

### DG XIII

Telecommunications Information Industries and Innovation

## INNOVATION AND TECHNOLOGY TRANSFER

Paga

### This issue

	rage
Innovation policy SPRINT well under way PATINNOVA '90 - Conference on strategies for the protection of innovation	2
Research and Development Policy First report on the state of science and technology in Europe Various new Commission Research Programmes Deadlines for the next Calls for proposals in the field of R&D	3 3 7
<b>Community R&amp;D Results</b> Awards for a new engine stemming from Community R&D ENVITECH '89 - Technology for Environmental Protection Studies published on R&D exploitation in the Member States	9 10 11
SIMAC - Meeting point of the construction industry Industrial property rights and innovation Patent applications recently published Innovation dynamics in OECD countries by technometric analysis	12 13 14
<b>Conferences and Symposia</b> Science, Technology and European Cultural Heritage The European Economic Interest Grouping	15 17
Publications Recent publications on Community R&D Passport to grey literature now available	19 22
SPRINT - The European Programme for Innovation and Technology Transfer Collaboration between industrial research associations End-use properties of textiles European Community Design Prize 1990 Quality control procedures for fibre composites Technology Transfer Networks Venture capitalists on the look-out for companies with pan-European potential SPRINT Transnational Professional Exchange Scheme Conferences under the SPRINT Programme	

### Note to our readers

Many of our readers tell us that they are looking for more comprehensive information on the Community's R, D&T policy and its corresponding actions. Previous issues of '**I&TT**' already contained some condensed information on the various EC R&D programmes. In order to comply with the wishes of our readers in this issue we extend our reporting on the wideranging R, D&T activities of the Commission. From now on we shall try to provide you with a regular review of all relevant matters and events including concise information on current policy, programmes, calls for proposals etc.

The Commission, under its VALUE Programme, is also planning to set up under the name CORDIS, a **CO**mmunity **R**esearch and **D**evelopment Information **S**ervice using modern information technologies.

The major benefit of CORDIS is expected to be the integration of the information under a single operation and the provision of access to the service through electronic media from all over the Community. COR-DIS will be concerned with non-confidential information arising from Community R&D programmes and will cover all phases of Community R, D&T from definition to implementation and diffusion or exploitation of results.

Preparation for this new information system is well underway, and the next issues of I&TT will give you more details of it.

### A.S. Strub

Director for Exploitation of Research, Technological Development, Technology Transfer and Innovation

### Newsletter Vol. 10/1 — February 1989 — Supplement to Euroabstracts — ISSN 0255-0806

Published by the Commission of the European Communities

Directorate XIII-C — Exploitation of Research, Technological Development, Technology Transfer and Innovation

Editor: A. von Witzleben, Commission of the European Communities, DG XIII-C — JMO B4-091, L-2920 Luxembourg — Tel (0 03 52) 43 01 33 51 (Orders, changes of address etc. will only be accepted in writing)

### SPRINT MAKES GOOD PROGRESS

### - Call for Proposals expected in spring 1989 -

SPRINT is now being discussed by the Council of Ministers. A decision is expected soon. Though an exact date of approval is not yet known, the Commission envisages launching a provisional call for proposals in spring 1989. It is intended that it will cover the proven transnational collaboration schemes known from the previous calls. Subject to the Council reaching a decision on SPRINT, proposals will be invited for three schemes:

A. PROMOTION OF TRANSNATIONAL COOPERATION BETWEEN TECHNOLOGY AND INNOVATION MANAGEMENT AD-VISORY SERVICES

This scheme covers transnational cooperation projects between technology advisory organisations including regional development agencies, chambers of commerce, technology and licence brokers, and private management consultants. The aim of these cooperation projects should be to promote and bring about international exchanges of technology involving SMEs from the respective regions and/or sectors (see also the article on pages 30/31 in this issue).

B. PROMOTION OF TRANSNATIONAL COOPERATION BETWEEN INDUSTRIAL RESEARCH ASSOCIATIONS, TECHNICAL INSTITUTES AND OTHER SIMILAR BODIES

Under this scheme proposals will be welcomed for transnational cooperation between industrial research associations, technical institutes and other similar bodies, the aim being to promote technology transfer towards, and innovation in, enterprises in the respective sector (for further information on this cooperation scheme see also page 23 in this issue).

In addition to supporting collaboration between industrial research associations and technical institutes it is intended to gather a limited number of proposals for transnational cooperation between contract research organizations, university-industry or research-industry liaison organizations and engineering consultancies, the aim of which will be to promote industrial innovation and technology transfer at a transnational level.

C. PROMOTION OF EUROPEAN CONFERENCES OR WORKSHOPS ON TECHNOLOGY AND INNOVATION This scheme is intended to promote the Community-wide dissemination of information concerning innovation and/or technology transfer. Proposals will be invited from the organizers of conferences on innovation or technology who are prepared to give a European dimension to conferences which would normally be held on a national or regional basis (see also the examples on page 36 in this issue).

From the date of the Call, applicants will have between six and eight weeks to prepare and submit a proposal jointly with their cooperation partners, and it is advisable to start preparations now. The Call will be published in the Official Journal and in a special issue of I&TT.



- exchange of positive and negative experience in the exploitation of property rights (by bringing together patent and marketing experts);
- relevance of patents and other protection rights for researchers in public institutions (in particular in universities).

A first programme and information package will be available in March/April 1989. It can be obtained on written request from Mr A. v. Witzleben, Commission of the European Communities, DG XIII/C/1, B4/091, Jean Monnet Building, L-2920 Luxembourg, Tlx: 3423/3446 COMEUR LU, Fax: (352) 4301-4129.

### HIGHER EDUCATION IN THE EUROPEAN COMMUNITY - STUDENT HANDBOOK

This Student Handbook has been prepared for the assistance of students and their advisers, to provide in all the Community languages the basic information needed by those considering a period of higher education in another Member State. 470 pp., published in all Community languages, Catalogue number: CB-49-87-713-EN-C, ISBN: 92-825-7633-7. Price (excluding VAT) in Luxembourg: ECU 17.25, IRL 13.50, UKL 11.95, BFR 750 OFFICE FOR OFFICIAL PUBLICATIONS OF THE EUROPEAN COMMUNITIES, L-2985 Luxembourg

### THE STATE OF SCIENCE AND TECHNOLOGY IN EUROPE

### First report from the Commission now available —

Despite substantial progress in recent years, Europe remains weak in a number of the science-based sectors which are growing rapidly world-wide. This economic weakness reflects a technological dependence in key areas, says the first report on the state of science and technology in Europe, which the Commission has just adopted.

The main aim of the report is to provide a factual basis for further reflection on Europe's needs in science and technology and how they can be best satisfied.

As far as research areas are concerned, the report highlights five areas of major relevance to the European economy:

Information technology and telecommunications, new materials and technologies for use in manufacturing industry, aeronautics, biology and biotechnology and energy.

In terms of the quality of life there are major research needs in the fields of the environment, health research and industrial, road and nuclear safety.

The full report and further information can be obtained from Mrs M. Meijer, DG XII, Commission of the European Communities, 200, rue de la Loi, SDME 1/40 B-1049 Brussels, Tel.: (32) 2 235.64.19, Tlx: 21877 COMEUR B.

### Aeronautical research now under the BRITE/EURAM Programme — New Call for Proposals —

Pilot projects in the field of aeronautics are now associated with the BRITE/EURAM programme, particularly those features which have value in areas linked to aeronautics (aerodynamics, noise pollution, high-tech materials etc.). At its meeting of 15 December 1988 the Council approved the Commission's proposal for a new BRITE/EURAM programme to apply new technologies and use advanced materials in industry. The budget is 499 million ECU for 1989-1992, of which 35 million are devoted to aeronautics. The Commission is issuing a first call for proposals. An information package containing full details of the programme and how to apply can be obtained on written request from:

Commission of the European Communities, DG XII, Directorate for Technological Research BRITE/EURAM Programme, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.40.55, TIx: 21877 COMEUR B, Fax: (32) 2 235.80.46 (see also section 'Call for proposals' on page 7).

### Two new environmental research programmes - STEP and EPOCH

### 1. STEP - Science and Technology for Environmental Protection

This programme will be allocated 75 million ECU from the EC budget and 64 million ECU from national sources. It covers the whole range of research into environmental protection and is divided into nine key areas:

- a) environment and human heath
- b) assessment of risks associated with chemicals
- c) atmospheric processes and air quality
- d) water quality
- e) soil and groundwater protection
- f) ecosystem research
- g) protection and conservation of the European cultural heritage
- h) technologies for environmental protection
- i) major technological hazards and fire safety.

### 2. EPOCH - European Programme on Climatology and Natural Hazards

This programme will be allocated 40 million ECU from the EC budget and 36.5 million ECU from national funding. It

deals with the study of the climate (particularly the climatic change induced by the greenhouse effect) and with hazards and risks associated with climatic change and variability. It is divided into four key areas:

- a) past climates and climate change
- b) climate processes and models
- c) climatic impacts and climate-related hazards (landslides, floods, wildfires)
- d) seismic hazards (earthquakes).

These two programmes are a scientific response by the EC to the environmental challenges of the nineties. These challenges vary from the local to the regional and global levels. Climatic changes due to the accumulation of greenhouse gases in the atmosphere and stratospheric ozone depletion are now more than a purely scientific concern, and are beginning to be addressed by a world-wide research programme, the IGBP (International Geosphere Biosphere Programme).

Further information on STEP and EPOCH can be obtained from Mr H. Ott, Commission of the European Communities, DG XII, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.11.82, TIx: 21877 COMEUR B, Fax: (32) 2 235.01.45.

### Commission proposes Marine Science and Technology Programme (MAST)

The Commission is proposing an entirely new R&D programme in the field of marine science and technology (MAST).

The proposed budget is 50 million ECU for 1989-1992, which will be used to finance different types of projects having the following technical content:

- 1. Basic and applied marine science
- 2. Coastal zone science and engineering
- 3. Marine technology
- 4. Supporting initiatives aimed at obtaining more cost-effec-

tive use of facilities in the Member States (vessels, large installations, data centres).

In anticipation of the adoption of the programme by the Council, advance notice of a call for proposals is given in order that those interested can request the information package for MAST and have sufficient time to prepare proposals.

A full description of the programme is given in the information package, which may be obtained on request from the address below.

Mr J. Boissonnas, Commission of the European Communities, DG XII-E, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.67.87, TIx: 21877 COMEUR B, Fax: (32) 2 236.30.24.



### RACE: Research and Development in Advanced Communications Technologies in Europe

A wide variety of organisations established in the European Community or EFTA countries are eligible to participate in the programme: telecommunication network operators, whether public or private; major multinational companies; small and medium-sized companies; research institutes, universities and groups of consultants.

The RACE workplan, brochure and information related to calls for proposals is available on request from:

Mr J. Rosenbaum, DG XIII-F, RACE Central Office, Commission of the European Communities, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.92.35, Tlx: 21877 COMEUR B, Fax: (32) 2 235.01.48.

### Further new EC research programmes in the pipeline

### 1. Specific research programme in the area of predictive medicine: analysis of the human genome (1989-1991)

This programme should stress the ethical aspects and longterm social consequences of genetic research.

Further information can be obtained from Mr A. Dickens, Commission of the European Communities, DG XII, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.00.32, TIx: 21877 COMEUR B, Fax: (32) 2 235.01.45.

### 2. MONITOR programme

MONITOR is a programme in the area of strategic analysis of prospects for and evaluation of research and technology (with three sub-programmes: FAST, SAST and SPEAR)

Further information can be obtained from Mr Allgeier, Commission of the European Communities, DG XII, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.40.55, TIx: 21877 COM-EUR B.

#### 3. DOSES programme

The Commission has approved a proposal for a Council decision adopting a specific multiannual programme to research and develop expert systems for handling statistics. The aim is to improve the Community's capacity to produce and use statistical information.

Further information can be obtained from Mr R. Thomas, Commission of the European Communities, DG XII/H/1, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.47.07, TIx: 22045 COMEUR B, Fax: (32) 2 235.06.56.

For the programmes above, please see the section 'Calls for proposals' on page 7

### 4. Programme of research into the competitiveness of agriculture and the management of agricultural resources (1989-1993)

Further information can be obtained from Mr Ph. Moulart, Commission of the European Communities, DG VI, Agriculture, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.24.18, TIx: 21877 COMEUR B.

### 5. TEDIS programme

TEDIS is the Community programme for the transfer of electronic trade data.

Further information can be obtained from Mr E. Peeters, Commission of the European Communities, DG XIII-C, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.73.30, TIx: 21877 COMEUR B, Fax: (32) 2 235.02.99.

### AIM - Advanced Informatics in Medicine

The Council has decided to launch an action in the area of information and telecommunications technologies applied to health: advanced informatics in medicine (AIM).

The action, with a financial contribution from the Community of **20 million ECU**, aims to put progress in health care knowledge at the disposal of citizens and health services as quickly and cheaply as possible, thus contributing to the achievement of social and economic goals. A European infrastructure and framework will be set up within which current achievements and future progress will improve health thanks to cooperation between public and private activities at national and international levels.

Further information and application forms can be obtained from the Commission of the European Communities, DG XIII/F - AIM/TR61, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.27.06 or 236.20.78, TIx: 22045 COMEUR B, Fax: (32) 2 236.23.91 (see also section 'Call for proposals' on page 7).

### EUROPEAN RIVER OCEAN SYSTEM

### EROS 2000 - European River Ocean System

EROS 2000 (European River Ocean System) is an interdisciplinary long-term research programme on biogeochemical processes in the European coastal environment.

The aim of EROS is to provide basic information to help find a realistic compromise between economic development and the protection of the marine environment and its biological resources. The project involves close cooperation between 25 research institutions from 11 Member States of the European Community, and is supported financially by the Commission of the European Communities.

Further information can be obtained from Mr H. Barth, Commission of the European Communities, DG XII - Environment, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.64.52 or 235.64.81, Tlx: 21877 COMEUR B, Fax: (32) 2 235.01.45.

### STOP PRESS

NEW GUIDE TO COMMUNITY R & D PROGRAMMES JUST PUBLISHED.

INVENTORY OF SPECIFIC PROGRAMMES WITHIN THE FRAMEWORK PROGRAMME FOR COMMUNITY ACTIVITIES IN THE FIELD OF RESEARCH AND DEVELOPMENT

(status 16 January 1989)

Copies can be obtained from Mrs M. MEIJER, DG XII, SDME 1/40 Commission of the European Communities, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.64.19, Tlx: 21877 COMEUR B.

### SPES - Research in Economic Sciences

This programme (budget 6 million ECU for four years) aims to establish a network of cooperation and interchange between economists of the highest professional quality at Community level.

The programme will be implemented through scholarships, research grants, grants for multinational networks or research projects, subsidies for high-level training courses, surveys and studies, and access to data banks. **Research topics** include:

- the EC internal market;
- European integration economics, including issues of intra-European, regional and North-South relations;
- the determinants of economic growth in Western Europe (advanced technology and innovation, environment);

Further information can be obtained from Mr R. Thomas, Commission of the European Communities, DG XII/H/1 -SPES, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.47.07/235.64.72, Tlx: 22045 COMEUR B, Fax: (32) 2 235.06.56.

