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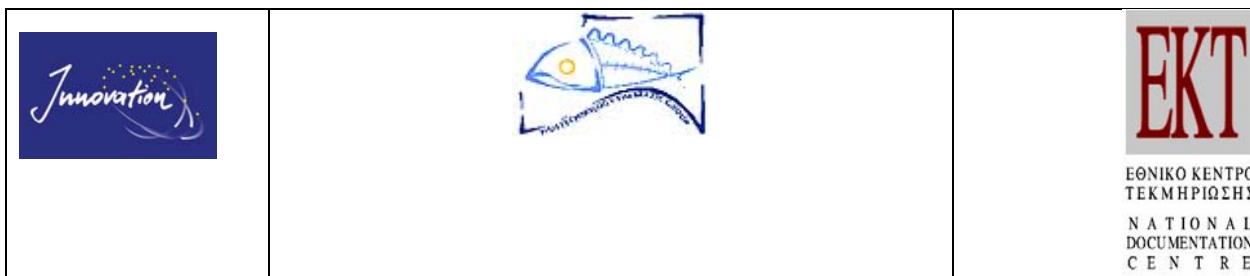


Fisheries and Aquaculture Partnering Event
Athens, 3rd of June 2004



Catalogue of Cooperation Profiles

Hellenic Innovation Relay Centre



ATHENS, 3rd of June 2004
INTERNATIONAL COOPERATION FORUM
National Documentation Centre/
National Hellenic Research Foundation (NHRF)

Athens, 3 June 2004, International Cooperation Forum, co-organised by the network of Innovation Relay Centres with special support of the **Thematic Group Fish Technology**, offers a unique opportunity to establish cross-border contacts and find international business and research partners for cooperation with regard to aquaculture and fisheries technologies.

This catalogue focuses on technology offers, technology requests and research partner searches of companies, universities and research institutes throughout the IRC network members. Specifically the catalogue profiles were gathered from Cyprus, France, Greece, Iceland, Norway, Netherlands, and Poland. The participating organisations or their representatives will be present at IRC Hellenic's premises, National Hellenic Research Foundation, 48, Vas. Constantinou, Athens, on the 3rd of June, to meet potential co-operation partners.

Moreover the event includes a presentation of the Integrated Project [SEAFOODplus](#) (FP6 Integrated Project "Health promoting, safe seafood of high eating quality in a consumer driven fork-to-farm concept").

The coordinator of the project will present the [call for proposals for the involvement of SMEs](#) in the consortium of the project. The call concerns SMEs interested in developing their seafood business and improving their profit through the swift application of the most recent innovative research results. The coordinator will be available for bilateral meetings after the presentation session.

All participants and interested organisations are invited to select from this catalogue potential partners and interesting business and research contacts with whom bilateral meetings will be arranged right on IRC Hellenic's premises.

The deadline to submit the list of meeting requests to HIRC is the **28th of May 2004**. The participants will then receive their individual meeting schedules before the event date.

This catalogue with all submitted profiles will be available on-line as a downloadable document on the 25th of May at: http://www.hirc.gr/events/alieia_04/index_alieia04_en.html

The Innovation Relay Centres Network (IRC Network)

The Innovation Relay Centres (IRC) are a network of competent service providers especially for companies, but also open to universities and research institutes which either seek partners to market new products and processes throughout Europe or need to acquire new technological solutions. The IRC network is part of the framework programme for research and technology of the EU and is funded by the Innovation programme. The network was established in 1995 and consists of 250 organisations from 30 countries (EU, Associated Countries, the Central and Eastern European countries (CEEC) and Israel). Further information is available at: <http://irc.cordis.lu>.

We would like to thank the network of Innovation Relay Centres, and especially IRC Centre Atlantic, IRC Cyprus, IRC Netherlands, IRC Western and Southern Sweden/Iceland, IRC-Norway, IRC North-Nord Manche, IRC West Poland and IRC Scotland.

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Analysis of genetic variation in wild and cultivated stocks to help fisheries and aquaculture management

Type of profile: Technology Offer

Abstract: A Greek research group developed a molecular markers technique to aid the management of aquacultures and fisheries. The methodology can be applied in the genetic differentiation between populations, in the study of the impact of the release of reared fish into the natural ecosystems, in genetic improvement programs, forensic applications, etc. The group seeks for research centre for further developing the methodology and other interested parties that would like to use its services.

Detailed description: Knowledge of the levels of genetic diversity and the population structure in marine species is important if effective management is to be applied in both wild and cultivated populations. The use of molecular genetic markers, such as microsatellite and mitochondrial DNA, allows to estimate the genetic health of the population, and to delineate different stocks. In aquaculture, it is important to know if the practices followed for bloodstock management lead to inbreeding phenomena, and in genetic improvement programs it is important to have pedigree information, which is not easy to have in traditional breeding schemes. Modern molecular genetic techniques provide insights for the level of inbreeding in the populations and allow identifying the parents of progeny in mass crosses. Moreover, these techniques can be used for the determination of the species in specimens, in which the diagnostic characteristics have been destroyed or in processed food. In this way, illegal fishing and trading of protected species can be detected. Finally, molecular markers can be used to assess the impacts that deliberate or accidental releases of fish for fish farms have on the natural populations.

Innovative aspect: The techniques used in these methodologies stemmed from the revolutionary developments in the last two decades in the area of molecular genetics, which allowed the study of genetic material at the most fundamental level: that of DNA. By the aid of advanced and high-throughput automated equipment the genetic material of hundreds of specimens can be characterized in several genetic loci in a short time and provide important info about the genetic make-up of the populations.

Main advantages: DNA-based methods followed are fast, reliable and practically cost-effective methods, which are based on the PCR (Polymerase Chain Reaction) technique, which allows application by non-destructive tissue sampling and using minute amount of tissue (fin clips, scales, etc). Several software packages have been developed for the analysis of the results and data interpretation.

Intellectual Property Rights Others (registered design, plant variety right, etc)

Comments: - Expertise, Know - How, Specialized Equipment

Keywords selection Fish / Fisheries / Fishing Technology Marine Science

Application domain selection Agricultural and marine resources and products

Fisheries, resources of the sea

Comments about market applications: Management of fishery stocks

Genetic improvement in aquaculture Bioconcentration

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance Financial resources

Type of partner sought Research institution (research projects to further improve the methodology), as a services provider for public authorities & private companies. Technical assistance can be offered when acquiring the samples - data or when evaluating the results according to the specifications of the partner.

Name of the Innovation Relay Centre

IRC Hellenic

Ref: TO_GR_3736

Integrated system for the automated implantation of metal tubes in sedimentary seabeds

Type of profile: Technology Offer

Abstract: A Greek research Institute has developed a new, innovative system that allows the implantation of foundation tubes into sedimentary seabeds. The offers major advantages for the insertion of tubes or piles in marine soft substrates in comparison to other known traditional methods (i.e. drilling, hammer operations) and has a broad spectrum of application in the marine constructions domain. The Institute is primarily interested in joint venture, technical-cooperation and commercial agreements.

Detailed description: The system consists of a mechanism that holds tightly metal tubes from their upper part aiming at deploying it from the sea surface to the bottom in a vertical position. By activating a water pump pressurized water comes out from the lower end of the metal tube, allowing the lowering of the tube to the desired depth. This depth is controlled by special shoes that prevent further penetration in the seabed. The implantation of metal tubes in soft bottom substrates by using this innovative and generic technology may have many (and diverse) applications in the field of marine underwater constructions. The research laboratory is seeking for a partner to set up a joint construction company. The laboratory could also provide its services to other laboratories, companies, state authorities, organizations (technical consulting or cooperation in-house or at the projects premises if necessary). In addition the laboratory is looking for a company or research institute to improve/expand the research - product. Finally the research laboratory has developed the end product available for demonstration / usage, providing also the required technical assistance for the product installation, training and operation.

Innovative aspect: The tube implantation system in question uses a different principle of operation from the currently used traditional methods like drilling or hammering.

Main advantages: The implantation of metal tubes in marine sedimentary seabeds offers unique advantages in comparison with other competitive technologies (drilling, hammering) strictly related with money and time saving. The method can be used easily in harsh environments (e.g. very shallow waters, lagoon systems, etc.) where other methods fail or are very difficult to apply. Tube unit implantation time is considerably smaller thus making the whole operation more attractive than other methods. Furthermore, it can be easily transferred in the field (portable) and handled by small vessels without the need to use extensive supporting platforms.

Intellectual Property Rights Patent(s) granted. European Patent No: EP 0897034B1

Keywords selection Aquaculture, Marine Science

Application domain selection Agricultural and marine resources and products

Comments about market applications: Marine constructions (i.e. anchorage of aquaculture cages or vessels, marine outfalls, foundation - support of underwater constructions). Aquaculture technologies. Coastal protection from erosion.

Collaboration details:

Type of collaboration sought: License agreement Commercial agreement with technical assistance
Technical co-operation Joint Venture agreement

Type of partner sought To provide its services to other laboratories, companies, state authorities organizations (technical consulting or cooperation in-house or at the projects premises if necessary). The research laboratory has developed the end product available for demonstration / usage, providing also the required technical assistance for the product installation, training and operation.

The tasks to be performed of the partner sought A partner to set up a joint construction company. A company or research institute to improve/expand the research - product.

Name of the Innovation Relay Centre
IRC Hellenic

Ref: KHE_FR_3773

Know how in Optimization of production lines and implementation of New Production facilities Projects

Type of profile: Know-how/ expertise

Abstract: A consultancy company has 12 years experience in fresh, smoked, frozen and canned products. The company has developed a specific know how in Optimization of production lines and New Production facilities Projects.

Detailed description: A consultancy company has 12 years experience in fresh, smoked, frozen and canned products. This long field experience leads to develop close link with fisherman, logistic fish trade and fish process units. Through several projects, the company has develop a specific know how in Optimization of production lines and implement New Production facilities Projects. The company dealt with projects such as:

- Canning factory: Case filling efficiency improvement- Fresh fish workshop efficiency improvement
- New Production facilities Projects in: Smoking plant: salmon and trout;
- Canning factory: seafood salads and tuna; Cooking workshop: shrimp and shellfishes.

A 30 years experience in food manufacturing, industrial engineering, and costs management and control has been a key point for success, through know-how transfer.

Innovative aspect: The company is able to optimize different kind of production lines and to implement production facilities for different kind of fish.

Main advantages: The company has a long experience in the fish sector and is able to solve many problems. The company has also a deep experience in training.

