



NEWSLETTER

new technologies

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Annual Meeting of the European Venture Capital Association (EVCA)

The European Venture Capital Association (EVCA) which was set up in 1983 with financial support of the Commission of the European Communities, held its first statutory general annual meeting on May 14 in Dublin, where, amongst others, a code of conduct was passed, the 1983 accounts were approved, and a new board of directors was elected.

The annual meeting was also the occasion of an internal seminar which included a case study delivered by one of EVCA's member firms, an overview of the Business Expansion scheme and its impact on venture capital in the United Kingdom, and a review of the legal and fiscal environment for venture capital in the Federal Republic of Germany.

The initial activities of the European Venture Capital Association, the 'purpose of which is to provide for the examination and discussion of the management of and investment in venture capital in the European Community, with a view to developing and maintaining a venture capital industry as a means to finance innovation and small and medium-sized enterprises with equity, and to establish high standards of business conduct and professional competence', as is laid down in its charter, are supported by the Commission in connection with the „Plan for the transnational development of a supporting infrastructure for innovation and technology transfer“ adopted by the Council on 25 November 1983.

The European Venture Capital Association now comprises 56 member organisations specialising in the financing of innovation and high-risk investment.

Seminar on a European Telefax Network for Technology Transfer

In cooperation with the European Association for the Transfer of Technology, Innovation and Industrial Information (TII) and the Danish Invention Centre, a seminar on a European Telefax Network for Technology Transfer was held by the Commission on 22 May 1984 at Luxembourg.

The aim of this seminar was firstly to demonstrate how an efficient communication system among technology transfer centres can be based on the use of an existing data base service supplemented by telefax installations, the latter allowing rapid transfer of visual materials, drawings etc., and secondly to prepare the creation of a network based on these techniques.

The Commission has made available funds for co-financing the creation and the operations of this network for a period of one year. Seminar participants who intended to join the network were given the opportunity to apply for grants.

In addition, during the seminar decisions were taken as regards the cooperation among the organizations that wish to join the network.

The seminar was attended by 35 participants representing 26 technology transfer organizations in all 10 Member States of the European Community.

For further information contact:

Mr. H. Bank
Commission of the European Communities
DG XIII-A-1
Jean Monnet Building
L-2920 Luxembourg
Tel.: (352) 4301 2939

Patents from Community Research

In the first six months of 1984, the European Atomic Energy Community, represented by the Commission of the European Communities, has obtained 8 patents that are listed below (patent numbers in brackets):

- 'Preparation of selective surface for high temperature solar energy collectors', in Israel (N° 56481);
- 'Procédé pour rendre plus ductiles des objets formés en alliage superplastique', in Canada (N° 1165149);
- 'Processo de turbina de gas livre com alto grau de rendimento', in Portugal, (N° 70517);
- 'Secondary-electron detector for analysing irradiated samples for scanning electron microscopes and microprobes', in the United Kingdom (N° 2082832 B);
- 'Apparatus for continuous and direct measurement of the sea surface temperature', in Canada (N° 1163829);
- 'Apparatus for continuous and direct measurement of the sea surface temperature', in the United Kingdom (N° 2075689 B);
- 'Reprocessing of spent plasma', in Japan (N° 1180444);
- 'Apparatus for synchronising AC Motors', in Japan (N° 1188021).

In 1983, EURATOM received 47 patents in 14 countries (United States: 7; Japan: 3; 5 European Patents). Actually, EURATOM holds more than 530 valid patents for about 220 inventions.

Patent work and valorisation of inventions from Community research are carried out by DG XIII-A.

For further information contact:

Mr. H. KRONZ

Commission of the European Communities
DG XIII-A-1

Jean Monnet Building
L-1615 Luxembourg
Tel.: (352) 4301 2945

New Study on Candidate Technologies to Relieve the European Energy System

The Commission has published 'A comparative study for the Community on candidate technologies to relieve the European energy system' (EUR 8908 EN, 1984, 144 p., 450 BFR) that was carried out by E. VAN DER VOORT, E. DONNI, P. LOVE and C. THONET in the framework of the 'Energy System Analyses and Strategy Studies' sub-programme of the Energy Research and Development Programme 1979-83 of the European Communities.