### New Greek Energy Research Centre

A Greek Centre for Renewable Energy Sources (CRES) has been set up by a decision of the Greek Government with the support of the Commission of the European Communities. The Commission will have a permanent representative on the Governing Board of the Centre, which will be located in Legrena, 45 km south-east of Athens.

It will conduct, stimulate and manage research, development and demonstration in the areas of solar, wind, biomass and geothermal energy and the promotion of the use of these renewable sources in Greece and elsewhere. It will also perform activities to promote energy conservation.

CRES plans to develop working relations with other institutions involved in similar endeavours in order to exchange scientific information and expertise.

For further information, please contact Prof. S. Kyritsis, Director-General, Centre for Renewable Energy Sources, Frati St. 6, Fousa, GR-19400 Koropi Attikis, or Dr P.A. Pilavachi, Commission of the European Communities, DG XII, 200, rue de la Loi, B-1049 Brussels.

### Council approves R&D programme in the area of alternative energy (JOULE)

Allocated a 122 million ECU budget for 1989-1992, the aim of JOULE is research in the field of alternative energy. This objective requires a bigger contribution, in the medium and long terms, from solid fossil fuels and new and renewable energy sources, together with a considerable improvement in energy efficiency and the rational use of energy.

The proposed breakdown of financial support between the four major lines of action is as follows: energy and environment models, 6 million ECU; rational use of energy 35 million

ECU; fossil fuels 34 million ECU, and renewable and geothermal energies 47 million ECU.

Further information on JOULE can be obtained from Mr M. Trousson, Commission of the European Communities, DG XII-E, Programme JOULE, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.39.78, TIx: 21877 COMEUR B, Fax: (32) 2 235.01.45.

(see also section 'Call for proposals' on page 7)

### ESPRIT Programme: The Commission has approved 62 projects of basic research in information technology



The Commission has approved 62 projects within the framework of the second phase of ESPRIT, the section on basic research in information technology. The selection was made from a total of 283 valid proposals, but only those proposals (21 % of the total) which were of great interest were chosen, and the duration of the financing was limited to a period of two-and-a-half years.

Basic research in information technology concerns several different areas within the ESPRIT programme. The areas selected concern high-temperature supra-conductivity, optical data processing, the specification and verification of complex software systems, robotics, voice and image processing, etc.

The ESPRIT workplan, information packages relevant to the calls for proposals, synopses and other information can be obtained from the Commission's information offices in each Member State or from the ESPRIT Operations Office, Mr H. Hünke, Commission of the European Communities, DG XIII, A-25 8/7, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.76.66, TIX: 21877 COMEUR B, Fax: (32) 2 235.06.55.

### ECLAIR: Agro-industrial R&D based on Biotechnologies

The ECLAIR programme will have an 80 million ECU budget for six years. The principal objectives of the programme are:

- research, adaptation and development of agricultural products destined for industrial use, as well as the research and promotion of new industrial techniques for processing and transforming agricultural raw materials with a view to obtaining economically viable industrial products which meet market needs;
- research and development of industrial inputs for agriculture (e.g. pesticides and fertilizers) and of disease eradication and control systems that are less harmful or

better adapted to the environment and which limit waste.

Every proposal will have to include an environmental impact statement setting out the project's likely impact on man, fauna, flora, soil, water and air.

Further information and application forms can be obtained from the Commission of the European Communities, DG XII/F/3 - ECLAIR, SDME, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 236.31.63 or 236.31.64 or 236.09.73, Tlx: 21877 COMEUR B, Fax: (32) 2 236.20.07 or 235.01.45.

(see also section 'Call for proposals' on page 7)

### Community plan to support large scientific installations

This experimental programme aims to support and facilitate access to large scientific installations of European interest. With a 30 million ECU budget until 1992, its objectives are to: facilitate the access of researchers who are EC nationals to large scientific and technical installations they have little chance of using at present, increase training possibilities, and upgrade or adapt existing equipment.

Further information can be obtained from Mr R. Thomas, Commission of the European Communities, DG XII/H/1 -SPES, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.47.07/235.64.72, Tlx: 22045 COMEUR B, Fax: (32) 2 235.06.56.

<b>Community Research and Development Programmes</b>
Deadlines for the next Calls for Proposals

Programme	Directorate-General responsible	Deadline
BRITE II (industrial technologies), including EURAM II (advanced materials); please see the article on BRITE/EURAM on page 3	XII	12.05.1989
Technology research - coal (ECSC)	XVII	31.08.1989
Steel research (ECSC)	XII	31.08.1989
Pilot and demonstration projects in the iron and steel industry (ECSC)	XII	01.10.1989
ECLAIR (European Collaborative Linkage of Agriculture and Industry through Research); please see the article on ECLAIR on page 6	XII	31.03.1989
Research and development programme on metrology and chemical analysis (for further information see Official Journal C 20 of 26 January 1989)	XII	15.04.1989
JOULE (non-nuclear energies and rational use of energy; please see the article on JOULE on page 6 and Official Journal C 20 of 26 January 1989)	XII	30.04.1989
AIM (Advanced Informatics in Medicine): please see the article on AIM on page 5	ХШ	14.02.1989
Support of pilot projects to preserve and promote the Community's architectural heritage (for further information please call (32) 2 235.90.95 or see Official Journal C 308 of 3.12.1988)	XII	08.02.1989
Plan to stimulate the international cooperation and interchange needed by European researchers: SCIENCE (for further information see Official Journal C 335 of 30.12.1988)	XII	no deadline
Demonstration projects in the field of energy	XVII	14.04.1989
COMETT (Strand B - secondments)	V	28.02.1989

Application forms can be obtained from the Directorate-General concerned (Commission of the European Communities, DG ......, 200, rue de la Loi, B-1049 Brussels).

For COMETT: Office for Technical Support COMETT c/o CEMSU Avenue de Cortenberg 71 B-1040 Brussels Fax: (32) 2 734.56.41

Please see also the Council Decision on a Community-COST concertation agreement on seven concerted action projects in the field of the environment in Official Journal L 344 of 13.12.1988 (areas concerned: physico-chemical behaviour of atmospheric pollutants, air-pollution effects on terrestrial and aquatic ecosystems, organic micropollutants in the aquatic environment, treatment and use of organic sludges and liquid agricultural wastes, coastal benthic ecology, indoor-air quality and its impact on man and the protection of species.

Forthcoming calls	Deadline expected
MAST — Marine science and technology programme (see also the article on page 4)	June 1989
SPRINT — Innovation and Technology Transfer (see also the article on page 2)	April 1989

Calls for proposals or tenders might be launched in the second half of 1989 for the following programmes, which are currently being discussed by the competent institutions: DOSES, FLAIR, MONITOR, EUROTRA, VALUE, PREDICTIVE MEDICINE. By the end of 1989 calls might be launched for the programmes TELEMAN, BRIDGE, STEP, EPOCH and agricultural research.

### INNOVATIONS FROM COMMUNITY R&D

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

### 1. Acoustic and thermal insulating panelling made of waste paper

Pan-Terre is a structural board made from straw and mixed waste paper. In France and Belgium it is a popular material for interior renovation and prefab modular construction, competing favourably with plasterboard and chipboard because of its lighter weight, superior strength and easier fitting.

Specialized uses featuring Pan-Terre's acoustic and thermal insulation properties have met the highest standards and added value. Movable single and double walls, suspended ceilings, floating floors, acoustic structures for studios, soundproofing enclosures for industrial machinery and office partitions are all popular items.

The goal of the project was to design a natural, multi-purpose product, using simple raw materials and straightforward technology. Ingredients such as formaldehyde, glue,



chemical additives derived from petrol, asbestos and gypsum, typically used in comparable products, were ruled out as additives. Instead, Pan-Terre relies on the natural binding behaviour of pulped cellulose fibres combined with kiln-drying to achieve desired properties.

Recognizing these characteristics and the fact that Pan-Terre production is less energy-intensive than alternative insulation materials, the European Economic Community granted 650 000 ECU to the increased cost of the full-scale production plant launched in September 1987.

Pan-Terre was awarded the 'Golden Nail' at the 1987 Batimat Exhibition in Paris for its usefulness, ease of installation and handling and its appearance.

Further information can be obtained from: Pan-Terre, Parc industriel des Hauts-Sarts, B-4400 Herstal, Tél. (04) 48 08 78.

### 2. Crawler for use in forestry operations

This machine results from the knowledge built up over the past 15 years.

It combines several qualities, some of which are unique, which make the machine perfectly adapted to operate on uneven or low bearing grounds.

#### Performance:

- (a) simultaneous movement and function on steep gradients with a 130 HP engine;
- (b) high stability, longitudinal (100%) and transversal (60%);
- (c) low centre of gravity and high ground clearance;
- (d) good grip and light ground pressure thanks to flexible fulltracks.

#### Handiness:

- (a) compactness (1.80 x 4 metres);
- (b) reversible drive seat.

#### Comfort and safety:

- (a) spacious cab (2 places), ergonomic and air conditioned;
- (b) highly effective safety devices.

#### Multipurpose:

- (a) a large range of equipment can be mounted on it for various operations;
- (b) it is easy to manufacture and to market widely.



### Other specifications:

- (a) hydrostatic drive;
- (b) cooling and air filtration systems specially designed for hot climate and dusty conditions;
- (c) adjustable track tension according to ground profile and stress;
- (d) tank frame giving rigidity and cover for the components;
- (e) large access for easy maintenance.

By its original concept, this forest crawler is aimed to save and exploit the forest in areas of difficult access.

Further information can be obtained from:

Siper, La Petite Ferme, Fontenay-sur-Loing, F-45210 Ferrières-en-Gâtinais, Tél. 38 95 71 66.

### COMMUNITY R & D RESULTS

### AWARDS FOR A NEW MULTIPURPOSE ENGINE STEMMING FROM COMMUNITY R&D

With the financial support of the Commission (under the Energy Programme managed by DG XII), the Federal Ministry of Research and Technology and the Bavarian Ministry of Economic Affairs, the German SME Ficht GmbH has designed an internal combustion reciprocating engine in which the linear motion of the piston is converted into the rotary motion of the drive shaft through a combination of slides instead of the usual excursive connecting rod.

Cooperation between the Commission and Ficht GmbH has now gone a step further with a view to promoting the industrial exploitation of the new engine with the help of the recently reorganized 'Exploitation' service of Directorate XIII-C. The latter is making a financial contribution to the design, manufacture and field testing of a two-cylinder two-stroke marine engine of 15 kW, which is intended to be the first of a comprehensive range of new diesel and spark-ignition engines for many marine and terrestrial applications. More



The photo shows a model of this new engine with ceramic parts and its inventor Mr Ficht flanked by Mr J.N. Durvy, new head of the Commission's exploitation service (DG XIII/C/2) to the right, and Mr F. Engels, head of the section responsible for the commercialization of the new engine within DG XIII/C/2

powerful versions can be developed using the same principle, as well as versions with four, six, eight or more cylinders. Further development would allow aeronautical versions to be studied and manufactured.

A European company outside Germany is also involved in this work.

The advantages of the Ficht engine, which has received two awards (the 'Diesel-Goldmedaille' in 1986 and the 'Philip-Morris-Forschungspreis' in 1988) are:

- unparalleled light weight
- low fuel consumption
- favourable torque
- reduced pollution
- quietness
- on ease of manufacture (few parts).

Further information 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) 4301-2952, Tlx: 2423, 3446 COMEUR LU, Fax: (352) 4301-4129.

### PATENT INFRINGEMENT LITIGATION COSTS: A Practical Worldwide Survey

The Editor: André Bouju, Professor of Patent Law (CEIPI), European Patent and Trademark Attorney with contributors from 18 countries

Commissioned by the EEC, this practical worldwide survey on patent infringement litigation gives you essential information on costs incurred by the patent owner when suing an infringer.

#### Immediate evaluation

Designed to enable you to make an immediate evaluation of the costs and duration of an infringement suit, it demonstrates how to assess the economic advantages of initiating such an action and budget for future fees.

#### Country-by-Country

Each individual country is covered in a separate chapter, which starts with a general survey on the basic rules of the infringement suit. It goes on to examine the important roles of the individuals acting on behalf of the plaintiff (or defendant) in the proceedings.

A study of the costs of patent infringement in 18 different countries, this book analyses the

different steps of patent litigation procedure and the costs involved at each stage.

Unique tables summarise the calculation of the costs and helpful flow charts illustrate the infringement suit procedure.

#### Easy to use

With charts to clarify this complex and often costly area of the law, this international survey enables you to make country by country comparisons of costs that can be incurred by you or your client.

#### About the editor

Andre Bouju, Professor of Patent Law, is both a European Patent Attorney and Patent & Trademark Attorney. With extensive international experience, he has written many successful books on different aspects of patent law.

November 1987

PATENT INFRINGEMENT 085121 3243

LONGMAN GROUP UK LTD FREEPOST LONDON WC1N 3BR

**COMMUNITY R & D RESULTS** 

aten und Fakten zi

# Technik für Umweltschutz 6. Internationale Messe und Kongreß Düsseldorf, 10. – 14. 4. 1989 Technology for environmental protection

6th International Trade Fair and Congress Düsseldorf, 10.–14. 4.1989

The Commission will be exhibiting at the ENVITECH the Mark XIII-A flue gas desulphurisation process (hall 4, stand 4 G 03/05) developed at the Joint Research Centre in Ispra and marketed by FERLINI TECHNOLOGY SRL (Via Moie, 1, I-25050 Rodengo Salano (BS) - Tel. 030-610356) in cooperation with DG XIII/C-2.

Further information on the Mark XIII-A process can also be obtained from Mr B.B. GOODMAN, Commission of the European Communities, DG XIII-C, B4/069, Jean-Monnet-Building, L-2920 Luxembourg, Tel.: (352) 4301-2959/3176, Telex: 3423, 3446 COMEUR LU, Fax: (352) 4301-4129.

For further information on ENVITECH please contact: Messe Düsseldorf-NOWEA, Postfach 32 32 03, D-4000 DÜSSELDORF 30, Tel.: (02 11) 45 60-01, Telex 85 84 853 mes d Telegramm nowea, Telefax: (0211) 45 60-668

### IMPROVING THE UTILISATION OF PUBLICLY FUNDED RESEARCH First comprehensive report on the state of technology transfer in the Community now available — Studies on the situation in the Member States just published —

There has been growing concern in recent years that the results of publicly funded research and development should be fully exploited and that society should derive maximum benefit from them.