Current state of development of the technology Already on the market

Intellectual Property Rights Secret know-how

Keywords selection Fish / Fisheries / Fishing Technology Food Processing

Application domain selection Food - Agro Industry

Collaboration details:

Type of collaboration sought: Technical co-operation

Type of partner sought The company is looking for fish producer interested in developing, implementing or improving fish processing lines.

The specific area of activity of the partner Fish sector

Name of the Innovation Relay Centre
IRC Atlantic

Ref: KHE_FR_3774

Know how in fish Traceability

Type of profile: Know-how/ expertise

Abstract: A consultancy company has 12 years experience in fresh, smoked, frozen and canned products. The company has develop a specific know how in fish traceability.

Detailed description: A consultancy company has 12 years experience in fresh, smoked, frozen and canned products. This long field experience leads to develop close link with fisherman, logistic fish trade, fish process units, distributors and fishmongers. Through several projects, the company has develop a specific know how in fish traceability.

The company has competencies in:

- Overall organization from boat to shelf.
- Production lines adaptation
- Setting common quality standards between the different actors
- Quality insurance training.
- EDP requirements.

An overall experience of 30 years in food manufacturing, helped to succeed by know-how transfer.

Innovative aspect: The company is able to implement traceability for different kind of fish process.

Main advantages: The company has a long experience in the fish sector and has a specific competency in training session, which is of importance in the traceability implementation

Current state of development of the technology Already on the market

Intellectual Property Rights Secret know-how

Keywords selection Traceability of food

Application domain selection Food - Agro Industry
Standards - Quality

Collaboration details:

Type of collaboration sought: Technical co-operation

Type of partner sought The company is looking for fish producer interested in implementing traceability.

The specific area of activity of the partner Fish sector

Name of the Innovation Relay Centre
IRC Atlantic

Ref: KHE_FR_3776

Know how in fish By-products

Type of profile: Know-how/ expertise

Abstract: A consultancy company has 12 years experience in fresh, smoked, frozen and canned products. The company has develop a specific know how in fish by-products.

Detailed description: A consultancy company has 12 years experience in fresh, smoked, frozen and canned products. This long field experience leads to develop close link with fisherman, logistic fish trade and fish process units. We know that by-products represent 50% of the fish, which is currently very partially valorized. Through several projects, the company has develop a specific know how in fish by-products. The company worked for instance on a project which aim was to remove remaining flesh from the fish bones. The company is able to suggest solution adapted to the client requirement.

Innovative aspect: 50% of the fish are by-products.

Very few quantities are currently valorized. Companies could benefit from by products valorization. This French company can offer its know how on this topics.

Main advantages: The company has a long experience in fish and agro food industry, and is used to work with the sector. Thanks to this large experience, the company is able to find solution which fit client requirement in different topics.

Current state of development of the technology Already on the market

Intellectual Property Rights Secret know-how

Keywords selection Fish / Fisheries / Fishing Technology
Food Technology

Application domain selection Industrial manufacture
Food - Agro Industry

Collaboration details:

Type of collaboration sought: Technical co-operation

Type of partner sought The company is looking for wholesaler or fish producer interested in working on by product valorization

The specific area of activity of the partner Fish sector

Name of the Innovation Relay Centre
IRC Atlantic

Ref: TO_FR_3823

TinyGDS: A lightweight marine geographic data system for Web browsers

Type of profile: Technology Offer

Abstract: A French research institute has developed a low-cost piece of software for geographic data system. This software produces, from external data, maps for Web browsers. The main advantage is the data collection and map production, which are very easy. This software can be used by people or organizations that need to produce on-line maps. The institute is looking for commercial agreement or technical co-operation.

Detailed description: TinyGDS is the acronym of Tiny Geographic Data System. Thanks to this software, which is based on Web browser technology, geographic data creation and uploading is very easy. On one hand, you need the map subdivided as appropriate. On the second hand you need the data and their "related info" (Color from values or brackets - Legend - Way of showing numbers - Status of the map: public or private). They are collected in a form that is on a Web page. Then from a "frame map" and the data, TinyGDS color-shades the map. The map is generated on a Web page. For instance, you want to draw a map of population density. You have to collect the map you want to illustrate. You also collect the data relating to the population. You introduce in the form, the figures, the different brackets and colors for each bracket. Then, thanks to the application, the map is drawn with the colors, the legend, title and brackets. This software is dedicated to organizations or companies that want to put maps on line without using traditional cartography software, which is not usually Web-oriented, and is very complex.

Innovative aspect: - All-purpose: TinyGDS can draw a map from any territory, if the frame map and necessary numeric data are available. - Designed for the Web: A browser is the only software the client needs to produce and view maps. - Multi-language: TinyGDS was developed in French and English, but other languages can be added without any program modification. Only translation activity is required.

Main advantages: - Easy data collection - Classical maps (Europe, Africa, land or sea, etc.) already available - Any kind of maps can be added - Thanks to the login system, multiple access and map sharing are possible

Intellectual Property Rights Secret know-how

Keywords selection Marine Science

Application domain selection Agricultural and marine resources and products

Fisheries, resources of the sea

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance

Technical co-operation

Type of partner sought This software is dedicated to organizations or companies who want to put maps on line. Their geographic data or Web services could be interested in this product. This could be companies who wants to show their localization, or organizations that want to show projections during election time. This is dedicated to all kinds of maps: land or sea (enterprises, hospital, laboratory, city hall, etc.) Technical co-operation: The software can be adapted to partners' specific needs.

If required and necessary to the partner, further development can be done to improve software features.

Commercial agreement with technical assistance: The Institute will also provide technical training to deeply explain the software's uses. The tasks to be performed of the partner sought. This software can be used in various areas (industry, hospital, election time, marine area, etc.).

Name of the Innovation Relay Centre

IRC Atlantic

TELEFOS-New surface telephonic monitored drifters for coastal areas and lakes

Type of profile: Technology Offer

Abstract: A Greek company has developed a new low cost surface drifter for coastal and lake studies through measurements both of surface and subsurface currents. The system can be applied in a land-based station or alternative in a mobile station for small floating vessels. Combination of GPS / GSM technology permits the real-time monitoring and easy retrieval of the drifter fleet. Partnerships for technical cooperation and License agreements are sought.

Detailed description: A Greek SME specialized in marine telecommunication and electronics has developed a new surface drifter for coastal and lake studies. It is designed to measure both surface and subsurface currents. The system consists of a land-based station (which may be placed at an office or a lab), and the drifters. Alternatively there may be a mobile station for small floating vessels. The land-based station is equipped with the necessary telecommunication equipment (GSM and RF modem) and software in order to achieve experiment planning, drifter programming, real-time monitoring and data analysis with presentation-quality graphics interface. The booming growth of cellular phone market worldwide has brought large coastal areas under the coverage of GSM telephony. Not only coastal regions and lakes, but even semi-enclosed seas, like the Baltic, enjoy almost full coverage by cellular telephony. This enables the introduction of such technology in replacing satellite communication, resulting to significantly lower costs. Real-time monitoring and interactive, reprogrammable software, allow the easy tracking and recovery of drifters, thus lowering their cost by making them less expendable instruments. System's new design allows the alternate use of a drifter either as surface, Davis-type drifter, or as a surface float with a subsurface kite down to depths of 50 m. The software accompanying the drifters allows not only mission programming and drifter monitoring, but also considerable data analysis (Eulerian statistics, Lagrangian estimates of diffusivity, spectral analysis, etc).

Innovative aspect: Novel design, allowing the very easy conversion from measuring surface currents (Davis type) to subsurface currents (kite down to 50 m depth).

Main advantages: -Short-range communication (and programming) through UHF (no hussling with connectors) -Low-cost accessories (alkaline batteries) - A user-friendly, highly capable software

Intellectual Property Rights Others (registered design, plant variety right, etc). TELEFOS is a project result funded by the national Industrial Research Programme". There is no patent.

Keywords selection Aquaculture Fish / Fisheries / Fishing Technology

Marine Science Detection and Analysis methods

Application domain selection Fisheries, resources of the sea

Comments about market applications: Measurement methods

Telephone interconnect and other equipment

Applications software Electronics Related Equipment Other electronics related equipment

Highlights: The system has already been tested on the Aegean with Success. The next step is to expand the market to marine and non-marine scientists by offering ease of use and user-friendly data analysis.

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance

Manufacturing/ subcontracting agreement

Type of partner sought The company is open in collaborations with technical and research centers, public organizations and SMEs.

Name of the Innovation Relay Centre

IRC Hellenic

Ref: TO_GR_3833

Direct Electrochemical Flow Analysis (FA) System for Simultaneous Monitoring of Total Ammonia and Nitrite in Seawater

Type of profile: Technology Offer

Abstract: This portable Flow Analysis (FA) system for continuous, fast and accurate measurement of total ammonia and nitrite content in non-filtered seawater operates within the ammonia and nitrite concentration range of 0.05-10 ppm. Precise and continuous measurements of untreated samples for both in-field and laboratory applications are possible. The system has a small size and weight, capabilities for independent ammonia and nitrite monitoring.

Detailed description: A new portable Flow Analysis (FA) system ensures continuous, fast and accurate measurement of total ammonia and nitrite content in non-filtered seawater. It operates within the ammonia and nitrite concentration range of 0.05-10 ppm. The system has good reproducibility (>95%) and stability (<0.02 ppm/hr) at constant temperature. Analysis time varies between 1.5 - 4 min (depending on sample analyzed). Its data-logging capabilities allow for independent ammonia and nitrite monitoring. The ammonia and the nitrite detectors are Ion-Selective Electrodes (Severinghaus-type Electrodes) with fast response time and good reproducibility in conjunction with the capabilities of the Flow Analysis (FA) manifold. The samples are directly inserted into the system with no sample pretreatment indicating a simple analysis procedure.

