



QuiRicerca

Il luogo d'incontro tra ricerca e impresa

Catalogo Networking

HTE 2009, Nuovo Polo Fieristico Milano Rho-Pero
25-27 novembre 2009
Stand: HALL 18 - L51 c/o CHEM-MED



ASSOCIAZIONE
ITALIANA
PER LA RICERCA
INDUSTRIALE



Azienda Speciale della Camera di Commercio di Milano per l'innovazione

Premessa

QuiRicerca è un'iniziativa dell' AIRI, Associazione Italiana per la Ricerca Industriale, nell'ambito dei servizi erogati da Innovhub, Azienda speciale della Camera di Commercio di Milano per l'innovazione. QuiRicerca ha l'obiettivo di creare un luogo d'incontro tra l'offerta tecnico-scientifica milanese/lombarda e le imprese partecipanti ad importanti manifestazioni della Fiera di Milano, al fine di valorizzare, con un approccio organico e di sistema, quanto disponibile nel contesto scientifico e territoriale.

Il valore dell'iniziativa risiede nel facilitare l'incontro tra ricerca e imprese in uno spazio *ad hoc* riservato a spin-off e start-up operanti in settori high tech, e a università ed enti di ricerca - pubblici e privati - al fine di dare visibilità all'offerta di competenze e di risultati di potenziale interesse per le imprese innovative che partecipano alle manifestazioni.

Il catalogo QuiRicerca presenta i profili di imprese ed enti selezionati che hanno a disposizione uno spazio dedicato, presso CHEM-MED, HALL 18 - L51 a HTE 2009, ove partecipare agli incontri one-to-one con imprenditori interessati alle tecnologie proposte. Il catalogo QuiRicerca per HTE 2009 presenta le competenze di ricerca e sviluppo, nonché prodotti e soluzioni innovative offerte da ciascuna impresa e laboratorio in numerosi settori dell' HI-TECH: Robotica, Fotovoltaico, Vuoto, Coating, Fotonica, Nanotecnologie, Idrogeno, Fuels cells, Batterie e condensatori, Superconduttori, Tecnologie della visione ecc, con applicazioni destinate a migliorare i servizi di imprese e pubbliche amministrazioni.

Se è interessato a conoscere le competenze presentate nel catalogo e ad incontrare personalmente i responsabili di ciascuna impresa e laboratorio, aderisca al **Networking QuiRicerca** che si terrà **dal 25 al 27 novembre presso HTE 2009 – Stand Hall 18, L51.**

Le modalità per prenotare un incontro e i moduli di adesione sono disponibili al sito:

<http://www.airi.it/quiricerca/networking.htm>

Progetto QUIRicerca

AIRI – Associazione Italiana per la Ricerca Industriale / Ufficio di Milano

Piazzale Rodolfo Morandi 2 - 20121 Milano c/o Fast

Tel: +39 - 02/77790423/4 - Fax:+39 - 02/77790407

quiricerca@airi.it

www.airi.it/quiricerca/

Scheda di sintesi

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N.	COMPANY	COMPETENCE
1	CO2POWER	Renewable energy: Photovoltaics
2	DELOS	Biotechnologies, Nanotechnologies
3	GENPORT	Hydrogen, Fuel Cells, Lithium Ion Batteries
4	IDROGEN2	Hydrogen
5	IRIDIUM SCIENTIFIC	Photovoltaic Technology, Photonics
6	NUZOO	Robotics
7	PETROCERAMICS	Engineering ceramics
8	PLASMORE	Nanotechnologies
9	RD42 TECHNOLOGIES	Environment
10	SMILAB	Mechanics, Electronics
11	TETHIS	Vacuum Technologies, Nanotechnologies, Coating
12	UNIMIB-DISCO/IRELAB	Robotics, Vision technologies

Profili delle imprese ed enti di ricerca

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CO2POWER

Address: via Salvo D'Acquisto 8, 20080 Basiglio (MI)

Telephone: 338-8804660

Fax: 02-36549503

E-Mail: lelio.pellegrini@yahoo.it

Web-Site:

Contact person: Lelio Pellegrini

At a Glance

Type of organization: Start up

Turnover (€/Y):

Number of employees:

Main activity

Competences: two engineers with expertise in thermodynamics processes, a lawyer, an accountant.

