OSTC newsletter

Volume 2, No 1, March 1991

CABINET APPROVED COMPULSORY INSTALLATION OF CATALYTIC CONVERTER FOR MOTORCARS (11/15/90)

The Cabinet approved the joint proposal from the ministries of Interior. Industry, Commerce, and Science, Technology and Energy to install cutalytic converters on all new motorcars as one measure to alleviate the air pollution problem. The converters will be capable of drastically reducing three types of pollnting gases, namely, carbonmonoxide, hydro-carbons, and oxides of nitrogen by chemical processes. In order that the catalytic converters be able to function efficiently, it is imperative that the petrol used be lead free, and the diesel used be lowsulphered. The process to reduce lead in petrol, and sulpher in diesel will necessarily take quite some time.

OAEP USES GAMMA RADIATION TO TREAT SPICES AND HERBS (11/1/90)

Mr. Ratana Poomlek, the Deputy Secretary-General of the Office of Atomic Energy for Peace announced that OAEP had determined the appropriate level of radiation to destroy microbes and fungus spores in dried chillies and powdered chillies. The treated Chillies fully meet the quality standard set by the American Spices Trade Association, and the radiation dose not affect the aroma which is an important characteristic of each of the spices and herbs used in the experiments. OAEP has been experimenting with the gamma radiation of spices and herbs since 1989, and expects to be able to find the proper radiation level for pepper and ground pepper soon.

Mr Poomlek explained that Thailand bad been exporting a substantial amount of both types of pepper, for example the 1988 export figures for chillies were 2,603 tonnes amounting to 2.3 million dollars, and 850,603 tonnes and more than three million dollars in value for pepper. In the past, a rather high portion of the export was damaged by insects, microbes and fungi. OAEP will next study the radiation of other herbs and spices, for example, dried and powdered ginger, and turmeric.

Presently, seventeen countries allow radiation treatment of herbs and spices. They are the Netherlands, Canada, USA, France, Belginm, Norway, Bangladesh, Brazil, Yngoslavia, USSR, Hungary, Chile, Denmark, South Africa, Finland, Israel and Thailand.

TECHNOLOGY TRANSFER IN ACTION

Prior to full-scale implementation of TRB, there is a pilot programme being carried out, whereby technical assistance, technology licenses and joint ventures are being promoted between companies in the West and companies in two pilot project countries: Mexico and Thailand.

TRB (Technology Rights Bank) is a concept of UNDP and IFC for a systematised programme of technology transfer. It is conceived to function as a development bank but with a focus on enhancing existing technological capabilities in developing countries, by actually acquiring suitable technologies in the developed world and licensing those technologies to private sector firms with an existing solid level of capabilities.

At present, Mr Newendorp provides service to interested Thai companies seeking technical assistance or potential joint venture partners for the purpose of improving an existing line of business or creating an appropriate additional manufacturing capability. At no cost to the Thai company, Mr Newendorp will undertake a search for North American firms with capabilities in areas of specific interest to the Thai firm making the request. The Western firms are interviewed and the most likely suitable partners are presented to the Thai company.

along with suggestions/recommendations for further discussions.

The programme manager for the efforts in Thailand, is Terry A. Newendorp, Taylor-DcJongh, Washington, D.C. Thailand was targeted for the pilot project because of its recent rapid development of an industrial capacity, and the necessity that if it is to enhance its competitive position worldwide, its companies must begin to rely more and more on higher productivity through technology applications, rather than merely on low-cost labor.

It must be noted that the cost of all negotiations must be borne by each party, and, although Mr Newendorp will monitor and facilitate progress, there is no subsidisation of the technology transfer effort between c Thai and Western firms.

Currently, technology searches requested by Thai firms are underway for:

- refrigeration and air conditioning
- residential wastewater treatment equipment
 - printing equipment
 - rnbber parts for motorcar industry
- chemical process to manufacture sodium sulphate
- environmental services for steel industry

Further, a U.S. firm with technology in brick making and procelainware is seeking a joint venture partner in Thailand.