Innovative aspect: Precise and continuous measurements of untreated samples for both in-field and laboratory applications Small size and weight, capabilities for independent ammonia and nitrite monitoring

Main advantages: Precise and continuous measurements of untreated samples for both in-field and laboratory applications Small size and weight offer the advantage of portability, its data-logging capabilities allow for independent ammonia and nitrite monitoring

Intellectual Property Rights Patent(s) applied for

Keywords selection Aquaculture Fish / Fisheries / Fishing Technology
Marine Science Detection and Analysis methods

Application domain selection Agricultural and marine resources and products
Fisheries, resources of the sea

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance
Manufacturing/ subcontracting agreement Joint Venture agreement financial resources

Type of partner sought Industry

The specific area of activity of the partner Promotion, Marketing, Trade

Name of the Innovation Relay Centre
IRC Hellenic

Ref: TO_GR_3834

Device for counting fish from 0.05 to 0.30 g in weight (for use in fish hatcheries)

Type of profile: Technology Offer

Abstract: Device for counting fish fry that is smaller than 0.05 grams. This device can be used at the hatchery level of an aquaculture operation allowing the better management and feeding of fish populations during the weaning phase. The device is based on the measurement of light intensity through a pipe and the identification of bodies (fish) of different light absorbency.

Detailed description: This is a device for counting fish fry that are as small as 0.05 grams in weight. The counter can be used at the hatchery level of an aquaculture operation allowing for better management and feeding of fish populations during the early stages of their lives. The device is based on the measurement of light intensity through a pipe and the identification of bodies (fish) of different light absorbency. For this a transmitter and a receiver of electromagnetic radiation are located at a transparent position of the pipe. The pipe has a successively decreasing diameter until the point where the electronic devices are located. The diameter at this point determines the maximum size of individuals to be measured. The device comprises of tracer of unwanted signals, unit for the isolation - rejection of strays, and electronic enumerator.

Innovative aspect: This fish fry counter can count fish fry that weigh as little as .05 to 0.30 grams.

Main advantages: This fish fry counter is easy to use, measures with accuracy and offers better management in aquaculture farms during the early stages of the fishes life.

Intellectual Property Rights Others (registered design, plant variety right, etc) Comments: Partnership/other contractual agreement(s)

Keywords selection Aquaculture Fish / Fisheries / Fishing Technology Marine Science

Application domain selection Agricultural and marine resources and products

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance

Technical co-operation, Manufacturing/ subcontracting agreement

Type of partner sought Industrial/Commercial enterprise/SME

The specific area of activity of the partner Promotion, Marketing, Trade, Fishing & Aquaculture Production Systems

Name of the Innovation Relay Centre

IRC Hellenic

Ref: TO_GR_3835

Automated management and feeding system for intensive fish hatcheries

Type of profile: Technology Offer

Abstract: Computerized system for the feeding management in intensive hatcheries. Required hardware and software has been developed to control the feeding of marine larvae. The distributed amount of plankton required by larvae can be defined either according to tables or by a Fuzzy Logic Controller (FLC) that adapts the delivered amounts of food to the needs of the reared population.

Detailed description: A computerized system for the feeding management in intensive fish hatcheries has been developed. Daily amounts of plankton required by larvae are determined and prototype-feeding tables are created as well as distribution patterns. Required hardware and software has been developed to control the feeding. The distributed amount can be defined either according to tables or by a Fuzzy Logic Controller (FLC) that adapts the delivered amounts of food to the needs of the reared population. Feeding is 24 hours programmable. The system computes the required food (plankton organisms) and activates a peristaltic pump and electro-valves for the distribution. The FLC utilizes five linguistic variables describing the state of the population and a rule base composed of 316 rules.

Innovative aspect: Computer based feeding system for hatcheries. Fuzzy Logic Controller

Main advantages: Better performance of the reared populations. The required manpower for the rearing was reduced by fifty percent. The possibilities for making mistakes is minimized.

Intellectual Property Rights Others (registered design, plant variety right, etc) Comments: Partnership/other contractual agreements

Keywords selection Aquaculture Fish / Fisheries / Fishing Technology Marine Science

Application domain selection Agricultural and marine resources and products

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance

Technical co-operation Manufacturing/ subcontracting agreement

Joint Venture agreement

Type of partner sought Industrial/Commercial enterprise/SME

The specific area of activity of the partner Promotion, Marketing, Trade, Fish feeding, Research and development

Name of the Innovation Relay Centre

IRC Hellenic

Ref: TR_CY_3873

Shrimp farming of species *Panaeus Indiquis* in Cyprus waters

Type of profile: Technology Request

Abstract: A Cyprus company wishing to establish a shrimp farm in Cyprus is seeking know-how and information on all aspects of production, from larvae to end product stage. Viability of the farm and production techniques is of major importance. Cost and energy reduction along with environmental compliance are also topics that the company would like to address. Main types of desired cooperation would be technical cooperation or joint venture.

Detailed description: A Cyprus fish farming company is interested in starting production of shrimp's species (*Panaeus Indiquis*). Know how for the overall production chain is required from farm and production techniques to machinery. Major topics will be environmental compliance, cost and energy reduction. The company can allocate land facilities of min. 1500m², for the specific project. The land facilities are at sea level. The company can also allocate personnel with vast hatchery experience. It also has some equipment that is used currently at the hatchery. The company can also provide state of the art packing plant, IQF (International Quick Freezing) facilities and processing equipment for the end product.

Innovative aspect: The company can allocate land facilities of min. 1500m², for the specific project. The land facilities are at sea level. The company can also allocate personnel with vast hatchery experience. It also has some equipment that is used currently at the hatchery. The company can also provide state of the art packing plant, IQF (International Quick Freezing) facilities and processing equipment for the end product

Current state of development of the technology Other. Existing shrimp farming companies wishing to co-operate with the Cyprus company

Intellectual Property Rights Others (registered design, plant variety right, etc)

Keywords selection Aquaculture

Application domain selection Agricultural and marine resources and products

Comments about market applications: Shrimp farming of species *Panaeus Indiquis*

Collaboration details:

Type of collaboration sought: Technical co-operation Joint Venture agreement Financial resources

Type of partner sought Industry

The specific area of activity of the partner Aquaculture partners

The tasks to be performed of the partner sought Know-how transfer, advice on all aspects for the establishment of the shrimp farm

Name of the Innovation Relay Centre

IRC Cyprus

Ref: TR_CY_3874

Blue Fin Tuna ranching

Type of profile: Technology Request

Abstract: A Cyprus Fish Farming and processing SME, is looking for partners interested in transferring the know how for Blue Fin Tuna ranching. The company acquires off shore and on shore facilities and it is involved in the fishing of Blue Fin Tuna in the waters of Cyprus region. Additionally, the company has the know-how for the fattening and trading of other fish farming species. The company is interested in establishing a joint venture or a know-how transfer agreement with reputable European partners.

Detailed description: A Cyprus Fish Farming and processing SME, is looking for partners interested in transferring the know how for Blue Fin Tuna ranching. The company acquires off shore and on shore facilities and it is involved in the fishing of Blue Fin Tuna in the waters of Cyprus region. Additionally, the company has the know-how for the fattening and trading of other fish farming species such as Sea Bream, Sea Bass, Porgy etc. The company is interested in establishing a joint venture or a know-how transfer agreement with reputable European partners from environmental studies issue up until the actual harvesting part of the tuna. The company is looking to collaborate with aquaculture companies that are actively involved in the Blue Fin ranching method. Blue Fin ranching is a method for catching the fish to be fattened up in holding pens. The company would like to start the ranching method in the waters of the Cyprus region and use its own off shore and on shore facilities in Cyprus. In addition the company has the license and the processing facilities for packing fresh and frozen items including Tuna.

Innovative aspect: The company is looking to collaborate with aquaculture companies that are actively involved in the Blue Fin ranching method. Blue Fin ranching is a method for catching the fish to be fattened up in holding pens. The company would like to start the ranching method in the waters of the Cyprus region and use its own off shore and on shore facilities in Cyprus. In addition the company has the license and the processing facilities for packing fresh and frozen items including Tuna.

Current state of development of the technology Other (please specify) Companies with experience in Blue Fin Tuna Ranching

Intellectual Property Rights Others (registered design, plant variety right, etc)

Keywords selection Fish / Fisheries / Fishing Technology

Application domain selection Agricultural and marine resources and products

Collaboration details:

Type of collaboration sought: Technical co-operation Joint Venture agreement Financial resources

Type of partner sought Industry

The specific area of activity of the partner Aquaculture companies

The tasks to be performed of the partner sought Know-how transfer

Name of the Innovation Relay Centre

IRC Cyprus

Ref: TR_CY_3880

Temperature monitoring stickers

Type of profile: Technology Request

Abstract: A Cyprus SME specialized in the production of ready meals (home meals replacement) is looking for stickers that will be placed on the packaging (disposal containers) of the ready meals and monitor the temperature of the goods while these are stored under freeze conditions. The company through the change of color of the sticker can check the temperature of each package individually. A commercial agreement with technical assistance partner is sought.

Detailed description: A Cyprus SME specialized in the production of ready meals (home meals replacement) is looking for stickers that will be placed on the packaging (disposal containers) of the ready meals and monitor the temperature of the goods while these are stored under freeze conditions. The company through the change of color of the sticker can check the temperature of each package individually. A commercial agreement with technical assistance partner is sought. Specifically, the SME is looking for small stickers that can monitor the temperature of the end product through the change of the color while this is stored in the freezing area of the plant.

Innovative aspect: Small stickers that can monitor the temperature of the end product through the change of the color while this is stored in the freezing area of the plant.

Main advantages: To be placed on the package of the product (disposal containers).

Current state of development of the technology Already on the market

Intellectual Property Rights Others (registered design, plant variety right, etc) Comments: Stickers that are placed on the end-product and monitor temperature

Keywords selection Food Packaging / Handling Detection and Analysis methods

Application domain selection Food - Agro Industry

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance

Type of partner sought Industry

The specific area of activity of the partner Production of temperature monitoring stickers

Name of the Innovation Relay Centre

IRC Cyprus

Ref: TR_CY_3881

Raw materials for the production of fish ready meals

Type of profile: Technology Request

Abstract: A Cyprus SME specialized in the production of ready meals (home meals replacement) is looking for raw materials for the production of fish ready meals (cook & chill / cook & freeze). Specifically, the company is interested to be supplied by reputable European companies with high quality fillets of trout, salmon, Sea Bass, Sea Bream as well as with fillets of other Mediterranean species. Additionally, the company is also interested in gutted fish (different species). A commercial agreement with technical assistance partner is sought.

Detailed description: Supply of fish fillets (trout, salmon Sea Bass, Sea Bream etc) as well as gutted fish.

The company will use on its premises these raw materials for the production of different types of fish ready meals (home meals replacement)

Current state of development of the technology Already on the market

Intellectual Property Rights Others (registered design, plant variety right, etc)

Keywords selection Food Technology

Application domain selection Food - Agro Industry

Comments about market applications: The company is interested to be supplied by reputable European companies with high quality fillets of trout, salmon, Sea Bass, Sea Bream as well as with fillets of other Mediterranean species. Additionally, the company is also interested in gutted fish (different species).