Products: electronic power generator (100 kW), supplied with no-cost fuels (water or hot air) and provided with its container.

Services: the client has the opportunity to purchase a product with all the basic services to keep the system working as long as possible.

Processes: the company provides assistance on sale operations, components' supply, logistics, maintenance; products are manufactured in specialized laboratories.

Type of cooperation

- ✓ Direct investments
- ✓ Financial participation
- ✓ Venture capital

Sector

Other: Renewable energy: photovoltaic technology, thermodynamic solar panels, geothermal energy, biomass, hydraulic energy, biogas.

Company Strengthpoints

HIGH END PRODUCTS: The product obtains low-cost electric energy by using heat sources, biomass, or geothermal energy (energy sources at a very low cost). The system has also a very small size in order to meet the needs of small producers and it has not valid competitors on the market .

PATENTS/LICENSES/TRADE MARKS/QUALITY CERTIFICATIONS: CO2Power is licensed with a registered trademark. The licence of the CO2 generator has also been registered.

INNOVATIVE

PROCESSES/SERVICES/PRODUCTS: The product relies on innovative thermodynamic processes and is based on the use of standard on- production components.

NETWORKING: The product can be sold in Italy directly to the client by using specialized communication channels or direct marketing. On foreign markets, we are able to collaborate with specialized local companies.

Research and Development, R&D: The company is cooperating with the Energy Department of the Politechnic University of Milan (Politecnico di Milano).

EXPERTISE: The company is presently looking for funds aimed to transfer the product to the industrial assembly-line production.

Partnership proposal

The aim of our partnership is to find investors interested in our project and willing to trust its further developments. They should also be able to actively participate to the economic initiative in the role of shareholder or strategic suppliers of our society. The financial request amounts to 300.000 €.

DELOS srl

Address: via Lurani 12, 20091 Bresso

Telephone: 02-89699020

Fax: 02-89699020

E-Mail: noura.gaiji@unimib.it

Web-Site: www.delos-bio.it

Contact person: Noura Gaiji

At a Glance

Type of organization: Spin off

Turnover (€/Y): 200.000

Number of employees: 5

Main activity

Delos srl was founded in March 2005 as a spin off of the University of Milano Bicocca.

Our technology applies to different fields, helping to investigate, predict, analyze and design. The aim is to offer to our customers a forwarding integration between advanced scientific knowledge and innovative computer science solutions.

Our mission is to help researchers to solve real molecular complex problems by means of computer simulation and hard computing, bringing strategic and economical strong advantages to its Customers.

We help chemical and pharmaceutical researchers in solving complex molecular problems by means of **computer simulation** bringing **strategic** and **economical** strong **advantages**.

An ad hoc service is created in strict collaboration with customers focusing on problems and specific needs, responding to requirements with innovative tools.

Delos srl also provides a bioinformatic platform called DELOS. It's a suite of advanced software solutions that help in designing new pharmaceutical compounds. DELOS is composed of several modules covering the whole paradigm of drug discovery and lead optimization, from virtual library generation, to the evaluation of more than 350 molecular descriptors, molecular docking and ADMET prediction. The particular nature of the DELOS solution lies in the integration of hardware and software, in that its basic structure is built for a specific class of parallel computers. In addition, DELOS takes advantage of a user-friendly graphical interface to manage specific sections of the platform and to assist in results analysis.

Type of cooperation

- ✓ Activation of new projects (R&D)
- ✓ Direct investments
- ✓ Development of new products

- ✓ Venture capital

Sector

ICT in Health Care and pharma

Company Strengthpoints

HIGH END PRODUCTS: DELOS platform is a software performing active site identification in target proteins, virtual molecular library generation, Protein-Ligand interaction, ADMET filtering, database and graphical analysis.

PATENTS/LICENSES/TRADE MARKS/QUALITY

CERTIFICATIONS: Patent EP1628234 Method of construction and selection of virtual libraries in combinatorial chemistry.

INNOVATIVE PROCESSES/SERVICES/PRODUCTS:

Delos provides software and consultancy services that help in research or production of new pharmaceuticals.