The study has been made on a national basis using the EFOM-12C model which is a supply techno-economic energy model that simulates or optimises (LP) the primary energy requirements and the related investments, in energy production and consumption, in order to satisfy a given exogenous demand in useful or final energy. The main concern of this study was to evaluate the emergence of new technologies in the field of energy and to show a method of assessing the need and priorities in R & D.

Further information on the Energy Programme and on its sub-programmes can be obtained from the:

Commission of the European Communities
Directorate - General for Science, Research and Development
200, rue de la Loi
B-1049 BRUSSELS

Forecasting and Assessment of Science and Technology (FAST) Publications in the Commission's EUR Series

(publications available through the Office for Official Publications of the European Communities, L-2985 Luxembourg)

- FS 1 CEPIL: 'Industrial Specialisation in Twelve European Countries before and after 1983'. 72 p., 1980 (EUR 6920 EN, 400 BFR)
- FS 2 BETA-GERSULP: 'Perspectives de la Chimie en Europe'. Proceedings of a seminar in Strasbourg, 2-4 April 1981, 177 p., 1981 (EUR 7767 FR, 500 BFR)
- FS 3 O. HOLST: 'European Transport: Crucial Problems and Research Needs. A Long Term Analysis'. 107 p., 1982 (EUR 7833 EN, 350 BFR)
- FS 4 J. GERSHUNY and I. MILES: 'Service Employment: Trends and Prospects'. 194 p., 1982 (EUR 7954 EN, 550 BFR)
- FS 5 EUROCONSTRUCT: 'Les Innovations Potentielles dans le Bâtiment en Europe et leurs conséquences sur l'Emploi'. 178 p., 1982 (EUR 7911 FR, 500 BFR)
- FS 6 B. ATKINSON and P. SAINTER: 'Technological Forecasting for Downstream Processing in Biotechnology, Phase 1: Criteria for Successful Developments in Product Recovery Operations'. 75 p., 1982 (EUR 8041 EN, 250 BFR)
- FS 7 P. SAINTER and B. ATKINSON: 'Technological Forecasting for Downstream Processing in Biotechnology, Phase 2, Process and Unit Operation Development Needs'. 112 p., 1983 (EUR 8549 EN, 560 BFR)
- FS 8 R. ALLPORT and K. GWILLIAM: 'Long-term Options and Forecasts for Transport in Europe: Summary Report'. 100 p., 1983 (EUR 8425 EN, 200 BFR)
- FS 9 D. KOPEC and D. MICHIE: 'Mismatch between Machine Representation and Human Concepts: Dangers and Remedies'. 200 p., 1983 (EUR 8426 EN, 500 BFR)
- FS 10 P. A. MERCIER, F. PLASSARD & V. SCARDIGLI: 'Vie quotidienne et nouvelles technologies de l'information', 137p., 1983 (EUR 8551 FR, 685 BFR)
- FS 11 J. P. BARBIER & W. RIBLIER: 'Nouvelles technologies de l'information et création d'emplois: les équipements de la maison du futur', 106 p., 1983 (EUR 8552 FR, 530 BFR)
- FS 12 W. RIBLIER & J. P. BARBIER: 'Nouvelles technologies de l'information et création d'emplois: l'industrie audio-visuelle', 96 p., 1983 (EUR 8553 FR, 480 BFR)
- FS 13 I. PERRING: 'Information Technology and Job Creation: Software and the Software Industry', 129 p., 1983 (EUR 8550 EN, 645 BFR)

- FS 14 C. BUYDENS, F. LOUVEAUX et G. SCHEPENS: 'Biomasses et régions: rapport de synthèse', 85 p., 1983 (EUR 8554 FR, 425 BFR)
- FS 15 M. A. FARGET, 'Valorisation énergétique de la biomasse d'origine agricole', 121 p., 1983 (EUR 8666 FR, 605 BFR)
- FS 16 J. P. BARBIER & R. BARNETT, I. PERRING, W. RIBLIER: 'The Potential of Information Technology for Job Creation: Synthesis Report', 87 p., (EUR 8665 EN, 435 BFR)
- FS 17 M. CHOPLET, E. GABILLARD & C. HERMANT-BARCHECHATH: 'Le Micro-Ordinateur: Eléments Prospectifs', 200 p., 1983 (EUR 8746 FR, 240 BFR)
- FS 18 F. E. JOYCE et al.: 'The Environmental Industry in the EEC: Employment and R & D in the Next Decade', 106 p., 1984 (EUR 8941 EN, 525 BFR).