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance

Type of partner sought Industry

The specific area of activity of the partner Fish production and processing

The tasks to be performed of the partner sought Production of fish fillets

Name of the Innovation Relay Centre

IRC Cyprus

Ref: TR_NO_3886

Products based on marine protein and marine oil

Type of profile: Technology Request

Abstract: A Norwegian company is looking for methods and processes to upgrade present products based on fish offal. The aim is to produce higher value products. The present products are marine oil, fish meal and protein concentrate.

Detailed description: Marine products based on fish offal contain valuable substances for various industrial products. Marine protein concentrate may be refined and used as ingredient in e.g. food, detergents and pharmaceuticals. Marine oil (fat) may be refined into ingredients for products like health food, cosmetics, biochemicals and various technical products.

Innovative aspect: New markets based on successful further processing of existing products have the potential of improved profitability and a more diversified market.

Main advantages: The present products are used as additives in the cattle and fish feed industries and the price is low. Refined products sold to another industrial sector will achieve better price in the market.

Intellectual Property Rights Others (registered design, plant variety right, etc)

Keywords selection Fish / Fisheries / Fishing Technology

Application domain selection Fisheries, resources of the sea

Collaboration details:

Type of collaboration sought: License agreement Commercial agreement with technical assistance
Technical co-operation

Type of partner sought Research organization or industry

The specific area of activity of the partner Processing of marine products

Name of the Innovation Relay Centre

IRC Norway

Ref: TO_NO_3887

Flexible grids for sorting out undersized fish from bottom trawl

Type of profile: Technology Offer

Abstract: A Norwegian institute has developed a new lightweight flexible sorting grid for bottom trawls. The grid can be applied to purse seine, Danish seine and floating trawls. The problems when using rigid steel grids are solved or greatly reduced.

Detailed description: To reduce catch of undersized fish the bottom trawl has a sorting grid. Flexible grids for size selection has been tested and the results are promising. The institute has the know-how, the testing experience, the set up for trials and the selection effect documentation. No permanent deformations of the grid components were observed and there was no disruption on lower panels. The weight of the flexible grid in water is reduced by 90% compared to steel grids. Advantages are observed when handling and hauling the trawl. The safety risks in bad weather are eliminated.

Innovative aspect: The rigid steel bottom trawl grids are often deformed and require frequent inspection and service. The main problem is difficulties with general handling on deck, especially on smaller boats, and safety risks for the crew when using the system under bad weather conditions. The new lightweight flexible grid solves most of the problems experienced with rigid steel grids.

Main advantages: Reduced catch of undersized fish when trawling without handling/hauling problems and no safety risks for the crew.

Current state of development of the technology Available for demonstration? field tested

Intellectual Property Rights Patent(s) granted

Keywords selection Fish / Fisheries / Fishing Technology

Application domain selection Fisheries, resources of the sea

Collaboration details:

Type of collaboration sought: License agreement Manufacturing/ subcontracting agreement

Type of partner sought Industry

The specific area of activity of the partner Fishing gear producer

Name of the Innovation Relay Centre
IRC Norway

Ref: TO_NO_3888

Juvenile production of marine fish

Type of profile: Technology Offer

Abstract: A Norwegian institute has developed know-how on production of farmed marine fish. The competence is offered and can be applied to various species of marine fish

Detailed description: Farming of marine fish is similar to industrial processes that have to be controlled carefully to obtain good results. The offered know-how covers areas like:

- live feed production technology
- control of nutrition quality
- larvae nutrition
- microbiological control/water quality
- immunity stimulation
- physical parameter in fry production

Innovative aspect: A controlled feeding regime for production of marine fish larvae.

Main advantages: Increased survival rate and growth rate in production of marine fish. The methodology has been proven on species like turbot, halibut and cod.

Current state of development of the technology Already on the market

Intellectual Property Rights Others (registered design, plant variety right, etc)

Keywords selection Aquaculture

Application domain selection Agricultural and marine resources and products
Fisheries, resources of the sea

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance

Type of partner sought Industry, academy or research organization

The specific area of activity of the partner Fish farming

Name of the Innovation Relay Centre

IRC Norway

Ref: TO_NO_3889

Compact, cost-effective mechanical wastewater treatment

Type of profile: Technology Offer

Abstract: A Norwegian company has developed a unique fine-mesh sieve system for treatment of municipal and industrial wastewater. Advantages over conventional systems include small floor space requirement, low investment costs, separation of suspended particles and sludge de-watering in one compact unit. The company is searching partners for distribution and technical support in order to develop new markets.

Detailed description: The technology is patented and well established in the Norwegian market. The company has more than 10 years of experience in municipal wastewater treatment (WWT) and the technology meets the EU requirements. References from research and scientific studies confirm the 50% SS (Suspended Solids) and 20% BOD5 (Biological Oxygen Demand) removal from the effluents, as well as a sludge dewatering to 25 - 35 % TS (total solids) concentration. There are a wide range of possible applications for the technology, such as primary treatment plant as a standalone unit, primary treatment for secondary or tertiary WWT plants (WWTP), replacement of conventional sedimentation systems, increase of capacity at overloaded WWTP, treatment of industrial process and wastewater, etc.

Innovative aspect: Feasibility studies have shown that the investment costs are 40% of the conventional technology, and the area requirement is less than 10%. Automatic, effluent-load operated units ensure a constant and efficient separation process. The primary sludge leaving the unit has a significant higher concentration of solids (25-35% compared to 1-2%) than prevailing technologies due to the integrated sludge de-watering (patented).

Main advantages: - Environmentally friendly
- Meets EU requirements - Low investment cost

Current state of development of the technology Already on the market

Intellectual Property Rights Patent(s) granted

Web link to present innovative product: <http://www.salsnes-filter.no>

Keywords selection Aquaculture Fish / Fisheries / Fishing Technology

Application domain selection Agricultural and marine resources and products

Comments about market applications: Agricultural and marine resources and products

Comments about market applications: Municipal wastewater treatment plants for primary treatment in coastal zones defined as less sensitive recipients. Fish food processing industry, certain applications in the pulp and paper industry

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance
Technical co-operation

Type of partner sought The company is looking for a partner with knowledge and experience in the municipal and industrial wastewater market, excellent relations in the local engineering business and with the resources and know-how to establish the necessary technical assistance to the customers.

The specific area of activity of the partner The technical co-operation and assistance wanted will be in relation to testing of applications, technical training of operating personnel, and after-sales support for service and maintenance. The technical support provided by the offering company will include technical training, technical consultancy and engineering assistance for the design of wastewater treatment plants and other applications

Name of the Innovation Relay Centre
IRC Norway

Ref: TO_GR_3898

SPARTACUS system-automation technology (robotic system) in fish landing ports and aquaculture packaging units of fish

Type of profile: Technology Offer

Abstract: The SPARTACUS system aims to introduce automation technology (robotic system) in fish landing ports and aquaculture packaging units of fish. The robot inserts special tags in a specific area of the fish head (operculum-gill cover) avoiding the injury of the fish. The tag contains all the necessary information (and additional as an option) in order to comply with the council regulation No 104/2000 of December 17 1999

Detailed description: The SPARTACUS system comprises:

1. The pattern recognition subsystem which includes a camera, the controller of the camera and the controller software. The use of controlled lighting conditions make the subsystem independent of ambient luminance. The goal of this subsystem is to determine and guide the robotic system to the gill area of the fish. The system can be trained to recognize any number of fish species produced by marine and fresh water aquaculture as well as fisheries of North and South Europe. The required CPU power, needed for intelligent algorithms, is provided from a sufficiently powerful computer system. 2. The feeding mechanism is able to feed uninterruptedly the robotic system with gill tags. The tagging system is able to tag fishes with no physical contact in order to have a subsystem with no delays in the production line 3. This robotic subsystem is able to put the tags in the right position on the fish. The design of the tagging procedure is made in such a way that it inserts no delays in the industrial production line. In order to achieve this goal the system tag capacity is in the area of 80 fishes/minute (adjustable from 30-100). Finally, the system is easy to operate using a user friendly GUI and a touch screen monitor of the controller subsystem.

Innovative aspect: The insertion of tags on fishes in the production line results in the creation of recognizable brand name products.

Main advantages: -Easy recognition of the origin of the fish (legal or illegal activity) by the consumers.
-Secure the production of the legally established fishermen co-operatives.
-Facilitate the awareness of the public towards consumption of legal products.
-Facilitate the traceability of the products.

Intellectual Property Rights Exclusive rights

Keywords selection Aquaculture Fish / Fisheries / Fishing Technology
Food Packaging / Handling Food Processing
Food Microbiology / Toxicology / Quality Control

Application domain selection Agricultural and marine resources and products
Food - Agro Industry Standards - Quality

Collaboration details:

Type of collaboration sought: License agreement Technical co-operation

Name of the Innovation Relay Centre
IRC Hellenic

Ref: TR_CY_3900

Participation in EU research funded projects

Type of profile: Technology Request

Abstract: A Cyprus consulting firm is interested in participating in EU funded research projects for the investigating how the creation of environmentally- and economically-sustainable "artificial reefs" in sensitive area in Cyprus will influence:

- The Life under the sea
- Existing Environmental Problems

Detailed description: The Cyprus SME is interested in investigating the possibilities of increasing the fish stock in the sea by applying a complete environmental management system and a methodology for the protection of the beach. Some areas constitute the major economical lung of the island. However, for the last years the eutrophication phenomenon has been noticed in some of those areas. This phenomenon has a negative result in the sea life. Firstly, the consortium will direct record of clues for the creation of a model, which will identify the pollution in the nearby area, and to find out the real reason of the creation of the phenomenon in those sensitive areas.

When planning an artificial reef creation program, potential environmental impacts affecting the biological and ecological community need to be considered. Specifically, the living environment, trophic relationships, life stages, rare and endangered species, special populations or communities and indigenous or endemic species need to be taken into consideration.