NETWORKING: University of Milano Bicocca, Consortium Biobresso.

R&D: Our desire is to create and develop new technologies that expand possibilities and open new doors to the discovery and development of drugs. Our scientists work to find new approaches to the challenges drug researchers face every day.

EXPERTISE: Delos bases its know-how on a consolidate experience in applied research on bioinformatics and computer science coming from over 20 years of problem solving and knowledge porting from academy to industry.

Partnership proposal

Looking for new partners (financial, scientific and commercial) for developing the start-up company.

GENPORT srl

Address: Via Garcia Lorca 29, 23871 Lomagna (LC)

Telephone: 039-2264588; 348-9007640

Fax:

E-Mail: info@genport.it

Web-Site: www.genport.it

Contact person: Paolo Fracas

At a Glance

Type of organization: Spin Off

Turnover (€/Y):

Number of employees: 4

Sector

Hydrogen

Fuel Cells

Ion lithium battery pack

Main activity

GENPORT is an Italian progressive spin-off of Politecnico of Milan founded on 2009 to develop and commercialize a lightweight portable fuel cell system platform.

GENPORT provides a wide range of solutions for the portable power generations, based on an innovative fuel cell designed to maximize power density, reduce to zero pollution, noise, thermal signature, vibration and provide a constant, reliable source of power where a lightweight, high energy density off-the-grid generator feature is required. GENPORT introduces the 25 series. This micro fuel cell weights 1 kilo, embeds a cartridge to power a devices up to 25 watt for more then 8 hours. It is a unique wearable generator, the lightest and compact fuel cell in the market that can operate in any extreme environment, desert, jungle as battery charger, auxiliary and backup power unit.

"Politecnico of Milan" and GENPORT are developing innovative fuel cell components to improve the state of the art performance of stack technology, reduce the weight and improve the durability of GENPORT series. They can be utilized in many contest as emergency, defense, medical, automation off-grid residential, nautical, caravan.

If an off-grid power unit has to constantly provide energy, our portable fuel cell generators are the key technology to choice.

Company Strengthpoints

HIGH END PRODUCTS: Wearable generators 15-25 W; portable PEMFC generators 100-1000 W; Ion-lithium battery packages

INNOVATIVE

PROCESSES/SERVICES/PRODUCTS: PEM Fuel cells, Ion lithium based battery packs

Type of cooperation

- ✓ Development of new products

Partnership proposal

We are looking for partners in the following sectors: medical devices; telecommunication; nautical; camper; surveillance; constructions tools; automation; pharmaceutical transportation; off-grid houses; emergency devices for the joint development of new systems integrating our high energy density generators based on PEMFC and IOL batteries to extend runtime.

IDROGEN2 srl

Address: Via Pozzo Antico 24, 20033 Desio (MB)

Telephone: 0362-1820040

Fax: 0362-1820039

E-mail: info@idrogen2.com

Web site: www.idrogen2.com

Contact person: Lorenzo Tardini

At a Glance

Type of organization: SME

Turnover (€/Y): 750.000

Number of employees: 4

Sector

Hydrogen

Fuel Cells

Main activity

Design, assembling and commissioning of high performance alkaline electrolyser for the electrical energy storage by hydrogen production.

In partnership with ICI Caldaie we develop a new system to storage, and reuse energy into residential or civil buildings for combined heat and power production, using hydrogen.

Company Strengthpoints

HIGH END PRODUCTS: Alkaline electrolyser with high efficiency (>80%) and pressure (30 bar)

PATENTS/LICENSES/TRADE MARKS/QUALITY

CERTIFICATIONS: 2 pending patents, CE and PED certified, ISO9001-2009

INNOVATIVE

PROCESSES/SERVICES/PRODUCTS: A new generation of alkaline electrolyser and CHP using hydrogen

NETWORKING: Politecnico di Milano Incubatore

R&D: A strong partnership with Politecnico di Milano University and ICI Caldaie Group.

EXPERTISE: Hydrogen production and storage, renewable energy, energy efficiency.