Other reports and books have been published by FAST, their list is available by writing to: Commission of the European Communities — D. G. XII — FAST, rue de la Loi, 200 — B-1049 Brussels or calling: Brussels 235.97.55.

Innovations issues de la recherche communautaire

Simulateur de processus industriels basé sur micro-ordinateur

La définition et le choix de systèmes de contrôle pour des installations industrielles telles que les installations de chauffage, les machines hydrauliques, les systèmes de transport, etc. posent souvent des problèmes ardues aux ingénieurs chargés de la conception de ces installations. Certaines questions soulevées lors de l'étude ne trouveront une réponse qu'après la construction de l'installation.

Aussi la simulation des processus industriels peut être mise à profit pour le développement ou la mise au point des systèmes de contrôle de ces processus, avant les tests en milieu réel.

La société Sterialux propose un tel simulateur de processus, dont le développement a été commencé au cours d'un projet cofinancé par la Commission des Communautés européennes ayant pour but l'étude et la construction de régulateurs de chauffage «intelligents» basés sur la technologie des microprocesseurs. Ce simulateur a aussi bénéficié d'une aide financière du ministère de l'économie et des classes moyennes luxembourgeois.

Le simulateur est constitué d'un micro-ordinateur équipé d'un logiciel performant, permettant la simulation de processus industriels divers et d'un interface spécialisé de raccordement du micro-ordinateur au système de contrôle.

Lorsqu'il est raccordé au simulateur, le système de contrôle agit sur l'installation simulée, de la même manière que sur une installation réelle. De par les performances du micro-ordinateur, des processus thermiques et hydrauliques peuvent être simulés en temps réel.

Il est ainsi possible de suivre le fonctionnement de l'installation et du système de contrôle et d'en tirer rapidement des conclusions sur l'efficacité de ce dernier.

Dans le cas particulier d'une installation de chauffage, le modèle mathématique développé permet de simuler sur le micro-ordinateur l'évolution dynamique de l'installation. Les différentes variables d'état, comme par exemple, la température de la chaudière, la température de départ de l'eau de chauffage, la position de vannes de mélange, etc., sont simulées et les grandeurs électriques correspondantes sont disponibles sur les borniers du simulateur.

Le simulateur de processus industriels est produit par la société

Sterialux
1, avenue de la Gare
L-1611 Luxembourg
Tél.: 49 00 91

Selected Recent Publications

1. Thermo-Mechanical Solar Power Plants — Volume 1 of Series B

This book reports on the construction phase of the European solar power plant EURELIOS. It is of the central receiver type employing steam as the heat transfer fluid and has a nominal electric power of 1 MW. The Project was built in Sicily as part of the Solar Energy R + D Programme of the Commission of the European Communities. It is important to note that EURELIOS is a purely experimental plant. The prime objective of its construction was the technical evaluation of this new and highly innovative conversion process. Its implementation at a relatively large scale — still being much below the full scale for commercial power plants of this type — was necessary because of the complexity of the involved technology.

EUR9127 EN ISBN 90-277-1728-1
pp.: 106
Published by: D. REIDEL PUBLISHING COMPANY,
P. O. Box 17, 3300 AA DORDRECHT (NL)
price: Hfl. 65,—

2. Energy Saving in Buildings

The International Seminar ENERGY SAVING IN BUILDINGS jointly organized by the Commission of the European Communities and the Netherlands' Ministry of Economic Affairs highlighted the results of energy saving projects carried out within the framework of the Communities Second Energy R + D Programme and the results of the Demonstration Programme (1979 - 1983). The seminar was also intended to convey these results to representatives of national authorities, public, industrial and financial organisations, architects, decision-makers and town-planners.