Current state of development of the technology Other (please specify): EU research funded project

Intellectual Property Rights Others (registered design, plant variety right, etc)

Comments: EU research funded project

Keywords selection Marine Science

Application domain selection Agricultural and marine resources and products

Collaboration details:

Type of collaboration sought: Other

Type of partner sought Industry, research organization

The specific area of activity of the partner Form a consortium

The tasks to be performed of the partner sought The tasks of each partner will be decided when the consortium will be formed and the proposal will be written

Name of the Innovation Relay Centre

IRC Cyprus

Ref: TR_CY_3901

Request for raw material for processing of fish fillets (sea bream, sea bass)

Type of profile: Technology Request

Abstract: A Cyprus SME specialized in the processing of fish (sea bass, sea bream) is looking for raw materials for the processing of fish fillets. Specifically, the company is interested to be supplied by reputable Greek companies with high quality fillets of Sea Bass, Sea Bream as well as with fillets of other Mediterranean species. Additionally, the company is also interested in gutted fish (different species). A commercial agreement with technical assistance partner is sought.

Detailed description: A Cyprus SME specialized in the processing of fish (sea bass, sea bream) is looking for raw materials for the processing of fish fillets. Specifically, the company is interested to be supplied by reputable Greek companies with high quality fillets of Sea Bass, Sea Bream as well as with fillets of other Mediterranean species. Additionally, the company is also interested in gutted fish (different species). The company is interested in establishing cooperation with a Greek company in order to be supplied with small quantities of fish on a weekly basis for covering its production needs. A commercial agreement with technical assistance partner is sought.

Current state of development of the technology Already on the market

Intellectual Property Rights Others (registered design, plant variety right, etc)

Keywords selection Fish / Fisheries / Fishing Technology

Application domain selection Agricultural and marine resources and products

Comments about market applications: Greek fish farming companies mainly of sea bass and sea bream interested in collaborating with a Cypriot company and establish a commercial agreement with technical assistance

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance

Type of partner sought Industry

The specific area of activity of the partner Fish farming companies (sea bass, sea bream and other Mediterranean species)

The tasks to be performed of the partner sought Supply of fish products

Name of the Innovation Relay Centre

IRC Cyprus

Ref: KHE_PL_3904

Know-how in brine salting process of herring

Type of profile: Know-how/ expertise

Abstract: A consultancy company has 47 years experience in fresh, frozen, salted, marinated, smoked and canned fish products technology. The company has developed a specific process for brine salting of headed and gutted herring (fresh or frozen).

Detailed description: A consultancy company is specialized in seafood science and technology, especially in new fish products. In the area of salted fish products the company experience is based upon several years of research opened on using instrumental and sensory evaluation of texture, determination of protein hydrolysis products during ripening process as well as industrial panel assessment in comparison to conventional salted fish products. The company has elaborated new technology process for brine salting of headed and gutted herring, creating desirable properties in salting product at relatively low concentration of salt and relatively long keeping time during refrigerated storage.

Innovative aspect: Low concentration of salt in the processed fish products.

Main advantages: Short time of ripening process without using of any artificial additives or enzyme preparations. Good quality of products with a low concentration of salt. Good yields of salted fish after ripening period.

Current state of development of the technology Available for demonstration, field tested

Intellectual Property Rights Others (registered design, plant variety right, etc)

Keywords selection Fish / Fisheries / Fishing Technology Food Technology

Application domain selection Agricultural and marine resources and products
Food - Agro Industry

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance

Type of partner sought Industrial company interested in developing the processing technology

The specific area of activity of the partner Fish sector

Name of the Innovation Relay Centre
IRC West Poland

Ref: TO_NL_3908

A new composite sheet covering material for in- and outdoor applications

Type of profile: Technology Offer

Abstract: A Dutch company offers a novel system that uses a carrier on which biomass can grow. The wastewaters and off-gases are fed counter- or co-current through the reactor, resulting in biological breakdown of pollutants and odor compounds. The system has been supplied to poultry and fish processing plants. The company is looking for a license contract with an environmental contractor that has experience in industrial wastewater treatment and/or off-gas handling.

Detailed description: The system developed by a Dutch company is interesting for food processing industries, since it combines biological wastewater treatment and odor control from off-gases. Biomass develops in the system on specially designed plastic carrier beads of 12-30 mm in diameter. The surface area of the smaller beads is 500 m²/m³. These beads can be removed from the system to selectively remove biomass in a hydro-cyclone. The beads are then re-introduced. The beads can move slowly top-down through the system in several days. The wastewater to be treated is distributed over the fixed bed and is re-circulated over the bed. The system is also known as moving-bed trickling filter. The off-gas to be treated is introduced at the bottom and will leave the system from the top, flowing around the wetted beads. In comparison to the treatment of off-gases in conventional biological systems this system has little pressure drop (10 cm) and can handle much larger volumes of off-gas than is usually required in for instance food industries. The system is patented including the removal and introducing equipment for the beads. The system has been tested in various pilot tests and several locations. Universities and consulting engineering companies have studied and tested the system in the past. Off-gas odor and VOC (volatile organic compounds) removal The system has been tested separately, without wastewater, for the removal of odor compounds and various organic compounds (VOC). Due to the large surface area of the beads and the absence of short-circuiting, the system's performance is superior to that of other biological off-gas treatment units that employ biological carrier materials, e.g. compost or mixtures of compost and polystyrene beads. For high loads of organic off-gas compounds the system is interesting, since produced biomass can be removed selectively. Also compounds resulting in increased biomass growth as a result of high yields, e.g. styrene, can be treated in the system. The superior design characteristics of the beads result in low-pressure drops over the bed. First full-scale systems The first full-scale systems were constructed for poultry and fish processing plants, in which high-loaded wastewaters and strong-smelling off-gases are set free. The systems are designed as tower systems with a total height of up to 20 meters, thus only requiring limited floor space. Prior to the biological treatment, suspended solids have to be removed from the wastewaters in conventional dissolved air flotation (DAF) units. Surplus sludge from the biological system can be handled together with the sludge from the DAF-units. At all locations discharge regulations for the community sewer systems are met, resulting in considerable cost reductions as compared to the untreated discharge situation. Innovative Aspects: By employing a trickling bed concept, large amounts of off-gas can be handled at very low additional cost in a wastewater treatment system. By using the off-gas as forced aeration the trickling filter bed can be constructed substantially higher, even up to 10 meters. This tall design results in limited space requirements for the combined system. Main Advantages: The system can handle both wastewater and off-gases, thus resulting in a smaller space requirement and substantially less investment costs, as compared to two separate treatment systems. Due to this small space requirement, the system is ideal as a retrofit system for space-lacking food industries. The active biomass control on the beads avoids any clogging of the carrier material.

Current state of development of the technology Already on the market

Intellectual Property Rights Patent(s) granted Comments: Patent granted in most European countries, USA, Japan. Patent nr: EP 0641295, EP 0785911

Keywords selection Food Processing

Application domain selection Food - Agro Industry

Collaboration details:

Type of collaboration sought: License agreement Technical co-operation

Type of partner sought Industry

The specific area of activity of the partner Preferably an environmental contractor which has experience in industrial wastewater treatment and/or off-gas handling.

Name of the Innovation Relay Centre

IRC-NL

Ref: TO_NL_3925

Cold Metal Spray - eight composite metals are sprayed on to virtually any surface using conventional spray equipment

Type of profile: Technology Offer

Abstract: LuminOre is a patented metallizing process that seamlessly applies cold sprayable metal to almost any surface. Available in eight metals: Aluminum, Brass, Bronze, Copper, Iron, Nickel-Silver, Stainless Steel and X-Metal; LuminOre is applied using conventional HVLP (high volume, low-pressure) spray equipment. Recent innovations have allowed LuminOre to also offer a Castable Metal line.

Innovative aspect: Metal and a polymer binder combine during a chemical reaction to make LuminOre metal composite. This makes the composite greater than the sum of its parts. The result Durable metallized surfaces that will capture any design or detail. Additionally, LuminOre Traditional metals are a Class "A", Class "1" material, which means it will not support a flame. It can withstand 1,500 PSI without pulling away from the substrate. It is non-corrosive and it will not significantly leach due to the properties of the binder. LuminOre does not conduct electricity and it will not arc in a microwave oven, opening the doors to a wide range of electronic applications

Main advantages: LuminOre provides the look, feel and durability of solid cast metal without the expense, weight, inconvenience and time of a forged metal product. It is most economical at 8 to 10 mils thick (1 mils = .001). While comprised of up to 95 percent metal, LuminOre lacks the weight of solid metal. At its standard 10-mil thickness, LuminOre adds less than four ounces per square foot to an object. As a result of using LuminOre, our customers have found that they are able to increase their revenues significantly without a large investment. LuminOre copper has successfully been tested on anti-fouling properties one year in the water. Because the binder holds the metal, LuminOre copper is also environment friendly.

Current state of development of the technology Already on the market

Intellectual Property Rights Patent(s) granted

Web link to present innovative product: www.luminore.com / www.herckmetal.com

Keywords selection Aquaculture Fish / Fisheries / Fishing Technology Marine Science Food Processing Food Technology

Application domain selection Agricultural and marine resources and products Food - Agro Industry Fisheries, resources of the sea

Collaboration details:

Type of collaboration sought: License agreement Commercial agreement with technical assistance

Name of the Innovation Relay Centre
IRC-NL

Ref: KHE_PL_3926

Know-how in production of glass reinforced polyester (GRP) marine equipment.

Type of profile: Know-how/ expertise

Abstract: A Polish SME has 8 years experience in production of different kinds of marine equipment made of hand-lay glass reinforced polyester. The company offers technical assistance at all types of glass reinforced polyester production.

Detailed description: The Polish SME established in 1996 specializes in could moulded reinforced polyester as well as epoxy and acrylic resin. The products are hand-lay made? the glass mate and cloth are saturated with polyester resin. The production scope includes: ready sailing yachts, ready motor speed boats, ready raw/motor/sailing dinghies, different elements of yachts: hulls, decks, interior sections, hatches, tanks, covers, rudders as well as different details: bumpers, side/front panels or lamp panels. The total production capacity is 200 tons per year.

Innovative aspect: The production process uses different modern rough materials for glass reinforcing.

Main advantages: 8 years experience and cost-effective production process of glass reinforcing with polyester resin.

Current state of development of the technology Already on the market

Intellectual Property Rights Others (registered design, plant variety right, etc)

Keywords selection Aquaculture Marine Science

Application domain selection Industrial manufacture Agricultural and marine resources and products

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance Manufacturing/ subcontracting agreement

Type of partner sought Trade/industrial company.

The specific area of activity of the partner Boat/yacht building, industrial glass reinforced polyester production.