Type of cooperation

- ✓ Direct investments
- ✓ Joint creation of an enterprise or consortium
- ✓ Financial participation
- ✓ Venture capital

Partnership proposal

IRIDIUM SCIENTIFIC sas

Address: Via Rucellai 23, 20126, Milano (MI)

Telephone: 02-26827684

Fax:

E-Mail: info@iridiumscientific.eu

Web-Site: www.iridiumscientific.eu

Contact person: Andrea Arcari

At a Glance

Type of organization: Spin Off

Turnover (€/Y): 20.000 €

Number of employees: 2

Sector

Photovoltaic Technology

Photonics

Main activity

Iridium scientific is a spin-off of University of Milano-Bicocca.

We have developed innovative instruments and software for:

- Investigating material properties (data acquisition and analysis);
- Dating archeological finds (the instruments use the techniques of thermoluminescence and optical stimulation with an innovative system of heating.);
- Measuring the dose of absorbed radiations in the field of dosimetry .

We have developed systems for inorganic and organic semiconductors:

- **Urania**, a system for the measurements of curve I-V for solar cells;
- **EQE**, a system to measure the external and internal quantum efficiency of solar cells.
- **Mnemosyne** an instrument to test the electrical bistability of materials for memory application.
- **EOS**: a system to measure the efficiency of OLED

We also have developed two measurement systems:

- **Arthemis**, based on TL (Thermo Luminescence)
- **Persephone**, based on OSL (Optically Stimulated Luminescence)
- A device called **Eurydice** allows to drive the photomultiplier necessary for the measurement.

All these last systems have a lot of advantages:

- Sharp and fast temperature control.
- High speed and accurate photoncounter system.

The instrumentation uses a USB protocol to communicate data from/to PC.

Company Strengthpoints

INNOVATIVE

PROCESSES/SERVICES/PRODUCTS: Urania, EQE, Mnemosyne and EOS; Artemis, Persephone and Eurydice

Type of cooperation

Activation of new projects (R&D)

Direct investments

Joint creation of an enterprise or consortium

Financial participation

Development of new products

Venture capital

Partnership proposal

Iridium scientific is looking for industrial support for several projects in the instrumental and for seller network in this field.

Iridium scientific is also looking for industrial support for the CEE's approval necessary before the sale of the products and to join a commercial partnership to increase the selling network. Since these instruments can also be applied in the field of dosimetry, the proponent is looking for a partner to share the effort and the benefits of expanding in this market.

NUZOO srl

Address: Via Boccherini 20, 20131, MILANO

Telephone: 02-2361548; 339-3148968

Fax:

E-Mail: stefano.avenia@nuzoo.it

Web-Site: www.nuzoo.it

Contact person: Stefano Avenia

At a Glance

Type of organization:

Turnover (€/Y): 250K

Number of employees: 8

Main activity

Nuzoo activity, from the early 90's, has been addressed to research, development of automation systems of many different genres, with the goal of "chasing" the guidelines of technological progress. More precisely, Nuzoo develops electronic and micro-mechanical prototypes, along with the softwares and firmwares necessary. Nuzoo offers support for the final phases of product lifecycle: patenting, CE certification and mass production spinoff.

Sector

Other: 2d and 3d modellation, rapid prototyping and CNC, molding and wax fusioning; PCB circuit boards, i/o boards, actuators and sensors, wireless data transmission. I/O data elaboration, managing and control softwares, Fuzzy Logic control.

Company Strengthpoints

HIGH END PRODUCTS: Humanoid minirobots, mocap systems

PATENTS/LICENSES/TRADE MARKS/QUALITY

CERTIFICATIONS: The Nuzoo logo, U-Man brand, Magnetic Levitation toy Train

INNOVATIVE

PROCESSES/SERVICES/PRODUCTS: Low Cost Custom Hi-Fidelity I/O boards, Merlin Devices

NETWORKING: Creation of products based on ZigBee technology

R&D: Personal Robotics, Social-Hardware gadgets, prototyping

EXPERTISE: Thanks to a multi skilled team, all projective, creative and building processes happen in Nuzoo laboratories to be able to develop internally, not only research but also the production of many structural components used for different needs.

