the Conference is to **emphasize the role of Contract Research Organizations (CROs) in improving the competitiveness of European industry**, bringing efficient technologies with lower cost and delay to their customers, and converting the results of scientific research and large national or European programmes into practical know-how. The second aim is to examine better ways of cooperation among members of the profession, its clients, governments and the Commission.

The Conference will be opened by the Dutch Minister of Science and Education, **Prof. Dr J. Ritzen**, and other keynote speakers include **Prof. H. G. Danielmeyer**, Member of Board, Siemens AG, and **Mr R. Ferrero**, Executive Vice President of FIAT SpA.



RAI Congress Centre

Amsterdam, The Netherlands

25 - 27 February 1990



✕ .....

**1st EACRO CONFERENCE AMSTERDAM, 25-27 February 1990**

Please send the conference programme and registration forms to:

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Postal Code: \_\_\_\_\_ Town: \_\_\_\_\_ Country: \_\_\_\_\_

Return this form to: TNO Corporate Communications Department, P.O. Box 297, NL-2501 BD The Hague

✕ .....

**STATUS REPORT ON VALUE ANALYSIS IN EUROPE NOW AVAILABLE**

The main purpose of this document is to **take stock of the situation as regards the different levels and implementation of Value Analysis (VA) in each EC Member State**. It recalls the basic elements of VA methodology and its fields of application and looks at the current situation in each Member State as regards VA. Finally, for each country, there is an identification sheet giving the names of the existing representative bodies, together with a brief presentation of the main activities, publications, training programmes, standards and methodological specificities. This publication forms part of the Value Analysis promotion activities under the **SPRINT** Programme.

A copy can be obtained from Mr J. Tiscar, CEC, DG XIII/C/1, JMO B4/102, L-2920 Luxembourg, Fax: (352) 4301-4129, Tlx: 3423 / 3446 COMEUR LU.

The proceedings of the Conference '**1992: Value Management - Key to success in European Business**', can be obtained from the Organizing Secretariat, MGR S.r.l., Via Servio Tullio 4, I-20123 Milano, Tel.: (39) 2 481.35.58, Fax: (39) 2 498.07.23, Tlx: 315469 MGRMIL I.



**CONFERENCES ON VALUE ANALYSIS IN SPAIN**

**Two conferences on Value Analysis** will be held, one in **Barcelona** and one in **Madrid** on 2-3-4 May 1990, with the financial support of the **SPRINT** Programme. The aim of these will be to **familiarize both public and private Spanish entities** in the innovation business with Value Analysis as an instrument for optimization of investment and resources. Several European Associations for Value Analysis will collaborate in the initiative, which presents the Spanish Association of Value Analysis (ANAVA), currently being created.

Further information can be obtained from Sr. D. Enrique de la Puerta, Fundación Empresa Pública, Plaza del Marqués de Salamanca, E-28006 Madrid, Tel.: (34) 1 404.03.12 / 404.03.51, Fax: (34) 1 275.56.41.

**INNOVATION ADVISORY BODIES:  
THIRD REGIONAL SPRINT MEETING IN SCOTLAND**

The Scottish Development Agency has undertaken great efforts to promote the SPRINT scheme among innovation consultants throughout Scotland. At the moment, 13 Scottish organisations are participating in SPRINT networks with over 40 European partners. In this context, the SDA organises regular **regional meetings** of the SPRINT contractors as well as other organizations involved in technology transfer. The third such meeting took place in Glasgow on 11 October 1989. The aim of this regional grouping is to **network the Scottish SPRINT contractors** in order to provide a forum for the exchange of ideas for information on Commission programmes and procedures and also for training on best technology transfer practices. The regional network also widens the pool of technology transfer opportunities and directs technology requests and offers to the best suited consultant.

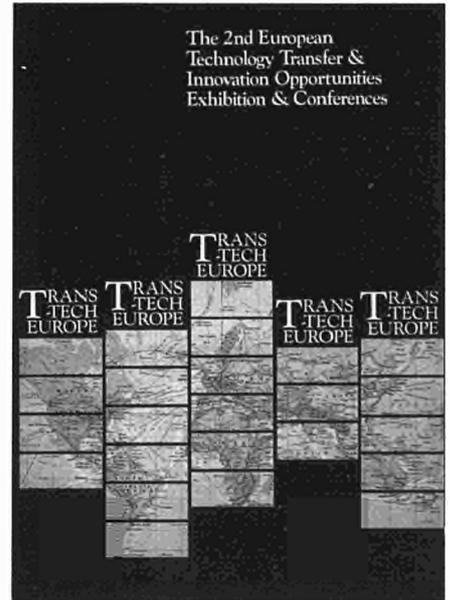
**TRANSTECH EUROPE EXHIBITION - STAND FOR SPRINT CONSULTANTS ENVISAGED**

The Transtech Europe Exhibition taking place in Glasgow on 22-24 May 1990 is a major exhibition supported by the CEC which **will attract UK and European businesses in the field of technology transfer**. The Scottish Development Agency has taken a stand at the exhibition with the intention of setting up a **SPRINT Consultants' 'Clinic'**.