The tasks to be performed of the partner sought Subcontracting cooperation, trade agreement.

Name of the Innovation Relay Centre

IRC West Poland

Ref: TO_FR_3929

Integration of Hydrogen and Fuel Cell Systems for marine and insulated sites applications

Type of profile: Technology Offer

Abstract: Alca Torda Applications is a pioneer company in the field of design and integration of fuel cells on boat aboard and in marine isolated sites. It also provides engineering advice and contract undertaking concerning projects on new energy technologies. Employees have a long experience of new propulsion technologies, offshore energy production and strong abilities on hydrogen as energy source. Alca Torda Applications is the first company who have fit with success a fuel cell on board a sailing boat during "la Route du Rhum" sailing race across Atlantic Ocean. Alca Torda is the Latin name of Torda auk. Since the sink of the tanker "Torrey Canyon" in March 1967, they regularly are the main victims of oil slick and oil dumping.

Detailed description: Alca Torda Applications design and manage the integration fuel cell motors for marine applications. The company is able to fit on board ships UPS (Uninterrupted Power Supply), APU (Auxiliary Power Unit) or for smalls crafts propulsion systems. UPS are able to provide electric power in place of batteries in case of electric shut down or black out. APU provide electric power for all kind of systems on board. Alca Torda Applications had already pre-design a fuel cell propulsion system for fishing boat with a length of less than 12 meters. This system is direct hydrogen, without any use of Diesel Oil or gasoline. A new concept of designed fuel cell motors can allowed also the use of biomass or chemical fuels cheaper than petroleum based ones. Alca Torda Applications can also provide energy (electricity, fresh water, gas or heat) for islands or aquaculture sites based on hydrogen technologies.

Innovative aspect: Marine use of fuel cell and hydrogen technologies.

Main advantages: The end users advantages are a wider autonomy (they can already be completely energy self sufficient), more efficient technologies, less or no pollution or emissions (outlet smoke, noise), Renewable Energy upgrading.

Intellectual Property Rights Secret know-how

Web link to present innovative product: <http://www.alca-torda.com>

Keywords selection Aquaculture Fish / Fisheries / Fishing Technology

Application domain selection Industrial manufacture Agricultural and marine resources and products

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance
Manufacturing/ subcontracting agreement

Type of partner sought Ship owner Ship yard Authorities

Name of the Innovation Relay Centre

IRC North-Nord Manche

Ref: TR_PL_3930

Automatic system for filleting line.

Type of profile: Technology Request

Abstract: A Polish SME specializing in sea fish processing (especially cod processing) is seeking devices and machines for sorting raw material, glacing, sorting frozen fillets by size and packing. The company wants to make commercial agreement with technical assistance with the European partner.

Detailed description: The Polish SME established in 1990 specializing in sea food processing is interesting in co-operation with the company producing machines and devices for the food industry. The following equipment is necessary: sorting machines for raw material and final product (frozen products), filleting table, glacing device and packing system. The filleting table (bench) should consist of (include) 16-18 standings (positions), sorting system (machine) for raw material and efficiency evaluation system of each worker. The sorting machine should sort the final product (frozen fillets) by sizes. High accuracy and computer-control of mentioned equipment is needed. Daily process capacity: 20 tons of raw material.

Intellectual Property Rights Others (registered design, plant variety right, etc)

Keywords selection Fish / Fisheries / Fishing Technology Food Processing

Application domain selection Agricultural and marine resources and products
Food - Agro Industry

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance

Type of partner sought Industry

The specific area of activity of the partner Food machinery

The tasks to be performed of the partner sought To provide automatic system for fish sorting and packing.

Name of the Innovation Relay Centre
IRC West Poland

Ref: TO_IS_3931

Automatic Disinfectant system, using mist as means of distributing the disinfectant ByoTrol.

Type of profile: Technology Offer

Abstract: A small Icelandic company has developed the DIS system. The dis system is a revolutionary new disinfection technology, which uses the environmentally friendly disinfectant Byotrol in a mist unit, distributing the disinfectant automatically everywhere air can access. The Icelandic company is interested in making a Commercial agreement with technical assistance, License agreements, and technical cooperation or joint venture agreements with a European partner. We already have partners in the UK, Norway, Sweden and the Faeroe Islands.

Detailed description: A small Icelandic company, DIS ltd, has developed a new disinfection technology, which uses the environmentally friendly disinfectant, Byotrol. The dis system is a revolutionary disinfection technology. A small unit, using a unique atomization technique, produces a dense fog/mist of disinfectant which reaches places hard to clean by traditional methods. The externally placed unit can serve multiple rooms, processing plants, animal sheds or cold stores and is fully automatic. Research tests demonstrate a 99.99% kill rate for all kinds of bacteria including Salmonella, Listeria and Staphylococcus. The dis system is effective regardless of whether surfaces are inclined upward, downward or horizontally. Units such as processing machines, conveyor belts and other units which are difficult to disinfect by traditional procedures, are easily disinfected by the dis system. The dis system can be used in all locations in the production process, from food production through breeding houses, animal and vehicle sheds, slaughterhouses, food processing plants, transportation, dairies and cold stores. In other words the dis system works everywhere that food, livestock, butchered and processed meat, fish, milk and cheese may be infected or cause infection and where there is danger of cross contamination. The dis system is completely automatic and does not have to rely on human accuracy. The built-in computer is specially programmed for every house or room, and records and prints a report of the whole process. This is very important for quality management systems such as the ISO 9000. The PLC controlled dis system unit is also programmed with a built in safety interval for the evacuation of personnel before the disinfecting process begins. The dis system helps you protect the environment by only using an environmentally friendly and non-corrosive disinfectant named Byotrol. Byotrol is nontoxic in the solution used. The dis system has a world wide exclusive license to use the revolutionary Byotrol solution in a mist disinfection unit. The company has systems installed in Iceland, UK, Sweden, Norway and the Faeroe Islands. The Icelandic company is seeking a Commercial agreement with technical assistance, License agreement, and technical cooperation or Joint venture agreement with a European partner.

Innovative aspect: The method of using fog automatically to disinfect with Byotrol.

Main advantages: Automatic disinfection. Better disinfection than by traditional methods and chemicals. Non-corrosive.

Current state of development of the technology Already on the market

Intellectual Property Rights Patent(s) applied for

Web link to present innovative product: www.dis-system.com

Keywords selection Aquaculture Fish / Fisheries / Fishing Technology Marine Science
Food Processing Food Technology Food Microbiology / Toxicology / Quality Control Safe production
methods

Application domain selection Industrial manufacture Chemical industry
Veterinary Pharmaceutical/Cosmetics Agricultural and marine resources and products
Food - Agro Industry Fisheries, resources of the sea Standards - Quality

Collaboration details:

Type of collaboration sought: License agreement Commercial agreement with technical assistance
Technical co-operation Joint Venture agreement

Type of partner sought The Icelandic company is open to most sort of cooperation.

The specific area of activity of the partner The company is looking for both industrial partners as well
as research partners within each territory.

Name of the Innovation Relay Centre
IRC Western and Southern Sweden/Iceland

Ref: TO_IS_3932

Automatic Long Line Fishing System

Type of profile: Technology Offer

Abstract: An Icelandic inventor has developed automatic long-line fishing system. The system is a computerized device to automatically clean and adjust deformed hooks, replace those beyond repair or missing and then bait the hooks again. The entire process is made simultaneously and there is no delay in hauling the line on board the vessel. When shooting out the computer monitors the entire process and counts the hooks. The company is interested licensing, joint venture or a manufacturing agreement.

Detailed description: An Icelandic inventor has over the last few years been developing a totally new fully automated system for long-line fishing. The process of hauling in the line, adjust or replace damaged hooks is extremely time consuming. In addition because of mistakes many hooks go undetected and are therefore useless and reduce the possibility of catching fish. Big long-lining boats use ca. 30.000 hooks per day. Depending on the type of fish being caught, between 5% and 70% of the hooks are damaged and must be adjusted or replaced. The process of adjusting or replacing the hooks is time consuming and in many/most cases fishing boats have personnel entirely devoted to the process. The "Automatic Long-line Fishing System" automatically adjusts deformed hooks and replaces those that are beyond repair or are missing. The hooks go into spiral racks on the storage reel for the line and are precisely baited without damaging the bait. The system uses both monofilament mainline, a traditional one and any kind of hook including a circular one. Briefly, the operation is as follows:

1. The line is hauled on board by a line winch
2. Hooks are automatically cleaned
3. They pass through a sensor which analyses each hook
4. Deformed hooks are readjusted to meet preprogrammed standards, or they are automatically cut off and replaced with new hooks
5. They proceed into the spiral slots on the storage reel for the line
6. Finally they are precisely baited, without damaging the bait.

The six step progress is made simultaneously and therefore do not delay hauling the line onboard the vessel. In addition to this, when shooting out the line the computer monitors the entire operation including counting the hooks. For those who have worked onboard a long-lining vessel or managed one can understand quickly the benefits of the system. The system is time and labor saving, and at the same time offers the possibility to monitor the entire process of hauling in and shooting out the line.

Because the system is computerized and is preprogrammed (by user), none of the hooks goes undetected. This means that all the hooks are in place and in good condition during shooting out, while at the same time reducing the use of new hooks because damaged hooks which can be repaired are. This both reduces cost and improves the possibility of catching fish. The system can be fitted to vessels down to the size of 5 tons. The inventor is looking for a company interested in License Agreement, Joint Venture or a Manufacturing Agreement.

Innovative aspect: The "Automatic Long-line Fishing System" simultaneously adjusts deformed hooks and replaces those that are beyond repair or are missing and baits the hooks while hauling in the line. The system can use both monofilament mainline, a traditional one and any kind of hooks.

Main advantages: Time saving, Labor saving, Cost saving, Waste saving, Improves the possibility of catching fish

Intellectual Property Rights Patent(s) granted

Keywords selection Fish / Fisheries / Fishing Technology Marine Science

Application domain selection Industrial manufacture Fisheries, resources of the sea

Collaboration details: **Type of collaboration sought:** License agreement Manufacturing/ subcontracting agreement Joint Venture agreement

Type of partner sought The Icelandic inventor is open to most sort of agreements. License agreement, Joint Venture Agreement, Manufacturing Agreement or a total sale of the invention is most suitable.

The specific area of activity of the partner In case of Manufacturing Agreement, the partner must have extensive knowledge of the fish technology market and the capabilities to aid in further development of the product to make it fully ready for the market.