Type of cooperation

- ✓ Activation of new projects (R&D)
- ✓ Technology transfer or production licensing
- ✓ Direct investments
- ✓ Joint creation of an enterprise or consortium
- ✓ Development of new products

Partnership proposal

Nuzoo offers prototyping services for new clients Nuzoo search for dealers for use and selling of Merlin Devices abroad.

Nuzoo search for Joint venture partners in the Personal Robotics Sector of market.

PETROCERAMICS spa

Address: Viale Europa 2, 24040 Stezzano (BG)

Telephone: 036-0770886

Fax: 036-0779653

E-Mail: info@petroceramics.com

Web-Site: www.petroceramics.com

Contact person: Paolo Vavassori

At a Glance

Type of organization: SME

Turnover (€/Y): 1.000.000

Number of employees: 10

Main activity

Petroceramics S.p.A. was founded in 2003, as the first spin-off from Milan State University, with a view to making the most of the results of the University's scientific research into materials engineering, in order to transform those results into industry-ready technologies and to develop state-of-the-art products.

The mission of Petroceramics is to develop advanced ceramic materials, as well as the processes and equipment associated with those materials. The company operates in a number of sectors, including: friction materials for brake systems (a field in which it works in partnership with Brembo S.p.A. and Brembo Ceramic Brake Systems S.p.A., as part of a joint venture with the Daimler Chrysler Mercedes Group); bulletproof materials for the armoured protection of persons and vehicles; and, last but not least, ceramic components for manufacturing industry and the aeronautical sector.

Type of cooperation

- ✓ Activation of new projects (R&D)
- ✓ Technology transfer or production licensing
- ✓ Development of new products

Sector

Other: friction materials for brake systems, bulletproof materials for the armoured protection of persons and vehicles, ceramic components for manufacturing industry and the aeronautical sector

Company Strengthpoints

HIGH END PRODUCTS: Several prototypes based on advanced ceramics and composite materials

PATENTS/LICENSES/TRADE MARKS/QUALITY CERTIFICATIONS: 2 patents filed. Certified ISO 9001:2000

NETWORKING: Our company has active collaborations with several Italian Universities (University of Milan, Turin, Padova) and Polytecnic of Zurich (ETH).

EXPERTISE: Deep knowledge on design, characterization and production processes of advanced ceramics and composite materials

Partnership proposal

The business model deployed by Petroceramics is based on establishing strategic partnerships with customers and providing them with valuable support throughout the development of new materials and processes, right up until the start-up of manufacturing operations.

PLASMORE srl

Address: Via Deledda 4, 21020 Ranco (VA)

Telephone: 347-0151050

Fax:

E-Mail: andrea.valsesia@plasmore.com

Web-Site: www.plasmore.com

Contact person: Andrea Valsesia

At a Glance

Type of organization: Spin off

Turnover (€/Y):

Number of employees:

Main activity

Plasmore is a joint spin-off company of the University of Pavia (Italy) and the Joint Research Centre (JRC) of the European Commission in Ispra (Italy).

It develops Fully Portable Multiplexing Label-Free Biosensors based on the Surface Plasmon Resonance detection.

These instruments:

- Will be fully portable (palm-top size) with a user-friendly interface;
- Will be based on a unique nanotechnological sensing platform;
- Will be able to measure in real time and in one single test the concentration of hundreds of different proteins, diseases markers, bacteria, viruses and toxins at point-of care.
- Will be label-free, no need of any sample preparation.

The target market for this products includes: applications of Point-of Care (POC) technologies (fast blood analysis, early diagnostics of diseases, etc.), homeland security, drug screening and basic research in proteomics and genomics.

The technological novelty resides in the special design that uses simple low cost optical setup combined with a novel nanostructured transducer surface developed in the last years of research at the Joint Research Centre in collaboration with the University of Pavia. This combination of technologies will allow the fabrication of a fully portable device with reduced costs of production.

Type of cooperation

- ✓ Technology transfer or production licensing
- ✓ Financial participation
- ✓ Venture capital

Sector

Nanotechnologies

Company Strengthpoints

HIGH END PRODUCTS: The multiplexed label-free biosensors will have important applications in many fields as described before.