First of all, there has been a lack of information on the actual measures adopted throughout the Community and on their effectiveness. In order to fill this gap and to identify measures which might have general utility, the Commission initiated a series of studies to be made under the SPRINT Programme by groups of experts from university or the economy (see list of authors below). The objectives of these studies were to examine the procedures adopted in each Member State to promote the effective utilisation of publicly funded R&D, and to suggest measures which, in the opinion of the consultants, would be useful at both national and Community level. These studies have now been published:

Title: Utilisation of the results of public research and development (plus the name of the Member State concerned) Edited by: H. Corsten/K.-O. Junginger-Dittel/B.B. Goodman/A.v. Witzleben - 1989, Published by: CEC, DG XIII-C, Kirchberg, Luxembourg. Price (excluding VAT) in Luxembourg: ECU 5 to 15

	E UTILISATION OF PUBL	LIC AND PUBLICLY	FUNDED R&D RESULTS
List of studies and auth Summary report EUR No. 11528 EN ISBN 92-825-8269-8	John T. McMullan Centre for Energy Research University of Ulster	Ireland EUR No. 11534 EN ISBN 92-825-9050-X	B.A. O'Sullivan and D.J. Cogan Science Policy Research Centre Department of Business Ad- ministration University College Dublin
Belgium EUR No. 11529 FR ISBN 92-825-9045-3 Denmark	Michel Allé Programmation de la Politique Scientifique 8, rue de la Science B-1040 Bruxelles Leif Christensen	Italy EUR No. 11535 EN ISBN 92-825-9062-3	Guiseppe Bellei, Domenico Corradetti and Renato Facci FORMIT Fondazione per la Ricerca sulla Migrazione e sulla Integrazione delle Tecnologie Via Giovanni Gemelli Careri 11
EUR No. 11530 EN ISBN 92-825-9046-1	DTO - Danish Technical Information Service Rygaards All 131 A DK-2900 Copenhagen, Hellerup	n Luxembourg EUR No. 11536 FR ISBN 92-825-9051-8	M. Oestreicher LUXINNOVATION 7, rue Alcide de Gasperi,
France EUR No. 11531 FR ISBN 92-825-9047-X	Thomas Durand, Thierry Gonard and Roland Schell ANVAR 43, rue de Caumartin F-74536 PARIS Cédex 09	Netherlands EUR No. 11537 EN ISBN 92-825-9052-6	F.A. de Jonge Stichting LICENTEC Bernadottelaan 15 NL-3503 RH Utrecht
Germany EUR No. 11532 DE ISBN 92-825-9048-8	Gerhard Bräunling Fraunhofer-Institut für Systemtechnik und Innovationsforschung Breslauer Strasse 48 D-7800 Karlsruhe 1 and Michael Maas Universität - GHS Duisburg	Spain and Portugal EUR No. 11538 EN ISBN 92-825-9053-4 United Kingdom EUR No. 11539 EN	Prof. Pedro Nueno IESE, Universidad de Navarra Avenida Pearson 21 E-08034 Barcelona R.E. Quince Segal Quince Wicksteed
Greece EUR No. 11533 EN ISBN 92-825-9049-6	D. Deniozos, T. Giannitsis and H. Tsipouri University of Athens Omirou 19, GR-10672 Athens	ISBN 92-825-9054-2	Economic and Management Con- sultants Hall Keeper's House 42, Castle Street UK-Cambridge CB3 0AJ
			*
of the results of public research and development in Greece	COLLECTION INNOVATION ATECHNOICC TRANSFEE INDOVATION TRANSFEE in D	ilization if public if NNOVATION if Public if NNOVATION if CHNOLOGY TRANSFER tenmark	of the results of public research and development in Ireland
			O.

Street For Line 4

CANADA A DE LADA

11

MARCH . M. NO.

### **COMMUNITY R & D RESULTS**



### SIMAC — Meeting point for the construction industry

SIMAC is the most comprehensive fair and exhibition held in Portugal for the civil engineering and public works industries.

This annual event is particularly significant because of the highly specialized information it provides and for the volume of business it stimulates.

Addressed particularly to professionals in the field, but also open to the public, SIMAC can be considered the high point in publicizing business activities and in promoting domestic and foreign products consumed or used in this sector.

### DATE

10/14 May 1989

**SETTING UP** 5/9 May 1989

DISMANTLING 15/17 May 1989 10/12 May 3 pm/ 7 pm — Professionals 7 pm/11 pm — Public 13/14 May 3 pm/11 pm — Public

DEADLINE FOR APPLICATIONS

**OPENING HOURS** 

24 February 1989

ASSACIAÇÃO INDUSTRIAL PORTUGUESA, Praça das Indústrias, P-1399 Lisbon Codex, Tel.: (351) 1 64.41.61/64.53.41, Tlx: 12282 FIPORT P, Fax: (351) 1 63.90.48 or Delegação do Norte, Rua Oliveira Monteiro 453, P-4000 Porto, Tel.: (351) 2 69.92.36/46, Tlx: 262.68 FILPOR P, Fax: (351) 649.82.

DG XIII/C/2 will be exhibiting af SIMAC a series of innovations stemming from Community R&D (e.g. acoustic and thermal insulating panelling made from waste paper, see the article on page 8).

Information on the participation of the CEC at SIMAC can be obtained from Mr J. Hernandez-Ros, Commission of the European Communities, DG XIII/C/2, B4/121, Jean Monnet Building, Tel. (352) 4301-4533, TIx: 3423, 3446 COMEUR LU, Fax: (352) 4301-4129

### EUROPEAN CONFERENCE ON STRATEGIES FOR LOCAL ECONOMIC DEVELOPMENT

### 30 - 31 March 1989 at Trinity College, Dublin, Ireland

Organized by the Regional Studies Association, Irish Branch, and sponsored by the Commission of the European Communities under the SPRINT Programme.

Many interventions to support local economic development fail or are less than optimal. This Conference will examine the factors of significance in stimulating innovation, entrepreneurship and growth within a local economy. It will identify the parameters for the design of local economic development strategies and of interventions by private and public organizations.

For further information contact: Gerry Sweeney, SICA, 44 Fitzwilliam Square, Dublin 2

### INDUSTRIAL PROPERTY RIGHTS AND INNOVATION

### PATENT APPLICATIONS RECENTLY PUBLISHED

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

### 1. SEPARATOR FILM FOR AN ELECTROLYSER FOR MODERATELY TRITIATED WATER AND ITS MANUFACTURING PROCESS

Inventors: L. GIUFFRE, G. PIERINI, G. MODICA, E. TEMPESTI, S. MAFFI

### Ref.: EUR Pat 2192

This seperator film produced by mixing an organic aromatic polymer with an inorganic polymer of polyantimonic acid is highly resistant to an acid environment and to mechanical attack. It is considerably wettable in the presence of heavy or tritiated water, and it allows recovery of cathodic gases with a high degree of purity (higher than 99.99 %).

Manufacturing process: SbCl<sub>3</sub> is added to an organic polymer (such as polysulphone, polythersulphone, polyethylene sulphur or polytetrafluorethylene) dissolved in a water-soluble solvent such as N-methylpyrollidone or 1,2-diclorethane. The mixture is poured onto a plane support where the solvent dissappears by evaporation. The film thus obtained is treated by water at below 50° C and kept in deionized water for about 24 hours.

### 2. DIVERTER/COLLECTOR FOR A TOKAMAK-TYPE NUCLEAR FUSION REACTOR

### Inventor: R. MATERA

#### Ref.: EUR Pat 2197

The diverter/collector located at the top or bottom of the plasma chamber is used for extracting particles and thermal energy from the plasma in order to keep its contamination at low level. Conventional diverter/collectors consist of a heat sink plate to which a protective tile is mechanically attached or welded; high thermal stress at the interface of the two materials may therefore cause rupture of the joint.

The dissipation plate (7) of the diverter/collector invented is better adapted to fusion reactor requirements. Instead of a tile, the plate is covered by an ionic protection layer (10). Numerous refractory fibres arranged in parallel (11) are embedded with their base in the material (9) of the plate and protrude into the ionic layer like the bristles of a brush. The space between them is filled with a liquid stabilized by capillary forces. Channels (8) connect the dissipation plate with the reactor's coolant circuit.



### 3. LIGHT MODULATOR ON THE BASIS OF A NON-LINEAR FABRY-PEROT MULTILAYER INTERFERENCE FILTER

### Inventors: S.D. SMITH, A.C. WALKER

#### Ref.: EUR Pat 2209

Interference filters controlling the reflection of a transmitted light beam have previously existed only in the form of experimental setups. This invention is for a spatial light modulator. A light beam (8) is directed along a convenient angle of incidence onto a semiconductor optical interference filter wafer (4) of the multilayer Fabry-Perot type, reticulated to form an array of mutually independent filter pixels (7). The control means are constituted by a cathode ray tube (1) the screen of which is formed by the wafer. An electron gun assembly (2) generates an electron beam (3) in the direction of the screen. Beam deflection means (arrows 5 and 6) influence the individual pixels of the screen, modifying the reflection rate of the wafer in the zones selected.



### 4. ARRANGEMENT FOR THE INTERFEROMETRIC ANALYSIS OF THE DEFORMATIONS OF A BODY

Inventors: L. PIRODDA, M. MONTAGNANI, C. ALBERTINI

### Ref.: EUR Pat 2206

This arrangement, combining two analytic systems at different wavelengths, functions in the following manner:

In the first system, the relief grating (3) cast on the surface of the body to be analysed (1) is illuminated by a laser light source (4). The light reflected by the body's surface projects the image of the relief grating through an optical grating (8) towards a photosensitive film arranged parallel to the body's surface and registering the Moiré fringes obtained by superimposing both gratings. The Moiré pattern obtained provides information on the body's deformations in-plane.

In the second system, a second laser light source (9) whose wave length differs from the first one projects the image of a second optical grating (10) onto the body's surface with the cast relief grating (3). The light reflected from the surface projects the Moiré pattern obtained by superimposing both gratings (3 and 10) through a third optical grating (8) towards the film (5), which is sensitive to the wavelengths of both light sources (4 and 5). The Moiré fringes obtained by superimposing the three gratings (10, 3 and 8) provide information about the body's deformation out-of-plane.



Further information on the inventions above can be obtained from:

Commission of the European Communities, Directorate-General XIII/C/1, Ms L. Gerlach (JMO B4/068), L-2920 Luxembourg — Tel.: (352) 4301-2922, Telex: 3423/3446 COMEUR LU

### Patent indicators for research, technology and economy

### Study on innovation dynamics in OECD countries by technometric analysis —

The Fraunhofer Institute for Systems and Innovation Research (Karlsruhe, FRG) has just published the final report on a pilot project on patent information for small and mediumsized enterprises. The project was limited to the northern part of Bavaria in its pilot phase, and the local partner was the LGA Bayern (Nürnberg). The project was supported by the Federal Ministry of the Economy (BMWi).

The results of the pilot project have shown clearly that patent search is an important information medium - in particular for SMEs - which can be a useful aid to research and development work and company planning. However, it is not sufficient merely to impress upon companies the value of patent information via suitable public relations work. On the contrary, there are so many objective barriers to access that there is a need for a user-friendly information supply which SMEs will be able to use and afford.

For this reason, practical methods for technical information search and statistical analyses based on patents were developed as part of the pilot project. These methods were tested in almost 90 SME-paid practical trials, in order to provide a firm basis for assessment at the end of the project. The results of the searches carried out on behalf of the companies were further tested in an extensive customer survey, permitting further improvements to the basic methods during the course of the project, resulting in a user-oriented offer.

The overall assessment shows that a high level of content quality was achieved, with the result that the new information

offer was favourably received by companies. One particularly noteworthy success was that the new method not only made it possible to meet the quality expectations, but also enabled the cost objectives to be achieved by the end of the pilot phase.

The evaluation proves that the new information method makes it possible to favour small and medium-sized firms. Over and above this, there is the possibility of improving the supply of information to companies in structurally handicapped areas.

According to the findings of the project, manual search is still of major importance, given the data banks currently on offer. For the time being, therefore, the new methods must be linked to information distribution centres with access to patent libraries. Nevertheless, the complementary use of data banks is definitely needed to deal efficiently with search contracts.

All in all, this patent information method has proved to be so successful in the pilot project that a broader dissemination would be justified in the medium term.

In April 1989, a manual of patent searching will be published containing the methodical results of the project (Title: U. Schmoch, Wettbewerbsvorsprung durch Patentinformation).

Further information can be obtained from Mr H. Grupp or Mr U. Schmoch, Fraunhofer Gesellschaft - ISI, Breslauer Strasse 48, D-7500 Karlsruhe 1, Tel.: (49) 721 680.91.56.

### CONFERENCES AND SYMPOSIA



### PRELIMINARY ANNOUNCEMENT

### EUROPEAN SYMPOSIUM



### SCIENCE, TECHNOLOGY AND EUROPEAN CULTURAL HERITAGE

### BOLOGNA, ITALY - 12-16 JUNE 1989

The Commission of the European Communities, in association with the National Research Council (CNR), the University of Bologna and the Municipality of Bologna, is organizing a European Symposium entitled «Science, Technology and European Cultural Heritage». It will be held in Bologna, 12-16 June 1989, within the framework of Bologna University's IX Centenary Celebrations.

### THE SCOPE

The Symposium will provide a broad, international forum for examining the role of science and technology in the protection, conservation and restoration of European cultural heritage existing in material form: including historic sites, buildings and monuments, indoor and museum environments, paintings, murals, etc. Particular attention will be given to environmental factors in the broadest sense, including pollution, natural hazards, urbanization, tourism, etc.

### THE AIMS

The Symposium will be organized in such a way as to encourage a multi-disciplinary approach to the main issues, and thus to substantially improve communication between scientists, engineers and technicians working in this field and users of their output such as conservators, architects, planners, historians as well as policy makers at the national and international level. The Symposium should also provide a major impetus to the continuing development of a European research community in this field.

### FURTHER INFORMATION

×
Dr. A. Sors, Commission of the European Communities (XII/E), 200 rue de la Loi, 1049 Bruxelles, Belgium.
Dr.ssa C. Sabbioni, Istituto FISBAT - CNR, via de' Castagnoli 1 - 40126 Bologna, Italy.
Name
Address

### The 1989 International Conference on Decommissioning of Nuclear Installations

The European Community is conducting research on the decommissioning of nuclear installations with the prime objective of developing effective techniques and procedures to ensure the protection of man and his environment against the potential hazards of nuclear installations that have been finally shut down.

A conference will be organised again upon completion of the programme, to present the results achieved and to provide an opportunity for discussions between experts and scientists from within and outside the European Community on the issue and options for future research.

Topics which will be covered are:

- Long-term integrity of buildings and systems;
- Decontamination for decommissioning purposes;
- Dismantling techniques;
- Treatment of specific waste materials;
- Large waste containers;
- Estimation of radioactive waste quantities;
- Influence of installation design features;
- Testing of new techniques under real conditions.

Only invited papers will be presented by scientists involved in the programme through contracts, members of the Commission's scientific staff and guest experts. The Scientific Secretary is: Mr K. Pflugrad, Commission of the European Communities, DG XII, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.84.25 or 236.04.63, Tlx: 21877 COMEUR B, Fax: (32) 2 236.20.06.