Name of the Innovation Relay Centre

IRC Western and Southern Sweden/Iceland

Ref: TO_FR_3933

Soles of wear of trawl panels for deep sea fishing

Type of profile: Technology Offer

Abstract: These soles of wear are metal band situated on the trawl panels base which role is to drag the fishing net on the sea floor.

Detailed description: The current soles of wear (without our innovation) are changed each 3 to 4 weeks. This changes of soles costs a lot for the fisherman as the boat stays in the port during 2 to 3 days (necessary time for the forge to do the work). The sole being represented by only one bar glued to the panel (length from 2 to 2,50 meters on the boats).

Innovative aspect: The innovation is based on the system for the soles support, on trawl panels basis by "cotter pin fixation". This process simplified the assembly and dismantling as the soles are constituted of adjustable elements.

Main advantages: This process consist on a creation of a support, glued to the panels, in which are fitted the brake blocks. The time to change the soles is about 1 hour and a half. The soles stemmed from a much more resistant alloy, has a duration life of 2 600 hours of work on sea.

Current state of development of the technology Already on the market

Intellectual Property Rights Patent(s) applied for

Keywords selection Fish / Fisheries / Fishing Technology

Application domain selection Fisheries, resources of the sea

Collaboration details:

Type of collaboration sought: Financial resources

Name of the Innovation Relay Centre

IRC North-Nord Manche

Ref: TO_IS_3934

Online moisture analyzer.

Type of profile: Technology Offer

Abstract: A small Icelandic company has developed non intrusive online moisture analyzer. The equipment measures the moisture of a products from a flow line 10 times per second within +/- 0,5% accuracy. License agreement or Commercial agreement with technical assistance is sought with a European partner.

Detailed description: A small Icelandic company, Intelscan, has developed iScan 40, an online equipment that measures the fat and moisture of a product straight of a flow line without any contact. The iScan 40 uses low power microwaves to provide continuous (10 times per second) moisture value of a product from a flow line with at least +/- 0,5% accuracy (of laboratory analysis). The factory can therefore control the production to reach the target moisture content of the product. By monitoring the moisture of the product continuously during production, optimum moisture content can be reached, and maintained, in minimum time. The moisture content can either be displayed on a touch screen at the measurement site or transferred to the factory computer system. Moisture values and dates can then be kept for later analysis for quality control purposes. There is no doubt that many industries, especially timber, tobacco and food industry have need for fast and accurate online moisture and fat measurement methods. In fact any production where moisture content of the product is important has a need for the new equipment. For example iScan 40 is applicable to: -Drying of all foods - both to know the water content before and after and also to control the process. -Snacks. -Mixing of alls sorts of different blends and emulsions. -Grinding of coffee, bakery products etc. -Grain. -Powder in various productions. -Grading of food by different amount of fat, e.g. in fish industry. -Fish meal industry. -Cheese production and dairy industry. -Animal feed. -Timber and board production. -Various applications in the chemistry and pharmacy industry. -Coal, sand, gravel and various other things in the construction industry. The company is looking for a Commercial agreement with technical assistance or License agreement with a European company capable of tendering the product to their markets and providing necessary technical assistance to future clients.

Innovative aspect: Very little development has taken place on equipment that measures moisture content with microwaves and there is no other equipment available on the market that measures fat content with microwaves. The equipment developed measures moisture and fat content instantly and continuously. Normally, off-line microwave measurements must have information about the density of the measured substance in order to give the moisture content in percentages. This would normally be done by means of an external measurement such as weight belt etc. but the new equipment corrects for density internally by using microwaves, which is not available in any other equipment.

Main advantages: Time Saving: The equipment provides continuous moisture analysis of the product within +/- 0,5% accuracy, meaning less production downtime since there is no need for laboratory analysis. Improved Productivity : By monitoring the moisture during production, optimum moisture content can be reached in minimum time and maintained by monitoring the moisture value continuously. Increased Value : The factory profits from producing with maximum acceptable moisture content without going over a certain limit. Reduced Energy Costs : Energy consumption when drying represents a large part of the running cost of a factory. The drying process will be fine-tuned by monitoring the moisture content. Data Presentation : Moisture content will either be displayed on a touch screen at the measurement site or transferred to the factory computer system. Moisture values and dates can then be kept for later analysis for quality control purposes. The equipment can be used not only to measure moisture but also to control processes where moisture is important. The equipment will have important applications in industries where moisture content of the product is important.

Intellectual Property Rights Patent(s) granted

Keywords selection Aquaculture Fish / Fisheries / Fishing Technology

Marine Science Food Processing Detection and Analysis methods Safe production methods

Application domain selection Industrial manufacture Chemical industry

Pharmaceutical/Cosmetics Agricultural and marine resources and products

Food - Agro Industry Fisheries, resources of the sea Standards - Quality

Comments about market applications: Moisture and/or fat analysis for a number of processing industries. The equipment is applicable to all industries where the moisture content of the product is important, such as Animal feed, fish meal, timber and board production, tobacco, grinding of coffee, grain, cheese production, snacks, chemistry and pharmacy, etc.

Collaboration details:

Type of collaboration sought: License agreement Commercial agreement with technical assistance

Type of partner sought The company is interested in making License agreement or Commercial agreement with technical assistance with a European partner is sought. The company is looking for any partner with extensive knowledge and experience in the market for moisture analysis of products.

In case of Commercial Agreement with technical assistance the partner would have to have the necessary know how to tender the product to its market area, to provide service to future customers and provide feedback to the Icelandic company to further improve the equipment.

Name of the Innovation Relay Centre
IRC Western and Southern Sweden/Iceland

Ref: TR_IS_3935

Production of EP grade calcium from ocean clam shells

Type of profile: Technology Request

Abstract: An Icelandic fishery and fish processing company that produces about 10.000 tons of empty ocean clam shells per year is exploring ways to produce EP grade calcium from the clams. The raw clam shells are about 98% pure calcium and the company is developing a cleaning process to make the raw ocean shells chloride and acid insoluble free.

The Icelandic company is seeking a partner with necessary know how and could cooperate in production of EP grade calcium from those shells.

Detailed description: An Icelandic fishery and fish processing company that produces about 10.000 tons of empty ocean clam shells per year is exploring ways to produce EP grad calcium from the clams. The raw clam shells are about 98% pure calcium and the company is developing a cleaning process to make the raw ocean shells chloride and acid insoluble free.

EP grade calcium is used in pharmaceutical applications and vitamin supplements.

The company is seeking a partner with the knowledge and technical know-how of EP grade calcium production.

Intellectual Property Rights Others (registered design, plant variety right, etc) Comments:

The company seeks technical knowledge and know-how in producing EP grade calcium.

Keywords selection Fish / Fisheries / Fishing Technology Food Additives/Ingredients/Functional Food Food Processing Food Technology

Application domain selection Industrial manufacture Chemical industry
Pharmaceutical/Cosmetics

Collaboration details:

Type of collaboration sought: License agreement Technical co-operation Joint Venture agreement

Type of partner sought The company is seeking a partner with the necessary technology and know-how for producing EP grade calcium from ocean clam shells. The company is open to most sort of agreement but would prefer Technical Co-operation or Joint venture agreement. In case of Joint venture agreement the Icelandic company would provide the raw material and the cleaning technology and the partner would provide the technology for producing EP grade calcium. In case of Technical Co-operation the partner must have the know-how to produce EP grade calcium, and ready to explore ways to produce EP grade calcium from ocean clam shells.

Name of the Innovation Relay Centre
IRC Western and Southern Sweden/Iceland

Ref: TO_IS_3936

Ice flow slurry machines for cooling fish in fishing vessels and processing plants

Type of profile: Technology Offer

Abstract: A company in Iceland specializing in refrigerating and freezing technology has developed 3 types of slurry machines that can cool products (fish) faster, using less volume, at sea and on land. The slurry can be made with and without salinity and can be fully programmed for temperature and size. These products are already on market and Icelandic fishing vessels and processing plants are using the slurry with great results.

Detailed description: The slurry ice machines developed by an Icelandic company can cool products up to 3 or 4 times faster than conventional flake-ice or plate-ice. The slurry surrounds the raw material with soft ice crystals that do not harm the product and can be evenly spread, cooling the entire load. The ice is high in energy and surface area of the crystals is relevantly large. Tests have shown that to reach the same cooling level, a 50% slurry mixture has 40 times less volume than a standard Re-circulation Sea Water (RSW) system, where seawater is made flow through the product in a closed circulation system, and the water is cooled with machines. Thus, fishing trips can be more efficient, without compromising the cooling abilities. The company has developed 3 different methods to produce slurry. 1. Flo-Ice that uses saltwater only (with salt levels 3-3.5% or higher). This solution is ideal at sea where ocean water is used directly on the machine. It takes up little space and with the new computer system the thickness of the slurry can be pre set regardless of the varying temperature of the water. This type of slurry is used to pre-freeze fish onboard and quality of the product is increased considerably. Current machines produce 7.5 tons of ice per day. 2. Slurry produced by North Star ice machines. Slurry can be produced with either salt or fresh water. The machine can be made in various sizes, from 3- 50 tons each machine. Output from currently existing machines varies from 30 tons-280 tons of slurry per day. Of course product that have been cooled with the slurry are in top conditions 3. Regular Ice is used and crushed into tanks, fresh or with automatic salinity control system. This solution for on land production where ice machines and storage are available. High quantity of slurry can be produced with this technology. Less salt and additives is needed and production increase of 1-1.6% can be expected (according to tests on shrimp). Cooling is better, more even and 2% weight gain in product.

Innovative aspect: The machines are controlled by a computer system where the thickness and salinity of the slurry can be pre- programmed. A constant thickness, temperature and salinity is kept.

Main advantages: Automatic control system for thickness, temperature and salinity of slurry, makes it simple and convenient. Less volume than conventional methods. Efficient. Slurry is evenly spread resulting in even cooling of product.

Current state of development of the technology Already on the market

Intellectual Property Rights Patent(s) granted

Keywords selection Fish / Fisheries / Fishing Technology Food Processing Food Technology

Application domain selection Industrial manufacture Food - Agro Industry Fisheries, resources of the sea Standards - Quality

Collaboration details:

Type of collaboration sought: License agreement Commercial agreement with technical assistance Technical co-operation

Type of partner sought The company would like to exchange its know-how with another refrigerating and freezing technology company and is open to joint projects on improving the current systems. Are also looking for companies that provide European fishing vessels and processing plants with equipment for a commercial agreement with technical assistance.