The clinic is designed to help companies and institutions looking for advice and help in locating distributors, partners, joint ventures, licensing and research collaboration. This opportunity is **aimed at consultants**, especially the Scottish SPRINT contractors from the European Community countries **to take part and provide specialist advice on their specific countries with a view to bringing companies together**.

For further information on the Scottish SPRINT Network, please contact Ms G. Heterich or Mr I. Traill, Commission of the European Communities, DG XIII/C/1, B4/105, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-4788, Fax: (352) 4301-4129, Tlx: 3423 / 3446 COMEUR LU or Mr R. Lauder, SDA, 120 Bothwell Street, UK-Glasgow G2 7JP, Tel.: (44) 41 24.82.700, Fax: (44) 041 22.13.217, Tlx: 777600.

If you are interested in participating in the **European Consultants' Clinic**, further details can be obtained from Ms Helen Lee, Technology Transfer and Training Group, Scottish Development Agency, 120 Bothwell Street, Glasgow G2 7JP, Scotland.



**SPRINT: FIFTH ANNUAL REPORT NOW AVAILABLE**

The Commission has approved the **1988 SPRINT annual progress report**. This report is now being submitted to the Council and the Parliament. 1988 was once again a year of considerable progress in the Commission's innovation promotion activities.

The actions undertaken fall into four fields:

- a. **Strengthening the European infrastructure for innovation services** through the establishment of intra-Community networks of technology transfer agents
- b. Developing **exchanges of views and experience** between the Member States and the Commission in order **to improve the efficiency of innovation policies**
- c. Specific **actions for the less-favoured** regions
- d. **Preparation of the proposal for the main phase of SPRINT (1989-1993)**.

The various evaluations which were completed during the year all show that downstream of, and in complementarity with, the major R&TD programmes, the experimental phase of SPRINT has been fulfilling a need, even though the programme has been operating on a modest budget. By the end of 1988, the networks of innovative advisory bodies set up under SPRINT had produced over **300 innovation and technology agreements** between companies in different countries, covering a wide range of technologies. Furthermore, **95 industrial research associations**, i.e. one out of four such associations in Europe, mostly in traditional sectors, are currently being supported by SPRINT with the aim of encouraging the modernisation of these sectors.

✂ .....

Order form: Please send me a copy of the **SPRINT 1988 Annual Progress Report** in (please tick):

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To be returned to Mr J. Tiscar, CEC, DG XIII/C/1, JMO B4/102, L-2920 Luxembourg, Fax: (352) 4301-4129.

**VENTURE CAPITAL - NEWS FROM EVCA**

**TRANSNATIONAL EXCHANGE SCHEME SHOWS PROMISE**

Earlier this year, the first **batch of venture capital managers and manageresses** took part in the **new Venture Manager Exchange Scheme**. The aim of the project, which is supported by the EC Commission's SPRINT Programme, is to give the opportunity to new entrants in the venture capital business to gain useful experience of the VC market and business in another European country.

Catherine Wall of Barclays Development Capital in the UK spent five weeks working with the French fund, Ciclad S.A.. Alberto Pacheco of Portugal's Sociedade Portuguesa de Capital de Risco spent three weeks with BBHQ, two weeks in London, and one in the Madrid office of BBVG. Eckart Bohm of GENES GmbH Venture Services in Cologne spent four weeks in London with Barclays Development Capital. Ralf Jung of GENES GmbH Venture Services spent time with Allied Irish Investment Bank (AIIB) in Dublin.

**EVCA EXPLORES POSSIBLE SUPPORT FROM EUROPEAN VENTURE CAPITALISTS FOR THE SOVIET UNION**



In a move to stimulate **possible support** from European venture capitalists for the **Soviet Union's current economic liberalisation** efforts, a delegation from EVCA was invited to Leningrad and Moscow in September to assess the new economic climate. EVCA Chairman Jos Peeters said: It was interesting and revealing to see the extent to which decision-making is being decentralised in the USSR. We now see joint-stock Innovation Banks taking over the investment function for entrepreneurial business. In a radical move, research institutes are increasingly looking for outside financial support, since they are now being funded on a projects basis by the State.