Information regarding the conference programme, registration, fees, accommodation, transport, official and social events, will be communicated early in 1989, together with the preliminary programme. The following address may be of use to persons and organisations interested in receiving the preliminary programme:

> CONFERENCE SERVICES Mrs F. Rey Avenue de l'Observatoire 3 Boîte 17 B-1180 BRUSSELS

NUMBER OF THE EUROPEAN COMMUNITIES

### DECOMMISSIONING OF NUCLEAR INSTALLATIONS







### **EEC Publications on industrial property**

- Patent Information and Documentation in Western Europe, Commission of the European Communities, An Inventory of Services available to the Public, Third Edition — Edited by Brenda M. Rimmer and K.G. Saur, EUR 6614 (1988 Edition)
- The application of recent software technology to access to patent information systems, Commission of the European Communities, Report — 1987 — EUR 11326 EN
- One century of technical progress based on an analysis of German patent statistics, J. Slama Osteuropa-Insitut, Commission of the European Communities Report, 1987, EUR 11044 EN
- Patent Infringement Litigation Costs A Practical Worldwide Survey, Commission of the European Communities and André Bouju, Longman Group UK Limited, 1987, ISBN 0 85121 324 3
- Patent Portfolio Methode einer Technik des strategischen Patentmanagements, Prof. Dr. Werner Pfeiffer, Lehrstuhl für Industriebetriebslehre - Universität Erlangen-Nürnberg, (in Bearbeitung)

Further information on the publications above can be obtained from:

Commission of the European Communities Directorate-General XIII/C-2 Attn: Mr H. Bank L-2920 Luxembourg Tel.: (352) 4301-2939 Telex: 3423/3446 COMEUR LU CONFERENCES AND SYMPOSIA



COMMISSION DES COMMUNAUTES EUROPEENNES COMMISSION OF THE EUROPEAN COMMUNITIES

### LE GROUPEMENT EUROPEEN D'INTERET ECONOMIQUE

Un nouvel outil pour la coopération

### JOURNEE D'INFORMATION

### THE EUROPEAN ECONOMIC INTEREST GROUPING

A new instrument for cooperation

### INFORMATION DAY

### 18.IV.1989

BRUXELLES - BRUSSELS



UNIVERSITE DE POITIERS

### RENCONTRES INTERNATIONALES

10, 11 Mai au Futuroscope, 12 Mai 1889 à Devenir

### LES PRATIQUES DE COMMUNICATION SCIENTIFIQUE PUBLIQUE THE APPLICATION OF PUBLIC SCIENTIFIC COMMUNICATION

DANS LE CADRE DES ETATS GENERAUX DE LA CULTURE SCIENTIFIQUE TECHNIQUE ET INDUSTRIELLE

Organisation : LABCIS / UFR Sciences - 40, Avenue du Recteur-Pineau, 86022 POITIERS CEDEX - Tél. (19.33) 49.46.26.49

### The European Economic Interest Grouping

As from 1 July 1989 Community economic agents will have at their disposal a new legal instrument to help them carry out Community-wide cooperation projects: the European Economic Interest Grouping, or EEIG.

In the run-up to the completion of the internal market, many enterprises, whether big or small, will review their commercial strategies and intensify cooperation with partners from other Member States. Likewise, the professions, research centres and several other economic agents will be cooperating at European level. The EEIG will be a valuable instrument to help realise such projects, at a time when the tools available under current national legislation are often inadequate in relation to cross-border cooperation.

As 1 July 1989 approaches, it is thus essential for economic agents, and for those whose task is to inform and advise them, to have the most complete information on the potential uses, advantages and limitations of the EEIG.

With this in mind, the Commission of the European Communities is organising an 'EEIG information Day' in Brussels on 18 April 1989.

The conference is designed for decision makers from the economic world, managers of businesses of all sizes, their legal and tax advisers, professional organisations and other representatives of the interested sectors.

### GENERAL INFORMATION

Due to the limited number of places available, the organisers reserve the right to refuse some inscriptions. Simultaneous interpretation will be provided.

The seminar's documentation will be at your disposal in English and French.

Your participation will be considered as definitive as soon as we have received your registration fees. A confirmation letter will be sent on 15 March at the latest.

Any cancellations must be known before 1st April to justify the reimbursement of the fees.

For further information, please contact our administrative staff.

Mr D. Rösgen COMMISSION OF THE EUROPEAN COMMUNITIES Centre de Conférences A. Borschette 36 rue Froissart, bureau: 4/4 B-1040 BRUSSELS Tel: 02/2358735 Telefax: 02/2359584 CONFERENCES AND SYMPOSIA

### International conference 'Pyrolysis and gasification' Luxembourg, 23.-25. May 1989

The Commission of the European Communities is organizing an international conference on the pyrolysis and gasification of waste materials (including plastics, rubber and wood wastes, various forms of biomass and other low-grade solid fuels) as a potential resource for:

(i) the production of storable fuels, chemical intermediates, synthesis gas, monomeres, or activated carbon;

(ii) the fuelling of spark-ignited engines, gas turbines or retrofitted boilers.

Weitere Auskünfte erteilt: For further information, please contact: Pour de plus amples informations, s'adresser à: Per ulteriori informazioni, rivolgersi a:

Commission of the European Communities — DG XVII/E1 Att. Mr G.L. Ferrero 200, rue de la Loi (Terv 06/8) **B-1049 BRUSSELS** Tel. (32/2) 235 79 72 Telex: COMEU B 21877



at the Heriot-Watt Conference Centre, EDINBURGH

On Thursday and Friday, 6th and 7th April, 1989

SUBJECT

THE ROLE OF SCIENCE PARKS IN THE PROMOTION A two-day residential conference during the first Edinburgh Festival of Science and Technology (3rd-12th April 1989)

Supported by the Commission of the European Communities under the 'SPRINT' programme, and organised in association with:

KPMG Peat Marwick McLintock TII The European Association for the transfer of Technologies,

Innovation and Industrial Information; ADT The Arbeitsgemeinschaft Deutscher Technologie-und Gründerzentren.

Make a note for your forward planner NOW. For further details contact: Brian Worrall, UKSPA 44 Four Oaks Road, Sutton Coldfield, B74 2TL. England.

4 ème Conférence Annuelle au Centre de Conférences Heriot-Watt, EDIMBOURG

Les jeudi et vendredi 6 et 7 avril 1989

SUJET:

'LE ROLE DES PARCS SCIENTIFIQUES DANS LA PROMOTION OF INNOVATION AND THE TRANSFER OF TECHNOLOGY' DES INNOVATIONS ET LE TRANSFERT DE TECHNOLOGIES' Une conférence résidentielle de deux jours, au cours du premier Festival de la Science et de la Technologie d'Edimbourg. (3-12 avril 1989)

> Dans le cadre du programme 'SPRINT' de la Commission des Communautés Européennes, et organisée conjointement par:

> KPMG Peat Marwick McLintock TII (Association Européenne pour le Transfert de Technologies, Innovation et Information Industrielle;) ADT (Arbeitgemeinschaft Deutscher Technologie-und

Gründerzentren.) Notez DÈS MAINTENANT ces dates dans votre agenda.

Pour tout autre renseignement, veuillez contacter: Brian Worrall, UKSPA - 44 Four Oaks Road, Sutton Coldfield, B74 2TL. Angleterre.





EUROPEAN COOPERATION IN THE FIELD OF SCIENTIFIC AND TECHNICAL RESEARCH

### INTERNATIONAL SEMINAR ON WEATHER RADAR NETWORKING

held on 5-8 September 1989

ECONOMIC AND SOCIAL COMMITTEE SALLE "EUROPE" (7th Floor) rue Ravenstein 2 B-1000 BRUSSELS BELGIUM

### 1st ANNOUNCEMENT AND CALL FOR PAPERS

### NOTIFICATION OF WRITTEN CONSTRIBUTION TO COST-73 SEMINAR ON WEATHER RADAR NETWORKING

Send title, abstract and paper to:

Mr C G COLLIER

Programme Chairmann Cost-73 Seminar AD Met O (SM), Met O 19, Meterorological Office, London Road, Bracknell, Berkshire RHG 12 2SZ, England, UK, Tel: 0344-420242 Ext: 2436, Telex: 848160, 847010, Telefax: 034451719

I intend to submit a paper for presentation at he COST-73 Seminar

Entitled Author (s), including address ..... The summary of the paper is attached

### A selection of recent publications from the Scientific and Technical Communications Services

### AGRICULTURE - Vaccination to control rabies in foxes / La vaccination antirabique du renard

Edited by P.P. Pastoret, B. Brochier, I. Thomas, J. Blancou

Proceedings of a symposium organized jointly by the 'Fonds pour la recherche contre la rage (Fo.Re.Ra.)', and the Commission of the European Communities, Directorate-General for Agriculture, Coordination of Agricultural Research Division, held in Brussels on 17 and 18 November 1987.

EUR 11439, CEC, DG XIII-C, ISBN 92-825-8377-5, Catalogue number: CD-NA-11439-2A-C

Published by the Commission of the European Communities, DG XIII, Jean Monnet Building, Luxembourg, 1988

### **Energy Recovery through Waste Combustion**

Edited by A. Brown, P. Evemy, G.L. Ferrero

This volume represents the Proceedings of a Seminar on Recovery of Energy from Municipal and Industrial Waste through Combustion, organised by the Commission of the European Communities, Directorate-General for Energy, the Warmer Campaign for Warmth and Energy from Rubbish, and the United Kingdom Department of Energy, held in Churchill College, Cambridge, UK, on 21-24 June 1988.

EUR 11841, with 92 tables and 76 illustrations, ISBN 1-85166-285-5

Published by Elsevier Applied Science Publishers Ltd., Crown House, Linton Road, Barking, Essex IG11 8JU, England, Brussels and Luxembourg, 1988



### Environment and Quality of Life — Proceedings of the 8th EARSeL Symposium



Alpine and Mediterranean Areas: A challenge for remote sensing

Capri (Naples), Italy 17-20 May, 1988

Edited by the CEC, Directorate-General for Science, Research and Development, Joint Research Centre, ISPRA Establishment

Under the general title of 'Alpine and Mediterranean Areas: A Challenge for Remote Sensing', Panel Sessions were devoted to particular scientific and environmental problems in these areas to which remote sensing can make a significant contribution.

EUR 11851, CEC, DG XIII-C

Published by the Commission of the European Communities, DG XIII, B4/078, Jean Monnet Building, L-2920 Luxembourg, 1988

Copies of this work can be obtained from the Publisher

### The Community of Science in Europe

- Preconditions for Research Effectiveness in European Community Countries -

Edited by Mark N. Franklin

This book is the result of a contract from the Commission of the European Communities (Directorate-General XII) to the European Science Foundation (ESF) concerning the design and execution of a survey of European research scientists to be carried out by Faits et Opinions.

EUR 11266, CEC, DG XIII, ISBN 0-56605-632-1

Published by Gower Publishing Company Ltd., Gower House, Croft Road, Aldershot, Hants GU11 3HR, England, 1988



### **Emergency Planning for Industrial Hazards**

Edited by H.B.F. Gow, R.W. Kay

Recent events world-wide have again highlighted the need for effective emergency measures for hazards connected with the processing industries and the large-scale storage of dangerous substances. In response to a number of major accidents, such as those at Flixborough (UK) and Seveso (Italy), the European Communities produced a Directive on the Major Accident Hazards of Certain Industrial Activities which sets out standards for the control and mitigation of the hazards presented by sites and storages which contain significant quantities of dangerous substances.

This book describes the proceedings of a conference organised by the Commission of the European Communities at which experts from a number of countries, and particularly from within the EC, exchanged information on the current situation.

EUR 11591, CEC, DG XIII, ISBN 1-85166-260-X

Published by Elsevier Science Publishers Ltd., Crown House, Linton Road, Barking, Essex IG11 8JU, England, Brussels and Luxembourg, 1988



### Technologies of Light — Lasers · Fibres · Optical Information Processing — Early Monitoring of Technological Change

- A report from the FAST programme of the Commission of the European Communities -

Edited by E.-U. Kotte, K. Derge, R.R. Landeryou, R. Poprawe, Th. Tschudi, W. Wobbe

This book draws upon a research project funded partially by the FAST Programme (Forecasting and Assessment in Science and Technology) of the CEC (Commission of the European Communities), Directorate-General for Science, Research and Development, DG XII. FAST comprises, amongst others, the subprogramme TWE (Technology, Work and Employment), which is concerned with technological change and its implications for qualifications and employment.

EUR 11383, CEC, DG XIII-C, ISBN 3-54050-458-3, Springer Verlag, Berlin, Heidelberg, New York, 1989



### JOINT RESEARCH CENTRE

### - Annual Report 1987 -

This 1987 annual report on the Joint Research Centre is the last of those covering the multiannual programme 1984-1987 and highlights the year's scientific and technical achievements.

EUR 11739, CEC, DG XIII-C

Published by the Commission of the European Communities, Directorate-General of the Joint Research Centre, 200, rue de la Loi, B-1049 Brussels, Tel.: (32) 2 235.86.35 (copies of the report can be obtained from this address)

### Spectral Atlas of Polycylic Aromatic Compounds — Vol. 2

Edited by W. Karcher, ISPRA Establishment, Italy, CEC

Polycyclic Aromatic Compounds (PAC) are a broad class of chemical compounds whose wide distribution in the environment results from spillage and incomplete combustion processes of fossil fuels in power generation, industrial plant and domestic heating. They occur regularly also in car exhausts and in tobacco smoke.

This second volume of the Spectral Atlas of Polycyclic Aromatic Compounds extends the work of the first volume to a further 45 PACs and a broader range of properties and will be of assistance to all those engaged in research on the physical, chemical and biological behaviour of this important class of chemicals, whose occurrence ranges from the human environment to interstellar matter.

EUR 11050, CEC, DG XIII-C, ISBN 0-79230-008-4

Published by Kluwer Academic Publishers, P.O. Box 17, 3300 AA Dordrecht, The Netherlands, Brussels and Luxembourg 1988

### The Management and Health of Farmed Deer

A seminar under the CEC Programme of Coordination of Research in Animal Husbandry, held in Edinburgh on 10-11
 December 1987 —

Interest in the farming of deer as an alternative to traditional livestock enterprises has increased considerably over the last few years. Successful commercial management of deer for meat production requires adoption of appropriate management schemes to accommodate the biological requirements of these animals. In addition, as the volume of deer farming has increased, a number of health problems have become recognised which present features distinct from other ruminants.

The purpose of the book is to provide a review of recent developments and experience in the field and to bring together all available information on the subjects of breeding, nutrition, growth, husbandry, management and the diagnosis and control of deer-specific diseases.

EUR 11540, CEC, DG XIII-C, ISBN 0-09838-408-7, Edited by H.W. Reid

Published by Kluwer Academic Publishers, P.O. Box 17, 3300 AA Dordrecht, The Netherlands, Brussels and Luxembourg, 1988

### New technologies for the exploration and exploitation of oil and gas resources

- Proceedings of the 3rd EC Symposium held in Luxembourg, 22-24 March 1988 -

Edited by E. Millich, J.P. Joulia, D. van Asselt, P.H. Argyris

A major new reference work, in two volumes, on the latest advances and developments in European hydrocarbon technology.