Name of the Innovation Relay Centre

IRC Western and Southern Sweden/Iceland

Ref: TO_IS_3937

Optim-Ice ? Liquid ice systems

Type of profile: Technology Offer

Abstract: A leading Icelandic company in production of Liquid ice systems is looking for European partner. The company is interested in making a Commercial agreement with technical assistance with a European partner capable of marketing the products and perform after-sales services to the clients.

Detailed description: The Icelandic company, Optimar, has developed the Optim-Ice technology where the liquid ice is produced directly from seawater. The Optim-Ice technology delivers rapid rate of cooling and at the same time does not bruise or damage the catcher. The cooling medium is viscous, consisting of microscopic ice crystals, which allows the medium to flow and completely enwrap the catch to bring about extremely rapid transfer of energy. This also hinders bacterial growth and ensures maximum quality of the catch. The Icelandic company is seeking a commercial agreement with technical assistance with a European partner capable of marketing the product to its home market and also to perform after sales services, such as repairs and setting up the devices.

Main advantages: The cooling medium is viscous, consisting of microscopic ice crystals, which allows the medium to flow and completely enwrap the catch to bring about extremely rapid transfer of energy. This also hinders bacterial growth and ensures maximum quality of the catch.

Current state of development of the technology Already on the market

Intellectual Property Rights Patent(s) granted

Keywords selection Fish / Fisheries / Fishing Technology Marine Science Food Processing Food Technology

Application domain selection Industrial manufacture Fisheries, resources of the sea Standards - Quality

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance

Type of partner sought The Icelandic companies is interested in making Commercial agreement with technical assistance with a European partner capable of marketing the products and perform after-sales services to the clients. The partner must have the necessary know-how and technology for servicing the future clients and the capability of setting up the devices in the clients facilities.

Name of the Innovation Relay Centre

IRC Western and Southern Sweden/Iceland

Ref: TR_IS_3938

Marketing and production of Icelandic grading machines.

Type of profile: Technology Request

Abstract: An Icelandic company, Style International, is looking for a European partner to handle assembly of the company's products. Style International is a leading manufacturer of graders. The Icelandic company is interested in a European partner capable of marketing, selling and producing the Icelandic products in the partner's home country. License agreement, Commercial agreement with technical assistance, Joint venture agreement and Manufacturing agreement are sought.

Detailed description: Style International is the leading manufacturer of graders. Style graders are in use throughout Iceland. And major fish processors in the world, including in Norway, the USA, and Canada, have invested in these precise, high capacity graders to ensure that raw material retains its original quality, thereby yielding the best-possible price for the processor. Most graders on the market measure fish by thickness for the simple reason that filleting machines are designed on the concept of fully utilizing a fillet. Yet most thickness-graders have definite problems, the raw material is roughly handled through, shaking, squeezing, and abrasion. Style International is seeking a European partner with know-how and experience in producing and marketing of fish processing machine. The European partner will assemble the Icelandic product in their home country and market on behalf of the Icelandic partner. Style is interested in making a License agreement, Commercial agreement with technical assistance, Joint venture agreement and/or manufacturing agreement. Style International is also open to invest or buy a company capable of performing the specific tasks mentioned above.

Current state of development of the technology Already on the market

Intellectual Property Rights Patent(s) granted

Keywords selection Fish / Fisheries / Fishing Technology Food Packaging / Handling Food Technology

Application domain selection Industrial manufacture Fisheries, resources of the sea

Collaboration details:

Type of collaboration sought: License agreement Commercial agreement with technical assistance Manufacturing/ subcontracting agreement Joint Venture agreement

Type of partner sought The partners role is to manufacture/assemble the Icelandic product and market in their home country.

Name of the Innovation Relay Centre
IRC Western and Southern Sweden/Iceland

Ref: TR_IS_3939

Sensor for fish filleting machine

Type of profile: Technology Request

Abstract: Velfag, an Icelandic company, is developing a revolutionary fish filleting machine. The machine uses a different approach than other filleting machines used and gives a better yield and total quality. The Icelandic company is seeking a partner with necessary know how and technology in industrial sensors for servo motors.

Detailed description: Velfag, an Icelandic company specializing in services in the fish processing industry is developing a revolutionary fish filleting machine. The machine uses a different approach than other filleting machines used and gives a better yield and total quality. The company has already made a prototype of the machine and the results are promising. The company is seeking a partner with necessary know how and technology in industrial sensors. The sensors function is to give the exact position of the cutting mechanism with 0,5 mm accuracy and transfer the data to a industrial computer that moves a CNC motor. The sensor (and computer) response time has to be at least 35-45 units pr. minute. Velfag has specialized in developing and servicing fish processing machinery since it was founded in 1995. It currently staffs 6 employees.

Innovative aspect: The new machine uses a well known technology is a way that has not been done before in this type of machinery.

Main advantages: The machine is going to give higher yield and better product handling.

Intellectual Property Rights Patent(s) applied for

Keywords selection Fish / Fisheries / Fishing Technology Food Packaging / Handling Food Processing Food Technology

Application domain selection Industrial manufacture Fisheries, resources of the sea Standards - Quality

Collaboration details:

Type of collaboration sought:

Technical co-operation

Name of the Innovation Relay Centre

IRC Western and Southern Sweden/Iceland

Ref: TR_IS_3940

PVC vacuum forming

Type of profile: Technology Request

Abstract: Velfag, an Icelandic company is developing a revolutionary fish filleting machine. The machine uses a different approach than other filleting machines used and gives a better yield and total quality. The Icelandic company is looking for a partner with necessary know-how and technology to form PVC material in a vacuum.

Detailed description: Velfag, an Icelandic company specializing in services in the fish processing industry is developing a revolutionary fish filleting machine. The machine uses a different approach than other filleting machines used and gives a better yield and total quality. The company has already made a prototype of the machine and the results are promising. The company is also seeking a partner with necessary know how and equipment to form PVC material (in a vacuum) for the machine outer cover. Velfag has specialized in developing and servicing fish processing machinery since it was founded in 1995. It currently staffs 6 employees.

Innovative aspect: The new machine uses a well known technology in a way that has not been done before in this type of machinery.

Main advantages: The machine is going to give higher yield and better product handling.

Intellectual Property Rights Patent(s) applied for

Keywords selection Fish / Fisheries / Fishing Technology Food Packaging / Handling Food Processing

Application domain selection Industrial manufacture Food - Agro Industry Fisheries, resources of the sea

Collaboration details:

Type of collaboration sought: Technical co-operation

Type of partner sought Offer technological know how regarding PVC materials handling and possibly equipment.

Name of the Innovation Relay Centre
IRC Western and Southern Sweden/Iceland

Ref: KHE_PL_3943

Know-how in high quality rainbow trout farming for food processing.

Type of profile: Know-how/ expertise

Abstract: A Polish SME active in fish hatching and farming with developed know-how in rainbow trout farming is seeking co-operation with companies that would like to use such know how or utilize rainbow trout as a raw material for food production.

Detailed description:

A Polish SME established in 1997 specializing in rainbow trout hatching and farming is seeking co-operation with companies from food processing sector and trade. The seven year experience allows it to develop its own farming method and gain efficient production (about 150 tons per year, 270g-500g trading fish weight). The fish ponds are supplied with the first class water cleanness which is liquid oxygen aerated and waste-water is purified using biofilters. All these processes and natural feed components increase the final product (trout flesh) quality and flavor value. The rainbow trout as raw material can be utilized for foodstuffs production of high quality and high nutritive value. The partner can receive fresh fish or chilled in ice.

Main advantages: High quality raw material for foodstuff production.

Current state of development of the technology Already on the market

Intellectual Property Rights Secret know-how

Web link to present innovative product: www.pstragi.pomorskie.pl

Keywords selection Aquaculture Food Processing

Application domain selection Food - Agro Industry

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance

Type of partner sought Industry

The specific area of activity of the partner Fish farming, fish processing

The tasks to be performed of the partner sought The company should owned means of transport

Name of the Innovation Relay Centre

IRC West Poland

Ref: KHE_PL_3955

Know-how in fish culture. Cytogenetics of fishes.

Type of profile: Know-how/ expertise

Abstract: The Department of Aquaculture has conducted research in fish culture technology, especially in cage rearing and production of fish for stocking natural water resources for 30 years. Research studies in the Laboratory of Fish Genetics are the following: Cytogenetics characteristics of populations of selected fish species as evaluation of stocking material, morphological and structural analysis of karyotypes of freshwater fish for estimation of their population diversity.

Detailed description: The Department of Aquaculture has conducted research experiments on fish rearing in cooling water for 30 years. The technology of culturing common carp, wels, African catfish, tilapia and sturgeon in cooling water, as well as many feed recipes for cyprinids, catfishes and sturgeons were elaborated. The Laboratory of Fish Genetics is carrying out the studies to estimate a possibility of applying morphological structure of karyotypes of freshwater fish to evaluate population diversity of endangered fish species. The knowledge of the levels of genetic diversity and the population structure of freshwater species is important if effective management is to be applied in both wild and cultured fish. The use of molecular genetic markers, such as microsatellite and mitochondrial DNA, allows to estimate the genetic health of the population, and to delineate different stocks. Modern molecular genetic techniques provide insights for the level of inbreeding in the populations and allow identifying the parents of progeny in mass crosses.

Innovative aspect: Cooling water is one of natural resources which can be effectively utilized in fish rearing. The technology of fish culture in cooling water was elaborated in The Department of Aquaculture. The genetic material of hundreds of specimens can be characterized in several genetic loci in a short time and provide important information about the genetic make-up of the populations.

Main advantages: Rearing fish in cooling water can cut down the time of production cycle by faster growth of fish. Some fish species (tilapia or catfish) can be reared only in cooling water or recycled system in Europe.

DNA-based methods that follow are fast, reliable and practically cost-effective methods, which are based on the PCR (Polymerase Chain Reaction) technique, which allows application by non-destructive tissue sampling and using minute amount of tissue (fin clips, scales, etc).

Intellectual Property Rights Others (registered design, plant variety right, etc)

Keywords selection Aquaculture Fish / Fisheries / Fishing Technology

Application domain selection Agricultural and marine resources and products Fisheries, resources of the sea

Collaboration details:

Type of collaboration sought: Commercial agreement with technical assistance
Technical co-operation

Type of partner sought Industry Research organization

Name of the Innovation Relay Centre
IRC West Poland