**INFO-EVCA REPORTS ON EUROPEAN VENTURE CAPITAL ACTIVITIES**

← **INFO EVCA** reports on the activities in the field of Venture Capital in the Community. It is published free for members of the European Venture Capital Association. Copies are available on subscription to non-members. INFO EVCA is also published in French.

Copies are available from the EVCA secretariat, EVCA, Keibergpark, Minervastraat 6, Bus 6, B-1930 Zaventem, Tel.: (32) 2 720.60.10, Fax: (32) 2 725.30.36.

**TII CONFERENCE IN NICE ON ENTERPRISE AND INNOVATION IN THE LIGHT OF 1992**

Over 400 technology transfer and other innovation-support professionals made their way to Nice on October 26-27 for the TII conference on **'Enterprise, Innovation and 1992: Innovation Support Services in Europe'**.

The delegates came from over 20 countries and included about 140 participants from TII member organisations. The core of the conference programme was a set of 10 workshops with 60 papers designed to give a state-of-the-art overview of support services to innovative companies. The themes covered included innovation generation, strategy and management, innovation financing, consultancy and information services, university-industry technology transfer, licensing, and technology dissemination and implementation. The workshop papers - and the key-note addresses by **B. Taylor** (Brussels correspondent of The Economist and President of European Research Associates) on 'The Consequences of 1992 for Economies, Sectors and Firms' and **G. Bräunling** (Fraunhofer Institute for Systems and Innovation Research) on 'The Development of Innovation Support Services in Europe' - are currently being revised for publication in the early part of next year.

For further information, please contact: Mr M. Duhamel, c/o TII, 3, rue des Capucins, L-1313 Luxembourg, Tel.: (352) 46.30.35, Fax: (352) 46.21.85, Tlx: 6105111 GMA Lu.

**EUROPEAN INNOVATION DIAGNOSTICS FOR CONSTRUCTION MATERIALS**

Under the SPRINT Programme various European civil engineering laboratories are involved in implementing a system of **European Innovation Diagnostics (DIE/IDEA)** intended for innovative construction materials and products. This DIE/IDEA service is a **decision-making tool intended to help firms in the construction industry** which create new or innovative products to market them in other EEC countries under optimum technical conditions. DIE allows an economic, simple, flexible and rapid **appreciation of the advantages** of the product or process and **an assessment of the weaknesses and risks** in each of the target countries, and hence an indication of any improvements and technical modifications which may be necessary, as well as the principal phases in implementation.

Over the past year a large number of diagnoses were carried out on various types of construction products intended for various countries, including Portugal.

For further information, please contact: Mr Henderieckx, CETC, 41, rue du Lombard, B-1000 Brussels, Tel.: (32) 2 513.60.50, Fax: (32) 2 511.41.56.



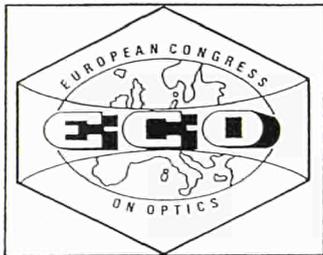
## MR CARPENTIER, DIRECTOR-GENERAL OF DG XIII, STRESSES NEED FOR BETTER QUALITY MANAGEMENT

Mr M. Carpentier, Director-General of DG XIII, gave the opening address to the **European Quality Management Forum** organised by the **European Foundation for Quality Management** in Montreux, on 19 October 1989. In his speech Mr Carpentier highlighted the various activities to improve quality management under SPRINT and other Community programmes.

Further information on the above Conference can be obtained from Mr Ian Traill, Commission of the European Communities, DG XIII/C/1, B4/105, Jean Monnet Building, L-2920 Luxembourg, Fax: (352) 4301-4129, Tlx: 3423 / 3446 COMEUR LU.

Mr Carpentier during his presentation

### The international Congress on



### OPTICAL SCIENCE & ENGINEERING

12 - 15 March 1990  
The Netherlands Congress Centre,  
The Hague, The Netherlands

- Optical Sensing and Metrology
- Optical Systems and Components
- Optical Materials
- Lasers and Laser Processing
- Optical Computing

*The Congress of:*

EPS — European Physical Society  
EUROPTICA — The European Federation for Applied Optics

SPIE — The International Society for Optical Engineering

**with the support of  
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of the Commission of the European  
Communities**

*For further information and registration please contact:*  
Amanda Coillot

Europtica Services I.C.  
16, av. Bugeaud, 75116 Paris, France  
Téléphone: (33.1) 45.53.26.67  
Telefax (33.1) 47.04.25.20

### HIGH TECH FAIR IN DENMARK:

## TECHTRANS CENTRE '90

... aims to build a bridge between high technology and the producer and ...