EUR 11704, CEC, DG XIII-C, ISBN 1-85333-058-2 (Volume 1), ISBN 1-85333-059-0 (Volume 2)

Published by Graham & Trotman Ltd., Sterling House, 66 Wilton Road, London SW1V 1DE, UK, Brussels and Luxembourg, 1988



Proceedings of the 3rd E.C. Symposium held in Luxembourg, 22-24 March 1988

Volume 1



Graham & Trotma

New Technologies for the Exploration and Exploitation of Oil and Gas Resources

> Proceedings of the 3rd E.C. Symposium held in Luxembourg, 22–24 March 1988

> > Volume 2



Graham & Trainnais For the Commonion of the European Commonities

### FLAX: Breeding and Utilisation

This publication contains the proceedings of a Flax Workshop held in Brussels, Belgium, on 4-5 May, 1988 under the auspices of the Commission of the European Communities as part of the EEC Common Research Programme on Plant Productivity.

The objectives of the book are as follows:

- 1. The review and dissemination of current research knowledge in the European Community.
- The fostering of an interdisciplinary awareness with respect to crop improvement, crop culture and post-harvest technology.
   The identification of existing research strengths and deficiencies.
- 4. The formulation of potential research strategies to encourage greater Community self-sufficiency in flax and linseed.

EUR 11585, CEC, DG XIII-C, ISBN 0-79230-065-3, Edited by G. Marshall

Published by Kluwer Academic Publishers, P.O. Box 17, 3300 AA Dordrecht, The Netherlands, Brussels and Luxembourg, 1988

### Conference on Electrostatic Problems in Industry

Over 80 people attended the ERA Technology Ltd. conference - mainly research managers from industrial concerns such as ASEA/BROWN BOVERI Sweden, BRITISH AEROSPACE UK, BP, NESTE of Finland, TOYOTA Belgium. It took place in Leatherhead on 13.12.1988.

This conference is the outcome of a SPRINT cooperation project on technical assistance to industry to minimise electrostatic problems (see I&TT, 4/88, page 29).

There was considerable discussion on the question of establishing an international standard for electrostatics, and the partners in the SPRINT project may wish to consider this as part of their future work programme.

Further information (report of proceedings) may be received from Mr Davies, ERA Technology, Cleeve Road, UK-Leatherhead, Surrey KT22 7SA, Tel.: (44) 372 37.41.51, Fax: (44) 372 37.44.96, and Mr J. Tiscar, Commission of the European Communities, DG XIII/C/1, B4/102, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-4102, TIx: 3423/3446 COMEUR LU, Fax: (352) 4301-4129.



### HUNTING AMONG THE GREY LITERATURE

- 'Passport' to grey literature now available —



The term 'grey literature' is used by documentalists to describe material such as research reports, theses, conference papers and some types of official documents which are not issued through the normal publishing channels. Only to a limited extent is the grey literature included in the variety of databases, abstracting systems and directories which have been developed to help users find their way around the conventionally published literature. As a result, it inhabits a twilight zone, making grey literature difficult to locate and obtain.

An initiative of the Commission of the European Communities, in cooperation with the major information and documentation centres in the member countries, led to the establishment of the 'System for Information on Grey Literature in Europe' (SIGLE), which became operational in 1981. The Scientific and Technical Communication Unit of the Commission (DG XIII/C/3) has now issued a leaflet describing the current status of SIGLE.

Entitled 'Your passport to grey literature', the leaflet reports that the computersearchable bibliographic database at the heart of SIGLE now holds information on 150 000 grey literature documents in the fields of pure and applied sciences, technology, economics, social sciences and humanities. Documents are being added to the database at the rate of 30 000 per year. The database is accessible via BLAISE-LINE, STN and Sunist hosts.

SIGLE is a document supply system as well as a database, so it can be used to locate and obtain copies of doucments which have been identified by means of the database. Full details are given in the leaflets of the various national centres able to obtain documents for users, as well as methods of accessing the database.

A copy of 'Your passport to grey literature' can be obtained by writing to Mr E. Phillips, Commission of the European Communities, DG XIII/C/3, B4/078, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-2916, Tlx: 2423, 3446 COMEUR LU, Fax: (352) 4301-4129.

EURO ABSTRA Scientific and technical research in certain key areas, such as reactor safety, radiation protection, thermonuclear fusion an pean Communities in its Joint Research Centres (direct ac organizations and industry (indirect actions). Current inform nounced in the monthly abstracts journal 'euro abstracts' –	<b>CTS SECTION I</b> alternative energy sources d others is being carried o tions) or through research ation on published results - Section I.	s, environmental research, nuclear ut by the Commission of the Euro- n contracts with national research from these research actions is an-		
EURO ABSTRACTS SECTION II Current information on scientific and technical research in coal, steel and social matters is announced in the monthly abstracts journal 'euro abstracts' — Section II.				
Order Form for Euro Abstracts:				
Euro Abstracts section I:Image: ECU 76,30Euro Abstracts section II:Image: ECU 76,30Combined subscriptionImage: ECU 127.00				
Name and address:	(please return to:)	1-2920 LUXEMBOURG		
Date: Signature:	Mr E. Phillips CEC DG XIII/C/3	(Tel. 4301-2916) Telex 3423 3446 COMEUR LU		

### SPRINT

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

### Transnational collaboration between industrial research associations supported under SPRINT

Industrial research associations/centres techniques are the collective sectoral research institutes of industry. In general they are financed collectively (through compulsory levies/para-fiscal taxes or voluntary subscriptions) by firms in a particular sector or branch of industry, and their prime function is to provide technical services to those firms.

These services typically include: the supply of information on the latest technological developments of relevance for the sector, technical training, technology development through R&D work, testing and certification, preparation of technical norms and standards, and individual consultancy to firms.

The aim of this SPRINT action is to encourage transnational European cooperation between the national industrial research associations.

SPRINT is currently providing partial financial support to 16 transnational cooperation projects between 94 industrial research associations in the Community. The core objective of each project is to compile and diffuse information likely to assist innovation and technological development on a broad front among the firms in the corresponding sector.

The following tables contain a brief description of the participants in, and objectives of, each of the projects currently supported.

### Summary of Transnational Collaboration between Industrial Research Associations supported under SPRINT (October 1988)

Sector	Starting Year	Participants	Aims of project
Building/ Construction	1987	<ul> <li>Centre Scientifique et Technique de la Construction, Brussels (B)</li> <li>Centre Scientifique et Technique du Bâtiment, Paris (F)</li> <li>Istituto Cooperativo per l'Innovazione, Rome (I)</li> <li>Instituto 'Eduardo Torroja de la Construcción y del Cemento' del Consejo Superior de Investigaciones de España, Madrid (E)</li> <li>Laboratório Nacional de Engenharia Civil, Lisbon (P)</li> <li>Building Research Establishment, Watford (UK)</li> <li>The Irish Science and Technology Agency (EOLAS), Dublin (IRL)</li> <li>Instituut voor Bouwmaterialen en Bouwconstructies (TNO-IBBC), Delft (NL)</li> </ul>	To improve technology transfer and innovation in the building/construction sector using the 'European Innovation Diagnostic', a method to facilitate evaluation of foreign market potential of new products/processes.
	1987	<ul> <li>The Building Services Research and Information Association (BSRIA), Bracknell (UK)</li> <li>BPS-Centret, Hørsholm (DK)</li> <li>Comité Scientifique et Technique des Industries Climatiques (COSTIC), Saint-Rémy-lès-Chevreuse (F)</li> <li>The Institute for the Study and Promotion of Research in the field of Heating and Air Treatment (ISSO), Rotterdam (NL)</li> <li>Laboratório Nacional de Engenharia Civil, Lisbon (P)</li> </ul>	To provide the building/engineering services sector of the construction industry with an (integrated) package of <b>expert systems</b> to assist with design of <b>ventilation, control and fire safety</b> <b>systems</b> and to provide an open architecture for the further integration of systems developed by others.
	1988	<ul> <li>Rijksuniversiteit, Ghent (B)</li> <li>Staatliches Materialprüfungsamt NRW, Erwitte (D)</li> <li>Centre Scientifique et Technique du Bâtiment, Paris (F)</li> <li>Laboratoire National d'Essais, Paris (F)</li> <li>Warrington Fire Research Centre, Warrington (UK)</li> <li>Instituut voor Bouwmaterialen en Bouwconstructies (TNO-IBBC), Delft (NL)</li> <li>Dantest, Copenhagen (DK)</li> </ul>	To establish, in view of 1992, a procedure for the <b>mutual acceptance of</b> <b>reaction-to-fire test reports</b> (and materials) between the participating laboratories and their countries.
Composite Materials	1987	<ul> <li>Centre Technique des Industries Mécaniques (CETIM), Nantes (F)</li> <li>Dipartimento Ingegnerie dei Materiali e della Produzione, Naples (I)</li> <li>Centre de Recherches Scientifiques et Techniques de l'Industrie des Fabrications Métalliques (CRIF), Liège (B)</li> <li>Instituto de Engenharia Mecânica e Gestão Industrial (IMEGI), Oporto (P)</li> <li>Production Engineering Research Association (PERA), Melton Mowbray (UK)</li> <li>Centro Nacional de Investigaciones Metalúrgicas (CENIM), Madrid (E)</li> </ul>	To improve <b>quality control in SMEs</b> which process composite materials, through the establishment of a European Quality Network and the development and dissemination of common quality control procedures.
Electricity	1988	<ul> <li>Laboratoire Central des Industries Électriques, Fontenay-aux- Roses (F)</li> <li>ERA Technology, Leatherhead (UK)</li> <li>Westfälische Berggewerkschaftskasse, Dortmund (D)</li> <li>Laboratorio Oficial J.M. Madariaga, Madrid (E)</li> <li>Università di Genova, Genoa (I)</li> </ul>	To assist European industry to minimize electrostatic problems by developing a European Code of Practice and by developing ways to select materials and products in order to minimize nuisance to electronic components and products.

### SPRINT

Sector	Starting Year	Participants	Aims of project
Footwear	1987	<ul> <li>SATRA Footwear Technology Centre, Kettering (UK)</li> <li>Instituto Español del Calzado y Conexas, Elda (E)</li> <li>Prüf- und Forschungsinstitut für die Schuhherstellung, Pirmasens (D)</li> <li>Centre Technique Cuir Chaussure Maroquinerie, Lyon (F)</li> <li>Quality Control Laboratory Leathers and Shoes Ltd., Athens (GR)</li> <li>Laboratório Apiccaps/Iapmei, João da Madeira (P)</li> <li>ILS-TNO Leather and Shoe Research Institute, Waalwijk (NL)</li> </ul>	To increase the introduction and application by SMEs of <b>CAD/CAM</b> in the European footwear industries.
Lasers	1988	<ul> <li>Research Center of Crete, Iraklion (GR)</li> <li>Mirtec S.A., Volos (GR)</li> <li>Institut de Soudure, Paris (F)</li> <li>Instituto Soldadura e Qualidade, Lisbon (P)</li> <li>Centro Laser de Navarra, Pamplona (E) '</li> </ul>	To facilitate the adoption of laser-based material processing technology by small and medium-sized enterprises in a number of industrial sectors (e.g. metals, plastics, fabrics, ceramics).
Paint	1987	<ul> <li>Paint Research Association, Teddington (UK)</li> <li>Coatings Research Institute, Limelette (B)</li> <li>The Irish Science and Technology Agency EOLAS, Dublin (IRL)</li> <li>Technological Institute, Tastrup (DK)</li> </ul>	To develop and disseminate <b>an expert</b> <b>system</b> which will assist non-specialists in <b>selecting the most appropriate</b> coating for their manufactured components
Ship- building	1988	<ul> <li>British Maritime Technology Ltd (BMT Ltd), Wallsend (UK)</li> <li>Institut de Recherches de la Construction Navale (IRCN), Paris (F)</li> <li>Forschungszentrum des Deutschen Schiffbaus (FDS), Hamburg (D)</li> <li>Centro per gli Studi di Tecnica Navale (CETENA), Genoa (I)</li> <li>Maritime Research Institute Netherlands (MARIN), Wageningen (NL)</li> <li>Associación de Investigación Naval Española (ASINAVE), Madrid (E)</li> <li>Marine Transport Centre, Liverpool (UK)</li> <li>Marine Technology Development Company SA (MARTEDEC), Piraeus (GR)</li> </ul>	To foster transnational cooperation between the participants in order to <b>promote international exchanges of</b> <b>technology</b> between firms in the industries concerned.
Textiles/ Wool	1988	<ul> <li>Centre de Recherche Lainier et Chimique (CELAC), Chaineux (B)</li> <li>Institut Textile de France - Section Nord, Villeneuve d'Ascq (F)</li> <li>Consorzio per il Risanamento delle Acque del Biellese, Biella (I)</li> </ul>	To establish the advantages, disadvantages and comparative costs of <b>new wool cleaning processes</b> and of the processes for the recuperation of the by-products of those processes.
	1988	<ul> <li>Deutsches Wollforschungsinstitut e.V., Aachen (D)</li> <li>Centexbel, Bruxelles (B)</li> <li>Dansk Beklaednings og Textil Institut, Tastrup (DK)</li> <li>Institut Textile de France, Lyon (F)</li> <li>Instituto di Ricerche e Sperimentazione Laniera 'O.RIVETTI', Biella (I)</li> <li>TNO-Vezelinstituut, Delft (NL)</li> </ul>	To evaluate the end-use properties of textile materials on the basis of objective measurements and to initiate a technology transfer process for <b>objective measurement techniques</b> <b>and testing instruments</b> among participating laboratories and the textile and clothing industries.
Welding	1987	<ul> <li>Institut Belge de la Soudure, Ghent (B)</li> <li>Svejscentralen, Brondby (DK)</li> <li>Institut de Soudure, Paris (F)</li> <li>Deutscher Verband für Schweißtechnik, Düsseldorf (D)</li> <li>The Welding Institute for Industrial Research and Standards, Cambridge (UK)</li> <li>The Irish Science and Technology Agency EOLAS, Dublin (IRL)</li> <li>Istituto Italiano della Saldatura, Genoa (I)</li> <li>Stichting Centrum voor Lastechniek - TNO, The Hague (NL)</li> <li>Instituto de Soldadura e Qualidade, Lisbon (P)</li> <li>Asociación Española para el Desarollo, Madrid (E)</li> <li>MIRTEC, Volos (GR)</li> </ul>	To develop a Quality Management System (QMS) for small and medium-sized enterprises engaged in welding fabrication. In the first phase of the project, a guide book on QMS and a video on gas/metal arc welding, i.e. a modern and highly cost-effective welding process, will be produced.
Food	1988	<ul> <li>Instituto de Agroquímica y Tecnología de Alimentos, Valencia (E)</li> <li>Campden Food Preservation Research Association, Chipping Campden (UK)</li> </ul>	To establish a system for <b>the exchange</b> of <b>technologies</b> and information between centres and industries on the preservation of food.
	1988	<ul> <li>Leatherhead Food Research Association, Leatherhead (UK)</li> <li>National Food Centre Castleknock, Dublin (IRL)</li> <li>Association pour le Développement de la Recherche Appliquée aux Industries Agricoles et Alimentaires, Quimper (F)</li> </ul>	To <b>establish best practice</b> to promote the adoption of new technology among SMEs in the food sector.