EUR9150 EN ISBN 90-277-1770-2
pp.: 819
Published by: D. REIDEL PUBLISHING COMPANY,
P. O. Box 17, 3300 AA DORDRECHT (NL)
price: Hfl. 265,—

3. Grassland Beef Production

In this book is described the background to beef production in several European countries and are outlined methods of production for beef animals fed mainly on grass both for cattle derived from dairy herds and from single suckler herds. Particular attention is paid to the additional contribution possible from bull beef production and to methods of relating animal production to predicted herbage

production. The objectives in breeding for beef production are considered and it is concluded that performance tests on beef bulls should be designed so that they corresponded closely with the conditions under which commercial beef cattle would be produced. Experimental methods applicable to the conduct of beef experiments on grassland are also considered. The summary includes suggestions for further investigational or development work.

EUR 8814 EN ISBN 0-89838-650-0
pp.: 195

Published by: MARTINUS NIJHOFF PUBLISHERS,
P. O. Box 322, 3300 AA DORDRECHT (NL)

4. Biogas Plants in Europe

The present book is conceived to give guidance on the state-of-the-art and possible future developments. Conclusions are drawn from more than 500 plants which were analysed for this purpose. A selection of them are described in details as possible examples. Reference lists of operational plants and manufactures as of 1983 are included as well as information on government supports for financing. Apart from this practical information, the book also covers problem areas and makes suggestions for future R + D. The work for this book was initiated and directed by the Commission's staff in Brussels. Its preparation was in the hands of a European group of experts and a coordinator team in Louvain-la-Neuve, Belgium.

EUR 9096 EN ISBN 90-277-1780-X
pp.: 339

Published by: D. REIDEL PUBLISHING COMPANY,
P. O. Box 17, 3300 AA DORDRECHT (NL)

5. Radiation Protection

The Community Radiation Protection Programme aims to update the scientific basis for radiation protection standards and to develop methods and techniques for preventing and counteracting harmful effects of radiation and/or for coping with the consequences of radiation accidents. In this way, it provides the information required for optimization of radiological protection and for decision making on the basis of a realistic assessment of risks from ionizing radiation.

EUR 9088 DE/EN/FR ISBN 92-825-4378-1
pp.: 1353

Published by:
Office for Official Publications
of the European Communities
L-2985 LUXEMBOURG
price: BFR 3.250,—

6. Research and Training Programme in Biomolecular Engineering — Volume 1

The multi-annual research and training programme of the European Economic Community in the field of biomolecular engineering was adopted by the Council on 7 December 1981 for the period April 1982 to March 1986. The main objective of the programme recognised as being of primary importance

for Europe's development and competitiveness, is to remove the bottlenecks which prevent applications of modern biochemistry and molecular genetics to agriculture and industry. The programme is executed in two phases with a total budget allocation of 15 Mio ECU. The present progress report has been prepared after the first year of implementation of the programme and is therefore restricted to a review of the work executed during the first stage.

EUR 8967 DE/EN/FR ISBN 92-825-4332-3
pp.: 247

Published by:
Office for Official Publications
of the European Communities
L-2985 LUXEMBOURG
price: BFR 800,—

Calendar

To obtain further information on the meetings listed below, please contact

Mr D. NICOLAY
Commission of the European Communities
DG XIII-A2
P.O. Box 1907
L-1615 Luxembourg
Tel. (3 52) 4301 2946

1984

1. International Ozone Symposium
Thessaloniki, 3-7 September
2. 1st European Symposium 'Fire in buildings'
Luxembourg, 18-20 September
3. 13th Symposium on Fusion Technology — SOFT
Varese, 24-28 September
4. Sorting of Household Waste and Thermal Treatment of Water
Luxembourg, 25-27 September
5. Workshop 'Long Term Effects of Sewage Sludge and Farm Slurries Application'
Pisa, 25-27 September
6. Seminar 'The results of the Indirect Action Research Programme Safety of Thermal Water Reactors'
Brussels, 1-3 October
7. Fifth European Symposium on the Financing of Innovation 'Improving Venture Capital Opportunities in Europe'
Luxembourg, 3-5 October
8. 1st EC Wind Energy Conference
Hamburg, 22-26 October
9. EC Symposium 'Coal Preparation'
Luxembourg, 15 November
10. EC Conference 'A more Cost-effective Health Care Through GMP'
Luxembourg, 29-30 November

1985

11. 3rd EC Conference 'Energy from Biomass'
Venice, 25-29 March
12. 8th International Conference 'Structural Mechanics in Reactor Technology — SMiRT'
Brussels, 19-23 August