Other fields likely to be good areas of cooperation and technology transfer between U.S. firms and Thai companies, include:

- - coal/lignite combustion technology
 - water and wastewater treating
 - air pollution control equipment
 - hazardons and toxic waste disposal
 - · precision-machined equipment

Excellent relations exist between MR. Newendorp and the official Thai government entities, lucluding MOSTE. TRB is envisioned, however, as private sector activity-Consequently, Thai firms interested in initiating a serious search should contact:

> Terry A. Newendorp 2022 Columbia Rd., N.W. # 312 Washington, D.C. 20009, U.S.A. Tel. 202-667-9519

Fax. 202-462-2768

Further, a liaison office in Bangkok, to facilitate communication between Thai companies and Mr. Newendorp is expected to be operative soon.

NECTEC ANNOUNCED 1991 GUIDELINES FOR RESEARCH SUPPORT (10/24/90)

Professor Dr. Pairash Thaichayapong, the Director of NECTEC announced that NECTEC would be accepting research proposals for consideration for NECTEC support throughout November, NECTEC has supported several research projects which have been completed and have become commercially available, for example, the 32-bit 80386SX 16 MHz and 80386SX 20 MHz. couputer projects, the computer-aided electricmotor design software project, the Thai card IC design project, the Thai software standards specification project, and the mobile phone prototype project. For the year 1991, NECTEC has specified twelve sub-fields of electronics and computer in which research grants will be provided. The twelve fields are as follows:

- 1. Artificial Intelligence
- 2. Computer Network
- 3 VISI
- 4. Medicine electronic computer
- 5. Electronic and computer technlogy transfer
- 6. Development of electronic circuits for industry
- 7. Development of materials and electronic parts technology
- 8. Computer systems technology
- 9. Computer software development
- 10. Tele-communication equipment development
- 11. Development of electric motor production for electrical appliances
- 12. Development of applications software for industry.

Dr. Thajchayapong emphasized NECTEC'S philosophy in granting the support that NECTEC always gives priority to a proposal which has the tri-partite structure, i.e., a research unit responsible for the technical research work, a private partner responsible for the marketing information and commercial production, and NECTEC, which will look after the policy and objective. Adhering to this philosophy should increase the chance that commercial production and industrial usage will result from the supported research, as well as promotion of other activities, which will result in production and competition both in domestic and international markets.

STDB TO PROMOTE TECHNICAL CONSULTING SERVICES FOR THE LOCAL INDUSTRIES (12/14/90)

Dr. Wirojana Tantraporn and Dr. Nikorn Mungkorntong of the Science and Technology Development Board (STDB) made an announcement that STDB had developed a project to provide technical consulting services to the local industries. The objective of the project is to promote and familiarise the local industries with the use of technical consulting services in solving operating problems, in the expansion of operations, and in product improvement.

Under this project, any local industrialist who faces any technical problem can seek help from STDB. STDB will provide a preliminary analysis of the problem free of charge. If the analysis indicates that external technical expertise is needed, a proper sonrce of service will be arranged by STDB at a subsidised rate. STDB will pay 70% of the charge for the first service and 50% for the second. There are limits, however, of 20 man-mouth and \$1600 for the STDB subsidy for the first consultation. For the second and subsequent consultations, if any, STDB will continue to provide free preliminary analyses but not the subsidised consulting fee.

STDB hopes to create confidence among small and medium local industries in solving technical problems the correct way so that the standards of finished products will improve and become competitive in the international market. The project should also help to create an industrial consulting industry and promote proper usage of industrial personnel.

List of abbreviations

OAFP Office of Atomic Energy for Peace STDB Office of the Science & Technology Development Board TRB Technology Rights Bank UNDP United Nations Development Programme IFC International Finance Corporation MOSTE Ministry of Science, Technology and Energy

Technology Centre

NEC

National Electronies and Computer