Sector	Starting Year	Participants	Aims of project
Wood	1987	<ul> <li>Technological Institute, Dept. of Wood Technology, Tastrup (DK)</li> <li>Timber Research &amp; Development Association, High Wycombe (UK)</li> <li>Houtinstituut TNO, Delft (NL)</li> <li>Bundesforschungsanstalt für Forst- und Holzwirtschaft, Hamburg (D)</li> <li>Instituto Nacional de Investigaciones Agrarias (INIA) Departamento de Maderas, Madrid (E)</li> <li>Laboratório Nacional de Engenharia e Tecnologia Industrial (LNETI), Queluz (P)</li> </ul>	To promote the awareness and application of new technologies in the wood drying area, with particular emphasis on 'quality', through the establishment of a European Kiln Drying Group involving industry, kiln and equipment manufacturers, operators and R&D centres.
	1987	<ul> <li>Centre Technique de l'Industrie du Bois, Brussels (B)</li> <li>Centre Régional de l'Innovation et du Transfert de Technologie pour les Industries du Bois, Epinal (F)</li> <li>Centre Technique du Bois et de l'Ameublement, Paris (F)</li> <li>The Irish Science and Technology Agency (EOLAS), Dublin (IRL)</li> <li>Istituto per la Tecnologia del Legno Michele, San Michele All'Adige (I)</li> <li>Houtinstituut TNO, Delft (NL)</li> <li>Fraunhofer Institut für Holzforschung, Braunschweig (D)</li> <li>Timber Research and Development Association, High Wycombe (UK)</li> </ul>	To foster the application of new technologies in the wood sector through the publication of a <b>European Newsletter</b> and the establishment of a <b>European</b> <b>Technological Orientation Service</b> .

Further information on these cooperations may be obtained from Mr R. Miège, Tel. (352) 4301-4180, Mr D. Janssens, Tel.: (352) 4301-4407, Mr F. Simoes, Tel.: (352) 4301-4564 and Mr J. Tiscar, Tel.: (352) 4301-4102, The SPRINT Secretariat, Commission of the European Communities, DG XIII/C/1, B4/100, Jean Monnet Building, L-2920 Luxembourg, TIx: 3423/3446 COMEUR LU, Fax: (352) 4301-4129.

### TECHNOLOGY TRANSFER DAY ON MAY 25th 1989 IN ORLEANS — — MIDEST fair success for SPRINT partners —

The partners in SPRINT project 'C 194' participated with a joint stand in the subcontracting fair MIDEST in Lyon. The partners are: Gesellschaft für Wirtschaftsförderung Saar mbH (GW Saar), Sagazde Álava S.A. and the Chambre Régionale de Commerce et d'Industrie Centre (ARIST), thus representing three regions facing the same problems which they hope to overcome through cooperation. At a welcoming address at the MIDEST these regions were represented by high ranking speakers. The photo shows in the centre Mr Ordovica, Deputy Minister of Labour of the Basque Country (third from left), Mr Porteaux, Deputy President of the CRCI, and Mr Hoffmann, Minister of Economic Affairs of the Saarland.

Following introduction at MIDEST the Scottish Development Agency (SDA) has now joined this project, which has thus become one of the most important 'mini technology transfer networks' under the SPRINT Programme.

The addresses of the partners are:

GW Saar (Mr Breuer), Bismarckstrasse 39-41, D-6600 Saarbrücken.

Sagazde Álava S.A. (Mr Laespada), s/n Plaza del Arco, E-01005 Vitoria-Gasteiz.

Arist (Mr Porteaux), 6, rue Pierre et Marie Curie, F-45142 St. Jean de la Ruelle Cédex.

SDA (Mr McKeran), Bothwell Street 120, UK-Glasgow G2 7JP.

The partners will be present with a joint stand at the FIST 89 (Forum-Expo Interrégional de la Sous-Traitance-Salon des Techniques et Technologies Nouvelles), which will take place in Orleans on 23 to 26 May 1989. The 25th May will be wholly

dedicated to technology transfer between firms within the Community. For further information please contact Mr Pourteaux (see address above), tel. 38 43 19 90.



### SPRINT

### SPRINT cooperation on evaluation of end-use properties of textile materials on the basis of objective measurements

Under the SPRINT Programme six European textile research institutes have joined together and cooperated since January 1 1988 on the subject 'Evaluation of end-use properties of textile materials on the basis of objective measurements, and initiation of a technology transfer process on objective measurement techniques and testing instruments among participating laboratories and the textile and clothing industry'.

The following institutes participate in this project:

- Deutsches Wollforschungsinstitut an der T.H. Aachen, project leader: G. Blankenburg
- Centexbel, Division Gent, project leader: E. Baetens
- Dansk Beklaednings og Textil Institut, Tastrup, project leader: T. Sörensen
- Institut Textile de France, Section Lyon, project leader: F.
   Payot
- Instituto di Ricerche e Sperimentazione Laniera
- 'O.RIVETTI', Biella, project leader: G. Mazzuchetti
- TNO-Vezelinstituut, Delft, project leader: H. Weustink.

All six institutes have worked for a long time on the problem of the objective evaluation of the mechanical properties of fabrics. All institutes use for these measurements the Japanese KES-F-System (Kawabata). Other measuring systems, some of them developed in the institutes, are also available.

The KES-F-System consists of four test instruments with which tensile, shear, bending, frictional and roughness/profile measurements can be carried out. Altogether, 16 parameters are received from the tests. These parameters can either be inserted in regression equations, developed by Professor Kawabata, which result in ranking numbers for primary hand values. These numbers can be used to specify the handle of fabrics objectively. Furthermore, the evaluated parameters can be used as such, offering the possibility of predicting processing behaviour in garment manufacture.

The experience gained with the KES-F-System was exchanged in several meetings at the different institutes. Improvements were also made to the test instruments.

A further aim of this project is harmonization of the test procedure. This is a difficult task, since the institutes have different interests with respect to the textile material. While DWI-Aachen and the institute in Biella are interested mainly in pure wool or wool/fine animal fibre blends - and here especially with respect to finishing effects - the main fields of interest are cotton and cotton/polyester blends in the case of TNO-Delft, silk and silk-like polyester in the case of ITF-Lyon, structural fabrics like terry-cloth, jacquards etc. in the case of Centexbel-Gent, and relatively stiff cotton and cotton/polyester fabrics for working cloth in the case of DBTI-Taastrup.

Because of this, it is planned to develop a joint framework protocol in which all the information about the testing, including the material data, is compiled in a computer-compatible form. With the aid of this uniform protocol it will later be possible to transfer data between the participating institutes quickly and efficiently via modern electronic communication systems.

This harmonization inevitably calls for a new methodology for the different product types. For this the following tasks have to be completed:

- Identification of product types for which an objective evaluation is of importance for the European textile and clothing industry.
- Identification of the processing stages for which these objective measurements are important.
- Definition of the adoption of the uniform framework protocol as a function of product type and processing stage.

Further harmonization of the objective KES-F-measuring system will be achieved by interlaboratory round trials. The first round trial has been finished, and a second one is being carried out at the moment. After finalizing the evaluation of these round trials, it will be possible to calculate for each parameter confidence intervals for the intra- and interlaboratory variation. Only with these statistical data available will it be possible to transfer the data into industry where they can become part of sales contracts.

A further focal point of the project is naturally technology transfer. This first short publication is part of it, and further ones will follow. Results of this project have already been discussed with representatives of the industry in working groups, at the scientific board meetings of the institutes, at conferences and at colloquia. Further meetings and contacts are planned. Last but not least, this publication should also arouse the interest of the textile and clothing industry. All project leaders at the institutes mentioned above are always happy to give information and to receive recommendations from industry.

For more information contact Mr F. Simoes, Commission of the European Communities, DG XIII/C/1, B4/101a, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-4564, Tlx: 2423, 3446 COMEUR LU, Fax: (352) 4301-4129 — or Mr. G. Blankenburg, DWI, Veltmannplatz 8, D-5100 Aachen, tel.: (49) 241/39921.



Illustration (from left to right): The tensile and shear testing device, the computer with the evaluation unit, and in the far corner a part of the bending test device. To the right of the assistant is the PC with the monitor for evaluation of the test.

### European Community Design Prize 1990 — Preparations are well underway —

As already reported, the Commission launched under the SPRINT programme a series of actions intended to stimulate the use of design throughout the Community. One of these measures is the EUROPEAN COMMUNITY DESIGN PRIZE (ECDP), which was awarded for the first time in February 1988 in Brussels. It is a reward to small and medium-sized companies that have shown a consistent application of the concepts of design and, therefore, project an image of quality worthy of emulation by other firms.

Preparations for the second award of the ECDP have started. The Commission convened a meeting of a special Task Force of the CIT design working group to come up with the statutes and national procedures for participation in the contest. A final document should be available by the end of February detailing those conditions.

National selections for the European Community Design Prize should be known by the end of the year, and the Community selections are expected for the beginning of 1990.

For more information contact Mr F. Simoes, Commission of the European Communities, DG XIII/C/1, B4/101a, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-4564, TIx: 2423, 3446 COMEUR LU, Fax: (352) 4301-4129.

### Just published: Produire la Nouveauté

This publication gives an analysis of the problems of innovation in the European Community and offers suggestions for action on this basis.

A common innovation policy must take account of the new scenario for businesses and their needs, national policies and the diversity of situations, the great technological challenges, and above all the need to develop human resources.

The need for coordinated management of the European research and innovation programmes calls for a strategic programme for stimulating innovation. Under this programme an infrastructure of networks of innovation services should be set up, pilot projects carried out, and developments in innovation - for which the impetus will have to be decentralized - should be monitored, evaluated and carefully considered.

The author Mr. J. L. MOYNOT is an aeronautical engineer and a consultant to the Thomson group in France.

With a preface by Mr H. Curien, Minister of Research and Technology in France.

Published by Ed. Economia, 49, rue Héricart, F-75015 Paris, ISBN 2-7178-1580-5 (French).

English, German, Italian and Spanish versions are available from Mrs. S. Barton, Commission of the European Communities, DG XIII/C/1, B4/100, Jean Monnet Building L-2920 Luxembourg, Tel.: (352) 4301-4371, TIx: 2423, 3446 COMEUR LU, Fax: (352) 4301-4129.



### **EUROTECH Project enlarged**

In I&TT 4/88 we reported that under the SPRINT Programme five national research and development organisations had started a new project, EUROTECH, to improve the general level of exploitation of results of national R&D by transnational cooperation.

At the last meeting of the EUROTECH group it was decided to extend the group to include the following partners:

- EOLAS, IRL, The Irish Science and Technology Agency
- CNR, I, Consiglio Nazionale della Ricerca
- GPC, GR, Greek Productivity Centre
- IMPI, E, Instituto de la Pequeña y Mediana Empresa Industrial
- JNICT, P, Junta Nacional de Investigação Científica e Tecnológica

EUROTECH has thus become a 'real' European cooperation project which will increase the flow of technology within the Community.

Further information can be obtained from Mr J.E. de Freitas, Commission of the European Communities, DG XIII/C/1, B4/075, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-4851, Tlx: 3423/3446 COMEUR LU, Fax: (352) 4301-4129.



### Quality control procedures for fibre composites

### Cooperation under the SPRINT Programme —

Competition in the market place is becoming increasingly intense, and the major challenge facing manufacturing industry is to produce, cost-effectively, components of the highest quality. Today, customers and clients require their suppliers to implement and maintain the highest standards of quality and expect to see evidence that adequate management procedures are being used. The message is simple. When, in 1992, the Single European Market becomes a reality, the successful companies will be those who produce goods of high quality at the right price.

A European cooperation project under the SPRINT programme aims to establish quality control procedures. This project began over a year ago involving 5 European associates and aims to define common European quality guidelines for the manufacture of fibre-reinforced composite components.

The work to date has identified the state-of-the-art information on quality control procedures adopted in the following 3 areas:

- Raw materials selection
- Processing
- Final part inspection



The project partners have gathered information from companies in a wide range of industries including aerospace, automotive, marine, sports and general engineering. The data have been analysed in terms of the type of product being manufactured - critical, semi-critical or non-critical - and the manufacturing route adopted - for example, filament winding, autoclave, press moulding and contact moulding. In addition, existing standards relating to fibre-reinforced composites have been identified and listed.

The work to date has highlighted serious voids in certain areas - especially raw materials inspection. It has become clear that particular industries, such as marine engineering, could benefit from the techniques and procedures adopted in the more high-performance industries, without incurring any greater expense.

Further work under this project foresees recommendations on the structure of quality control procedures and management guidelines for various manufacturing processes in industry.

Further institutions involved are:

- Centre Technique des Industries Mécaniques (CETIM), Nantes (F)
- Dipartimento Ingegnerie dei Materiali e della Produzione, Naples (I)
- Centre de Recherches Scientifiques et Techniques de l'Industrie des Fabrications Métalliques (CRIF), Liège (B)
- Instituto de Engenharia Mecânica e Gestão Industrial (IMEGI), Oporto (P)
- Production Engineering Research Association (PERA), Melton Mowbray (UK)
- Centro Nacional de Investigaciones Metalúrgicas (CENIM), Madrid (E).

Further information can be obtained from Mr Claude Bord, CETIM, 74, route de la Jonelière, F-Nantes, Tel.: (33) 40 373.635, and Mr J.R. Tiscar, Commission of the European Communities, DG XIII/C/1, B4/102, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-4102, Tlx: 2423, 3446 COMEUR LU, Fax: (352) 4301-4129.

### A European Conference on The Cooperation Phenomenon — Prospects for Small Firms and the Smaller Economies 6-7 November 1989, Dublin, Ireland

### Sponsored by the Commission of the European Communities under its SPRINT Programme

This conference will examine critically the recent experience of small firms in networking and cooperation - particularly in the smaller economy context - and the regional, national, international and EC policies and programmes aimed at encouraging and enhancing that cooperation.

The Conference is intended for international, national and regional decision makers, as well as advisers and researchers who are interested in maximising the benefits for SMEs of the cooperation phenomenon.

For further information please contact Ms Renee Browne, Head - Industrial Education Programme, EOLAS - The Irish Science and Technology Agency, Glasnevin, Dublin 9, Ireland, Tel.: (353) 1 37.01.01 ext. 2327, Fax: (353) 1 37.96.20.

SPRINT

### The 'Grand Prix de la Performance Commerciale 1988' awarded to JPB - La Synergie franco-allemande, a member of the SPRINT network — Partners for cooperation wanted for in the fields of information technologies, telematics and the car industry —

Jochen Peter Breuer and Pierre de Bartha received the 200 000 FF award for business performance (Grand Prix de la Performance Commerciale) from Mr P. Netter, President of the 'Permanent Assembly at the French Chambers of Commerce and Industry (APCCI)'. The award aims to promote the business function as well as the transfer of know-how. The final objective is to improve the competiveness of companies, especially with a view to the single market of 1992.

JPB was selected because of its original and at the same time efficient approach in matching up technologically-oriented companies, which JPB also demonstrated under SPRINT (in the network of innovation advisory bodies). At the award of the prize, it was pointed out that JPB's creative action FAITES (France Allemagne Innovation Transfer En Synergie) has a signal character, in as far as the FAITES concept could find a broader application within the profession of supporting services in the field of innovation and technology transfer.