PATENTS/LICENSES/TRADE MARKS/QUALITY CERTIFICATIONS: Plasmore has the know-how for producing the nanostructured biochips and a licence on a patent on the technology.

INNOVATIVE

PROCESSES/SERVICES/PRODUCTS: The process of nanofabrication of the biochips is novel as well as the final products.

NETWORKING: Plasmore works in an international environment and is connected with companies and research centres in all Europe.

R&D: R&D activities cover almost the 100% of the company activities.

EXPERTISE: Biodetection, optics, material processing, nanofabrication.

Partnership proposal

Plasmore is developing the prototype of the detection system. The system can be implemented on different specific applications in the above mentioned fields. Plasmore has a licence on the technology and on the use of the facilities for the R&D activities from the mother institutions (JRC and UniPv) and is completely autonomous from the know-how point of view. Plasmore needs collaborations for developing specific applications with large interest on the market and financial support for this first stage of R&D.

RD42 TECHNOLOGIES srl

Address: Via De Amicis 15, 20063 – Cernusco sul Naviglio (Mi)

Telephone: 392-9451380

Fax: 02-92112663

E-Mail: info@rd42technologies.it

Web-Site:

Contact person: Giorgio Radaelli

At a Glance

Type of organization: Start-up

Turnover (€/Y): 200.000 €

Number of employees:

Sector

Other: Environment

Main activity

Design & installation of plants for gas and purification from industrial emission sources.

The competence comes from the long experience in the field, developed by the owner and the partners, resulting in the development of innovative technologies, mainly in the concept and in the construction technologies of a new type of a bag filter (dust collector).

In front of a traditional approach consisting of a steelwork made of frame and panels, to be assembled/welded on site, the new concept is based on a completely modular patented solution using standard freight containers in the different sizes.

The implication, under the engineering point of view, are multiple and drastic: reduction of the parts, the drawings, the project-design activities, increase of standard non variable parts, re-use of the static and fluid-dynamic calculations, reduction of criticalities, lifting equipments capacity and craftsmanship requirements for the on-site operations. The high value of the technical solutions, of the general quality of the containers, the high level of the components, the materials used, the partners selected complete the profile of our offer.

The modules can be manufactured specifically for this purpose (and certified as freight containers for the transport) or even derived retrofitting 2nd hand containers found on the market.

The general approach appears to be a solution for increasing the possibility to install worldwide cheap and technologically advanced solutions and, at the same time to avoid effects of nonreturnable supplies of containers, remaining from big projects and too expensive to solve.

Type of cooperation

- ✓ Technology transfer or production licensing

Company Strengthpoints

PATENTS/LICENSES/TRADE MARKS/QUALITY

CERTIFICATIONS: Patent ownership for design and construction method of a bag filter based on standard freight containers; Patent on accessories and details to improve quality features of the products.

INNOVATIVE

PROCESSES/SERVICES/PRODUCTS: The result of our market approach is the reduction of costs and delivery time, with higher quality, in comparison with the competitors. Very high potential for productivity with no need of installation ownership.

NETWORKING: Long term partners for developing high quality engineering and components, while keeping lean structure. Good personal reputation from Key Clients operating worldwide as the main players in different markets.

R&D: Deep knowledge of the process and the products. 20 years experience (with a different company) as one of the progress leaders for the same products.

EXPERTISE: Best results and feed back form the first installations. Ownership and partners coming from a past experience of a start-up become one of the marketleader worldwide. Experience of technical consultant with the key clients for problem solving and survey.

Partnership proposal

Possibility of operating as a Original Equipment Manufacturer, in some field of activity to be defined. Engineering partnership with companies to increase the production capacities and the turn key offer.

SMILAB spa

Address: via Piazzalunga 30, 24015 San Giovanni Bianco (BG)

Telephone: 0345-40111

Fax:

E-Mail: smilab@smigroup.net

Web-Site: www.smilab.info; www.smigroup.it

Contact person: Stefano Salvi, Fabio Chiesa

At a Glance

Type of organization: Private Research Centre

Turnover (€/Y):

Number of employees: 70

Main activity

The new *Polo Tecnologico SMILAB* was established in 2008 in San Giovanni Bianco (BG) as "Laboratory for R&D", "Innovation Laboratory" and "Training Laboratory".