... will be an **international forum for exchanges of ideas** between suppliers of high-technology products, new technologies and techniques, as well as advanced processes, systems and know-how on the one side, and industrialists and technicians, producers looking for new results, licences and patents, investors, product developers and scientists, as well as technology and patent brokers on the other side. Furthermore, TechTrans Centre '90 will be a meeting place for colleagues with the opportunity to exchange experience and points of view at both conference and exhibition level.

TechTrans Centre '90, which takes place at the same time as the Herning Fair '90, **will concentrate on five key areas:**

- intelligent products, new technologies, processes and techniques
- new energy technologies and techniques
- new materials
- infrastructure
- bioengineering



**Sponsored by the Commission of the EC  
under the SPRINT Programme**

**Organizer:**

Messecenter Herning, (Exhibition Centre Herning), Vardevej 1, DK-7400 Herning,  
Phone: +45 97 12 60 00, Fax.: +45 97 22 30 60, Telex: 62 135 (herhal dk)

### CONFERENCES ON VENTURE CAPITAL:

December 14/15: **BUSINESS TURNAROUNDS**, London (Info: F&S, Tel.: (44) 1 730.34.38)

December 19/20: **LE FINANCEMENT MEZZANINE**, Paris (Info: IIR, Tel.: (33) 1 46.03.14.96)

February 23: **EVCA BUSINESS SEMINAR**, Florence (Info: EVCA, Tel.: (32) 2 720.60.10)

March 17/18: **EVCA FORUM**, Amsterdam (Info: EVCA, Tel.: (32) 2 720.60.10)

June 13-15: **VENTURE SYMPOSIUM 90**, Nice-Côte d'Azur (Info: EVCA, Tel.: (32) 2 720.60.10)

## ORDER FORM FOR "INNOVATION AND TECHNOLOGY TRANSFER" ('I & TT')

"Innovation and Technology Transfer" is published by DG XIII-C of the Commission of the European Communities and reports regularly on the Community's R&D policy under the RTD Framework Programme, new research results originating from the CEC Joint Research Centre and the implementation of the SPRINT Programme and related matters.

Innovation and Technology Transfer (5-6 issues per year) can be obtained free of charge.

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 Please send me on a regular basis 'Innovation and Technology Transfer'

Name: \_\_\_\_\_

Organisation: \_\_\_\_\_

Address: \_\_\_\_\_ Postal Code: \_\_\_\_\_ Town: \_\_\_\_\_

Date: \_\_\_\_\_ Signature: \_\_\_\_\_

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Under the SPRINT Programme the Commission is promoting the **Europeanisation of conferences on new technologies**. Here is an overview of some of the forthcoming conferences:

Date	Title	Venue	Organizer	See page or contact
21-23.2.90	Open industrialisation of construction, as a solution for the modernisation of small and medium-sized firms and industries	Stuttgart (D)	CERIB, Epernon (F)	40
21-22.3.90	Application of new technologies to traditional industrial sectors	Bilbao (E)	Parque Tecnológico, Bilbao (E)	Mr A. Aranzabe, Parque Tecnológico, Gran Vía 58, Pral, E- 48011 Bilbao
21-22.6.90	Actuator '90	Bremen (D)	VDI/VDE, Bremen (D)	38
5-8.11.90	A European conference on the advancement of rehabilitation technology	Maastricht (NL)	Institute for Rehabilitation Research, Hoensbroek (NL)	40

N.B. A list of conferences taking place after 31 March 1990 will be published in the next edition of I&TT, following the results of the last call for proposals (see page 33).

Further information on the SPRINT scheme to promote efforts to give conferences a European dimension can be obtained from: Dr E. Pérez Carbonell, Commission of the European Communities, DG XIII/C/1, B4/092, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-4117, Tlx: 3423 / 3446 COMEUR LU, Fax: (532) 4301-4129.



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Further information can be obtained from WIP, Sylvensteinstraße 2, D-8000 München 70, Tel.: (49) 89 720.12.32, Tlx: 5212186 haha d, Fax: (49) 89 720.12.91.

Conference secretariat, Scientific programme inquiries, Dr T. Gerritsen, Dr M. Soede, Institute for Rehabilitation Research, Zandbergsweg 111, NL-6432 CC Hoensbroek, Tel.: (31) 45 22.43.00, Fax: (31) 45 22.63.70.