The photo shows Mr J.P. Breuer (left) and Mr P. de Bartha with the trophy.

For 1989 three new FAITES actions have been planned. For the next project, which will be concluded in May 1989, four companies active in the information field have already been identified. A search to find potential German cooperation partners has already been launched.

Further subjects for future FAITES operations are telematics and subcontractors in the car industry.

Further information can be obtained directly from the partners in the corresponding SPRINT network:

- 1. JPB La Synergie Franco-Allemande, Mr J.P. Breuer and Mr P. de Bartha 20, rue Ernest André, F-78110 LE VESINET Tel.: (33) 1 348.002.80
- 2. GUV Krefeld Dr Herzog, Schillerstrasse 99, D-4150 KREFELD 1, Tel.: (49) 2151 60.09
- 3. Jean-Pierre Petit, 31, avenue Danièle Casanova, B.P. 40, F-95210 SAINT GRATIN, (33) 1 398.995.65

or from Ms G. Hetterich, Commission of the European Communities, DG XIII/C/2, B4/075, Jean Monnet Building, Tel.: (352) 4301-4788, TIx: 3423, 3446 COMEUR LU, Fax: (352) 4301-4129.

### Licensing Executives Society — Pan-European Conference 1988

One of the aspirations of the European Community is to raise living standards by greater harmonisation of technical standards and the wider use of high technology in Member States. The use of international licensing is a major contributor to this aim.

With this in mind, the Licensing Executives Society held the first of what it is hoped will be an annual Pan-European Conference on the theme of Licensing in Europe, at Heathrow on 23/24 June 1988.

The European chapters of LES together represent legal, professional and commercial licensing activities across the Community, and when brought together at such an occasion can meet formally and informally to discuss and examine licensing topics in the European context. A similar meeting is held annually by the USA/Canada chapter of LES, and the Pan-European meeting is a European forum of potentially comparable size and authority.

In recognition of the contribution made by licensing to the aims of the Community, the EEC supported the Conference under the SPRINT Programme. The European theme of the Conference was reflected in the range of delegates, one third of whom were from Community countries other than the UK. In total, some 180 delegates attended the Conference.

The three working sessions of the Conference were addressed by thirteen speakers, and the composition of the speakers' panel also reflected the European theme, being drawn from four Community countries and two non-Community European states. The Conference was opened by Des Ryan, the then International President of LES.

Further information on the LES Conference may be obtained from Ms Renate Siebrasse, LES, Battelle Institute Ltd., 15 Hanover Square, UK-London W1R 9AJ, Tel.: (44) 1 493.01.84, Tlx: 23773, Fax: (44) 1 629.97.05, and Mr B.B. Goodman, Commission of the European Communities, DG XIII-C, B4/069, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-2959/3176, Tlx: 2423, 3446 COMEUR LU, Fax: (352) 4301-4129.

### **Technology Transfer Networks**

### Transnational technological cooperation between enterprises under SPRINT —

Under the SPRINT programme a transnational network of specialised intermediaries has been built up (working within chambers of commerce and industry, consultancy bureaux, industrial liaison offices at universities, regional development agencies, etc.). These intermediaries help enterprises to find partners in other European countries with whom they can come to satisfactory technology-based agreements.

About 170 SPRINT contractors in this action are organized in about 50 projects or micro-networks. Most of these have 3-4 partners in as many different Community countries.

In this section of 'I & TT' we are publishing on a regular basis the addresses and contact persons of all SPRINT- sponsored advisory bodies and their partners. They will help you in carrying out your transnational technology transfer projects. Do not hesitate to contact them when you think your innovations, new products and processes are eligible for applications abroad. In this issue we publish the addresses of the advisory bodies in France, Italy and Ireland.

In I&TT 3/88 we published the addresses in Belgium, Greece and Germany, and in issue 4/88 in Denmark, Portugal and the United Kingdom.

NAME AND ADDRESS OF ADVISORY BODY	PARTNER ADVISORY BODIES		NAME AND ADDRESS OF ADVISORY BODY	PARTNER ADVISORY BODIES	
CCI DI TREVISO Mr PEDRON Piazza Borsa I-31100 TREVISO Tel: 39.422-540801 Telex: 410672 tvcami 3 Fax: 39.422-579736 IBCOM	I.P.C.M. CCI LILLE ROUBAIX TOURCOING CTA ECONOMIC AND EXPORT	I F	INTERNATIONAL LICENSING SERVICES SRL Mr Vittorio CARBDILLO Via F. Filzi 41 I-21124 MILANO Tel: 39.1-652932 Fax: 39.1-651387	BYRNE LOWE AND ASSOCIATES DUREXPORT ACTINOVE INDUSTRIE UND WIRT- SCHAFTSBERATUNG TECHNOLOGY MANAGEMENT CONSULTANCY PAX TECHNOLOGY TRANSFER	IRL E F D NL
Mr Antoni R. GRAIFF Viale Papiniano 41 I-20123 MILANO Tel: 39.2-8378954	ANALYSIS MARKETING ADVIESBUREAU RODERKERK EUROPOOL SA	UK NL B	CENTRO ESTERO CAMERE COMERCIO PIEMONTESE	LTD SOPRIAT	UK F
CCI BERGAMO Mr VALENTI Largo Belotti 16 I-14123 BERGAMO Tel: 39.35-217444 Telex: 340033	CCI TARRAGONA CCI MULHOUSE	F	Mr E. GENNARO Via Ventimiglia 165 I-10127 TORINO Tel: 39.11-6960096 Telex: 214159 ceccp i Fax: 39.11-6965456		
TECNOMEDIA SRL Mr CATTAPAN Via Ermes di Colloredo 34 I-33100 UDINE Tel: 39.432-43341 Telex: 33100 Fax: 39.432-470933	IMPIVA EOLAS	E IRL	CIMATEC Mr Mauro CAOCCI Via Pedemonte 3 I-16149 GENOVA Tel: 39.10-41091 Telex: 270212 Fax: 39.10-468508	PROGET INDUSTRIEBERATUNG LAM- BRECHT	F
MUNDT CONSULTING COMPANY Mr Stephen MUNDT Via Cristoforo 7 I-22040 ANNONO BRIANZA Tel: 39.341-579036	HEIDEMIJ FRANCE EXPORT SERVICE CENTRUM CEGOS BELGIUM SA	F NL B	CENTRO REGIONALE SER- VIZI PMI SRL Mr Paolo NICOLAO Padriciano (Area di Ricerca) 99 I-34012 TRIESTE Tel: 39.40-226635 Telex: 460613 area i	COMMISSÃO DE COORDENAÇÃO DA REGIÃO DO NORTE INSTITUTO TECNOLÓGICO DE ARAGÓN CENTRE EUROPEEN DU DEV. REGIONAL	P E F
MASBIOTECH SPA Mr Yves GALANTE 7 Via del Vecchio Politecnico I-20121 MILANO Tel: 39.2-784269 Telex: 332212 Fax: 39.2-784431	CORPORACIÓN DE GESTIÓN BARCELONA EXTRAMET MANAGEMENT SA TECHNOLOGY INTERNATIONAL EXCHANGE	E F UK	Fax: 39.40-226698		

ITALY

### IRELAND

NAME AND ADDRESS OF ADVISORY BODY	PARTNER ADVISORY BODIES	
TECHNOLOGY GUIDANCE LTD Mr Charles M. EGAN Court Centre, Station Road Killiney IRL-CO DUBLIN Tel: 353.1-852777 Telex: 33244	METACONSULT GOM-LIMBURG GOETZ SCHAUDE SHEKELL	F B D UK

NAME AND ADDRESS OF ADVISORY BODY	PARTNER ADVISORY BODIES	
INDUSTRIAL DEVELOPMENT AUTHORITY Mr F. MURRAY Wilton Park House Wilton Place IRL-DUBLIN 2 Tel: 353.1-688444 Telex: 2425 Fax: 353.1-603703	SOFAD DTO EETAA ARIST LORRAINE THE TECHNOLOGY EXCHANGE GOM VLAAMS BRABANT	E K GR F UK B



NAME AND ADDRESS OF ADVISORY BODY	PARTNER ADVISORY BODIES	
INDUSTRIAL DEVELOPMENT AUTHORITY Mr MURRAY Wilton Park House Wilton Place IRL-DUBLIN 2	WVIB	D
EOLAS Mr Jim MCBRIDE Ballymun Road IRL-DUBLIN 9 Tel: 353.1-370101 Telex: 25449 iirs ei Fax: 353.1-379620	TECNOMEDIA IMPIVA	E
EOLAS Mr Jim MCBRIDE Ballymun Road Glasnevin IRL-DUBLIN 9 Tel: 353.1-370101	LABORATÓRIO NACIONAL DE ENGENHARIA CIVIL METEK ENGINEERING AND CONTRACTING	P GR

NAME AND ADDRESS OF ADVISORY BODY	PARTNER ADVISORY BODIES	
BYRNE LOWE AND ASSOCIATES Mr Michael BYRNE 21 Northumberland Road IRL-DUBLIN Tel: 353.1-805990	DUREXPORT INTERNATIONAL LICENSING SERVICES ACTINOVE INDUSTRIE UND WIRT- SCHAFTSBERATUNG TECHNOLOGY MANAGEMENT CONSULTANCY PAX TECHNOLOGY TRANSFER LTD	E I F NL UK
INDUSTRIAL DEVELOPMENT AUTHORITY Mr F. MURRAY Wilton Park House Wilton Place IRL-DUBLIN 2 EOLAS Mr MCCARTHEY Ballymun Road	OTTI REGIONAL DEVELOPMENT AUTHORITY ANTWERPEN	D
EOLAS Mr MCCARTHEY Ballymun Road IRL-DUBLIN 9	REGIONAL DEVELOPMENT AUTHORITY ANTWERPEN DTO	1

### FRANCE

NAME AND ADDRESS OF ADVISORY BODY	PARTNER ADVISORY BODIES		NAME AND ADDRESS OF ADVISORY BODY	PARTNER ADVISORY BODIES	
CCI ARIST AQUITAINE Mr B. HANGUIEZ 10 Place Gabriel F-33075 BORDEAUX CEDEX Tel: 33.56812020 Telex: 56004 cecomex Fax: 33.56441861	GOMOV ASESORÍA INDUSTRIAL ZABALA	B	ARIST LORRAINE Mr Jean DEMERSON 93 rue de Metz F-54042 NANCY CEDEX Tel: 33.83375314 Fax: 33.9613987	INDUSTRIAL DEVELOPMENT AUTHORITY SOFAD DTO EETAA THE TECHNOLOGY EXCHANGE GOM VLAAMS BRABANT	IRL E DK GR UK B
CCI TOULOUSE Mr AIN 2 rue d'Alsace Lorraine F-31000 TOULOUSE Tel: 33.61294949	CCIN BARCELONA HOCHSCHULE BREMEN	E D	BOSSARD CONSULTANTS Mr J. CLAUDON 12 rue Jean Jaurès F-92807 PUTEAUX Tel: 33.47764201	PE CONSULTING LTD KIENBAUM UNTERNEHMENS GMBH	UK D
CCI LILLE- ROUBAIX-TOURCOING Mr MONTPOEL Place du Théatre, BP 359 F-59020 LILLE CEDEX Tel: 33.20741414 Telex: 136321 ccilrt f	CCI DI TREVISO I.P.C.M.	I B	Telex: 613715 f Fax: 33.47736265 PROMOTECH Mr CHEF 1 rue Grandville F-54042 NANCY CEDEX Tel: 33 83370638	BTC TWENTE DENAC METROPOLITAN BOROUGH OF CALDERDALE CENTRE SOCRAN	NL E UK B
METACONSULT Mr J-C LE JEUNE 28 Ave Picasso Domaine de Calas F-13480 CABRIES EN FRANCE Tel: 33.42691842 Fax: 33.91563761	GOM LIMBURG GOETZ SCHAUDE TECHNOLOGY GUIDANCE LTD SHEKELL	B D IRL UK	CCI MULHOUSE Mr Philippe LESAGE 8 rue du 17 Novembre F-68100 MULHOUSE Tel: 33.89460114 Telex: 881695 chamco	CCI BERGAMO CCI TARRAGONA	I E
ESPACE Mr LE MAROIS 8 Bd Jean Baptiste Lebas F-59000 LILLE Tel: 33.20537471	ENTREPRISE SC	В	CIMO SARL Mr M. DUCOURAU 62 Av. de Maréchal Foch F-65310 LALOUBERE Tel: 33.62961377	CGI-WOLFRAM GDS-TECHNOGESTION INNOVI NV	P E B
CABINET JP PETIT Ms PAYET PETIT 31 ave D. Casanova BP 40 F-92210 SAINT-GRATIEN Tel: 33.39899565 Telex: 695435 f	GUV KREFELD JPB LA SYNERGIE FRANCO- ALLEMANDE	F	Telex: 52051 Fax: 33.62960552 UNIVERSITÉ DE ROUEN Mr D. GAMBIER 1 Rue Thomas Becket F-76130 MONT-ST AIGNAN Tel: 33.35740332 Telex: 770127 univrou	UNIVERSITÉ DU HAVRE UNIVERSIDAD DE CANTABRIA	F
JPB LA SYNERGIE FRANCO- ALLEMANDE Mr BREUER 9 Place de l'Eglise F-8110 LE VESINET Tel: 33;344800280 Telex: 202139 f rcinf	GUV KREFELD CABINET JP PETIT	D F	Fax: 33.3570209 UNIVERSITÉ DU HAVRE Mr G. FLEURY 25 Rue Philippe Lebon F-76063 LE HAVRE Tel: 33.35229250 CCI DU MORBIHAN	UNIVERSITÈ DE ROUEN UNIVERSIDAD DE CANTABRIA	FE
ANVAR Mr J.C. POREE 43 rue Caumartin F-75436 PARIS CDX 09 Tel: 33.142669310	VDI/VDE TECHNOLOGIEZENTRUM	D	Mr Michel LAUDREN Quai des Indes 21 F-56101 LORIENT CEDEX Tel: 33,97024000 Telex: 950864 Eax: 33,07848739	REGIONAL	E

### SPRINT

NAME AND ADDRESS OF ADVISORY BODY	PARTNER ADVISORY BODIES	
AGENCE RÉGIONALE DE DÉVELOPPEMENT NORD-PAS-DE-CALAIS Mrs Anne SCHLEMMER Bd de la Liberté 185 F-59800 LILLE CEDEX Tel: 33.20308281 Telex: 120647 f Fax: 33.20308281	IMPIVA DTO	E DK
ARIST ALSACE Mr T. FERRARI 2 rue Brulée F-67000 STRASBOURG Tel: 33;88222396 Telex: 80999 Fax: 33.88 235645	LANDESGEWERBEANSTALT BAYERN WINTECH	D UK
HEIDEMIJ FRANCE LES CHABANNES Mr DE ROOS F-87220 LIMOGES Tel: 33.55483132	MUNDT CONSULTING COMPANY EXPORT SERVICE CENTRUM CEGOS BELGIUM SA	I NL B
EXTRAMET MANAGEMENT SA Mr G. BIENVENU 24A rue de la Résistance F-74108 ANNEMASSE CEDEX Tel: 33.50373833 Telex: 900984 f	CORPORACIÓN DE GESTIÓN BARCELONA MASBIOTECH TECHNOLOGY INTERNATIONAL EXCHANGE	E I UK
FRANCE PACIFIC CON- SULTANTS SARL Mr Jean MANDELBAUM 3 Rue Friant F-75014 PARIS Tel: 33.1-45391890 Telex: 200868 intmark Fax: 33.1-45391408	XENIUS SA DIPL. ING. K. HÜBNER VENTURE MARKET BV MARCH TECHNOLOGY LTD	E D NL UK

NAME AND ADDRESS OF ADVISORY BODY	PARTNER ADVISORY BODIES	
ACTINOVE Mr Alain PARMENTIER 9 bis route de Champagne F-69134 ECULLY	BYRNE LOWE AND ASSOCIATES DUREXPORT SA INTERNATIONAL LICENSING SERVICES INDUSTRIE UND WIRT- SCHAFTSBERATUNG TECHNOLOGY MANAGEMENT CONSULTANCY	IRL E I D
SOPRIAT Mr J. PROST 4 Cour du Château F-25200 MONTBÉLIARD Tel: 33.81913241 Fax: 33.81912476	CENTRO ESTERO CC PIEMONTESE	1
PROGET Mr Edmond VOGEL 2 Place d'Estienne d'Orbes F-75009 PARIS Tel: 33.1-48749222 Telex: 660651 Fax: 33.1-48745456	CIMATEC INDUSTRIEBERATUNG LAM- BRECHT	I D
CENTRE EUROPÉEN DU DÉVELOPPEMENT RÉGIONAL Mr J. ROBERT Immeuble Europe Place des Halles 20	CENTRO REGIONALE SERVIZI PMI SRL COMMISSÃO DE COORDENAÇÃO DA REGIÃO DO NORTE INSTITUTO TECNOLÓGICO DE	I P
F-6000 STRASBOURG Tel: 33.88223883 Telex: 870912 Fax: 33.88226482	ARAGÓN	E

### Survey on Contract Research Organisations

The first major survey of European Contract Research Organisations (CROs) is to be published shortly by the Commission under the SPRINT Programme (see also I&TT 4/88, page 31).

The contents of the report were disclosed at a meeting of leading CROs in Luxembourg in October. It shows that the UK, France and West Germany have by far the strongest research sectors, but that the UK is unique in a number of ways.

Of the companies earning more than 3 million ECU from contract research, 19 are in the UK, six in France, four in Italy and four in the rest of the EEC.

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 wide disparity between national practices.

The report recommends harmonization of grant aid system's throughout the Community to remove what it sees as 'a barrier to the general development of contract research'.

It recommends the promotion of CROs and their 'vital role in technology transfer'.

It further recommends strengthening and convergence of national associations and closer cooperation among them at European level.

Further information can be obtained from Mr J. Traill, Commission of the European Communities, DG XIII/C/1, B4/105, Jean Monnet Building, L-2920 Luxembourg, Tel. (352) 4301-4532, Tlx: 3423/3446 COMEUR LU, Fax: (352) 4301-4129.



Further information can be obtained from: Segreteria Tecnica SFOR.COM 89, c/o CEU — Centro Esposizioni UCIMU, Viale Fulvio Testi 128, 20092 CINISELLO BALSAMO MI, Italy.

### SPRINT



News from TII, the European Association for the Transfer of Technologies and Industrial Information

### Programme of TII Events

At the time of going to press, the programme of TII events for 1989 was still being finalised. Details of further events will be sent to members as soon as available.

01.02.1989	TII Management Commit- tee (Luxembourg)
13-15.03.1989	Group Visit to Rome
03-05.04.1989	Group Visit to Ireland
06-07.04.1989	'The Role of Science Parks in the Promotion of Innovation and the Transfer of Technology', Edinburgh, 4th Annual Con- ference of the UK Science Park Association, in association with Peat Mar- wick McLintock, Arbeitsge- meinschaft Deutscher Technologie- und Gründerzentren and TII
26.04.1989(09.00)	TII Board of Management (Ghent)
26.04.1989(14.30)	TII Annual General Meeting (Ghent)
27-28.04.1989	Seminar: Negotiation and legal protection of technology transfer (Ghent)

### **TII — THE INNOVATION LINK IN EUROPE**



TII – European Association for the Transfer of Technology, Innovation and Industrial Information



Copies of the TII Brochure are available from the TII Secretariat: 3 rue des Capucins, L-1313 Luxembourg, Tel. (352) 46 30 35

### EVCA: Activities, Communications, Statistics Committee

EVCA organises a number of activities with the objective of promoting venture capital to the broadest audience possible and establishing a close working relationship between EVCA members. The most important activities are its 'Annual Symposium' and the Business Seminars.

Attendance at EVCA's annual symposium is not restricted to EVCA members only. The symposium consists of a two-day programme designed to accommodate the wishes of those who want to learn more about the practice of venture capital, those who are interested in the most 'topical' and relevant issues that venture capital in Europe is struggling with, and those who are interested in the future and the opportunities for venture capital. Over the past four years, the EVCA Annual Symposium has been organised in Amsterdam (1985), Munich (1986), Madrid (1987) and London (1988).

In addition to the annual symposium, EVCA organises a business seminar three times a year. These business seminars are restricted to EVCA members only. The objective is to establish a close working relationship between all EVCA members throughout Europe.

Here is an overview of some of the forthcoming events:

### EVCA Programme of events

February 24, 1989:	EVCA BUSINESS SEMINAR,
	Vienna
February 27/28, 1989:	EVCA FORUM, Düsseldorf
April 13-15, 1989:	VENTURE '89, Birmingham
June 1/2, 1989:	VENTURE SYMPOSIUM '89,
	Berlin

#### For more information contact:

Y. Fassin, Secretary-General of EVCA, EVCA, Clos du Parnasse 11F, B-1040 Brussels, Tel.: (32) 2 513.74.39, Fax: (32) 2 513.63.97, Tlx: 23379, or D. Janssens, Commission of the European Communities, DG XIII/C/1, B4/101, Jean Monnet Building, L-2920 Luxembourg, Tel.: (352) 4301-4407, Tlx: 2423, 3446 COMEUR LU, Fax: (352) 4301-4129.

### Entrepreneurs must 'go European' to succeed after 1992

### Venture capitalists on the look-out for companies with pan-European potential

'By 1993, the venture capital industry in Europe will, on current trends, have overtaken the United States. But it is important for the European economy that the investments made by this industry be directed towards the type of pan-European companies which can compete on the world stage with Japan and the United States', said Klaus Nathusius, Chairman of the European Venture Capital Association (EVCA).

The 1992 programme of European market integration highlights the need to organise properly the finance which will enable transnationallyoriented companies to grow. Venture capital is the type of resource needed to enable emerging companies to capitalise on the enhanced market potential. European venture capital will therefore be called upon to play a vitally important role in the restructuring which will result from the integration of the internal market.

One particular innovation by the venture capital umbrella organisation EVCA, it was announced, is the creation of a Business Development Committee which will be on the look-out for companies which, with the right type of backing, could become pan-European success stories. As part of the search for companies with the right potential, this commit-

tee will be implementing the following:



EVCA-Chairman K. Nathusius

- EVCA FORUM: a place where entrepreneurs can meet the financial community;
- EVCA AWARD for 'The European Entrepreneur of the the Year'
- EVCA SEMINARS on 'How to Start and Grow European Companies'
- Programmes for improved communication and cooperation between investee companies.

### Venture Manager Exchange Scheme Underway

The Transnational Venture Manager Exchange Scheme, which has been set up by EVCA and the Commission of the EC (under its SPRINT Programme), starts up in 1989 (see 1&TT 4/88, page 26). Six venture capital managers will be leaving their firms for up to three months to work within a venture capital firm in another European country.

The objective of the scheme is to give new venture capital managers the opportunity to gain first-hand practical information and experience in other European markets. The secondments will also give the host VC firm an opportunity to learn B-1040 Brussels, Tel.: (32) 2 513.74.39, Fax: (32) 2 513.63.97, more about another market.

The first exchange managers are: Eckart Bohm of GENES Communities, DG XIII/C/1, B4/101, Jean Monnet Building, GmbH (Germany), who will be seconded to Barclays L-2920 Luxembourg, Tel.: (352) 4301-4407, Tlx: 3423, 3446 Development in the UK. Alberto Fereira Pacheco of SPR (Por- COMEUR LU, Fax: (352) 4301-4129.

tugal) goes to BBHQ in London. Antonio Jose Albino Freire of IPE (Portugal) will work with BeneVent in Belgium. Constantin E. Katsigiannis of Katsigiannis Associates (Greece) will transfer to BBHQ in Geneva. Catherine Wall of Barclays Develoment (UK) is being seconded to IDI-Cyclad in France. Karl Jung of Euroventures Germany will work with Allied Irish in Dublin.

Further information can be obtained from Mr Y. Fassin, Secretary-General of EVCA, EVCA, Clos du Parnasse 11F, Tlx: 23379 or D. Janssens, Commission of the European

### Publications on recent SPRINT conferences INTERNATIONAL CONFERENCE 1. Communication and enterprise; copies can be obtained from: ADESOL, Principe de Vergara, 74, E-28006 MADRID 2. Transnational Cooperation in Technology Transfer in Joining; copies can be obtain-CONFERENCE EUROPEENNE ENTREPRISE ET COMMUNICATIO ed from: AFCET, 156, Boulevard EUROPEAN CONFERENCE Péreire, F-75017 PARIS COMMUNICATION AND ENTERPRISE 7-8 JUIN / JUNE 1988 PARIS FRANCE ¢-🎄 🖬 A & FUER AFLU AND A FAMILY AND SOCKACT





on behalf of



Commission of the European Communities

Stragtegie PRogramme for INnovation 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.

VISITOR	HOST
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

### Conferences under the SPRINT Programme

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	Conference	Venue	Organizer
16-17.02.89	Introduction and successful managing of new technologies in SMEs in Europe, with reference to Japanese experience	Tilburg (NL)	Tilburg University, Office of International Relations (NL)
30-31.03.89	European conference on strategies for local economic development	Dublin (IRL)	Regional Studies Association, University College, Dublin (IRL)
30-31.03.89	Technology transfer & innovation management in the European Community	Athens (GR)	INFOGROUP, Athens (GR)
05-06.04.89	Rencontre internationale des organisations de sous-traitance	Biarritz (F)	Entente interconsulaire du Bassin de l'Adour (Chambre de commerce de Bayonne, Pau, Tarbes, Landes), Bayonne (F)
06-07.04.89	The rôle of science parks in the promotion of innovation and the transfer of technology	Edinburgh (UK)	UK Science Park Association, Birmingham (UK), Peat Marwick McLintock, Lon- don (UK), Arbeitsgemeinschaft Deutscher Technologie- und Gründerzentren, Syke (D), Association TII, (L)
11-14.04.89	CAL 89 : An international symposium on computer-assisted learning	Guildford (UK)	University of Surrey, Guildford (UK)
08-10.06.89	The application of advanced technology in clothing and footwear production	Limerick (IRL)	2000 Plus BV, Maastricht (NL), Plessey Technology Park, Limerick (IRL)
22-25.08.89	International Conference on Engineering Design	Harrogate (UK)	Institution of mechanical engineers, London
25-27.09.89	4th Conference on sensors and their applications	Canterbury (UK)	Dr. K T V Grattan, Dept. of electrical, electronic and information engineering, London (UK)
13-15.10.89	La gestion totale de la qualité, clé de la mutation que les PME européennes doivent réussir pour relever le défi de 1992	Lille (F)	Eurosoft-System SA, Brussels (B)
11-14.10.89	European Footwear Technologies Days	Nantes (F)	Centre technique Cuir, Chaussure, Maroquinerie, Lyon (F)

Further information can be obtained from : Commission of the European Communities, DG XIII/C/1, Attn.: Mr E. Perez Carbonell, B4/092, Jean Monnet Building, L-2920-Luxembourg, Tel.: (352) 4301-4117, Tlx: 3423, 3446 COMEUR LU, Fax: (352) 4301-4129.



### INNOVATION AND TECHNOLOGY TRANSFER

This issue	Page	Note to our readers
Last lap for SPRINT-MAIN	2	With the present issue, in its ninth year of publication, a
Council decision on Joint Research Centre	2	new name 'INNOVATION AND TECHNOLOGY TRANS- FER' has been chosen for our Newsletter (previously
Technology Transfer Networks	з	new technologies and innovation policy ) which reflects more accurately the two main tasks of the Commission's Dispeter NUC
Exposition IP '88	6	Directorate Alli-C.
ACHEMA '88'	7	<ul> <li>Promoting the exploitation of Community re- search results originating from the CEC's Joint Research Centre and EC sponsored contract rese-</li> </ul>
Prof. Straus: European scientists perceive a need for a novelty grace period	11	arch. Thus, DG XIII-C is acting as an intermediary between EC research and its potential users in scien- ce and industry;
Early recognition of technical trends on		- Direct promotion of innovation and technology
The basis of palent data	11	transfer, i.e improvement of the conditions permit-
The language of engineering	15	ting the rapid transnational dissemination of new technologies throughout the European Community
T.I.M.ECongress — Challenge for Europe	16	via the promotion of transnational technology trans- fer as an instrument to strengthen the economic co-
Venture Capital fund raising in Europe	10	to overcome some of the many obstacles to innova-
overtakes the United States	16	tion through the SPRINT programme in particular.
Valencia — Subcontracting trade fair	20	INNOVATION AND TECHNOLOGY TRANSFER will re-
News from T.I.I.	21	gularly inform you about both helds of activity.
EVCA database goes live	21	Please do not hesitate to contact us for more detailed in- formation on the various projects announced. Your com-
Human aspects of robot systems	22	ments and suggestions regarding any aspect of our work would be most welcome.
First international congress on Actuators	23	A.S. STRUB
Conferences under the SPBINT		Director for Exploitation of
Programme	28	R, D&T, Technology Transfer and Innovation

Newsletter Vol. 9/3 — July 1988 — Supplement to Europhatracta — ISSN 0255-080 Published by the Commission of the European Communities

Directorate XIII-C

blished by the Commission of the European Communities Notation of Research, Technological Development, Technology Transfer and Innovatic

### 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 new research results originating from the CEC Joint Research Centre, the implementation of the SPRINT Programme and related matters.

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

Please send me on a regular basis 'Innovation and Technology Transfer' (Only forms filled in by typewriter or with block capitals can be accepted)

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

Organisation: \_\_\_\_

Address: \_

Date: \_\_\_

Signature: \_

To be returned to the Commission of the European Communities, DG XIII/C, Newsletter 'I & TT', Jean Monnet Building, B4/091, Plateau du Kirchberg, L-2920 Luxembourg

Reproduction is encouraged (with copy to the editor, please, if possible), but neither the Commission of the European Communities nor any person acting on behalf of it is responsible for the use which might be made of this Information — Catalog number: CD-55-89-164-3A-C