This project aims to focus the attention on R&D as fundamental rule for an economic, cultural and social growth of SMIGroup. At present, SMIGroup is a leading manufacturer of highly technological packaging machines and plants. SMIGroup activity in this field started more than 20 years ago, and SMILab represents the consolidation of technology and methodological experience gained through several years that, now, allows the company to manage important projects as main contractor.

Through its R&D laboratories, located in San Giovanni Bosco (BG) and in San Pellegrino Terme (BG), SMILab takes part in several European and international projects.

Thanks to the funds allocated to research and innovation activities, SMILab asked to the Lombardy Region to be qualified as "Centre for Research and Technological Transfer – CRTT" with the possibility to issue "Technology vouchers".

SMILab needs now to face on the market as research center, offering the following services:

- Feasibilities studies
- Technology transfer to enterprises
- Project of mechanical, electronic, robot and/or mechatronic systems
- Analysis and development of IT&C advanced solutions
- Fast prototype system.

Type of cooperation

- ✓ Activation of new projects (R&D)
- ✓ Technology transfer or production licensing
- ✓ Development of new products

Sector

Mechanics: mechanical systems with related static and dynamical structural analysis

Electronics&automation: solutions for mechatronics, domotics energy production systems

IT&C: innovative systems to improve the processes.

Company Strengthpoints

HIGH END PRODUCTS: Machines for packaging, rotary drawing and blowing machines, MotorNet automation System, ICT E-Paper system for business paper disposal

PATENTS/LICENSES/TRADE MARKS/QUALITY

CERTIFICATIONS: ARS – Air Recovery System for rotary blowing machines; E-Paper – Integrated Informative System for the business paper disposal

NETWORKING: Airi, NanoTec, ABF, Polytechnic of Milan, University of Brescia, Fraunhofer, Irer, Warrant Group

R&D: Photovoltaic systems, Automation systems, Plant design, machines and high tech systems based on low energy consumption, high efficiency and easy use and maintenance

EXPERTISE: Mechanics, electronics, mechatronics, physics, chemistry, engineering, ecology, statistics, economy

Partnership proposal

SMILab can offer:

- To carry out the feasibility studies with:
 - ✓ Technical analysis of project & selected solution
 - ✓ Economical analysis
 - ✓ Planning and scheduling
- To write the specific points of the planning
- To accomplish the planning as described in the feasibility study
- To realise the prototype and/or the system.

TETHIS srl

Address: Via Franco Russoli 3, 20143 Milano

Telephone: 02-36568349

Fax: 02-36569183

E-Mail: isabella.colciago@tethis-lab.com

Web-Site: www.tethis-lab.com

Contact person: Isabella Colciago

At a Glance

Type of organization: SME

Turnover (€/Y): 800.000

Number of employees: 21

Sector

Nanotechnologies

Coating

Vacuum Technology

Main activity

Tethis is a technology development company active in the emerging field of nano- biotechnology.

The company designs, produces and sells different equipments based on gas-phase synthesis and deposition of nanoparticles by means of two systems. **Pulsed Microplasma Cluster Source (PMCS)** is a high-intensity nanoparticles source for vacuum thin film technology allowing the generation of nanostructured thin films with high surface area and porosity as well as micro- and nanoscale topography.

FSP (Flame Spray Pyrolysis) is the second technique. Based on flame spray pyrolysis two systems have been developed. Flame Beam source allows high rate deposition of nanostructured thin films.

NanoPowder Synthesizer (nps10) is the first bench top system for the synthesis of noble metals and metal oxides based nanopowders.

Tethis is also developing nanotechnological solutions based on innovative nanostructured materials for biomedical field. Features like biocompatibility, high surface area, transparency, patterning and compatibility with microfabrication technology make Tethis coatings a material of choice for an optimized interaction with biomolecules and cells in a variety of applications. The company is integrating the novel coatings with tools like microarrays, high content cell-based assays and microfluidic platforms for approaching a range of different biological assays.

Company Strengthpoints

HIGH END PRODUCTS: The versatility of Tethis commercial systems, the unique innovative materials and revolutionary coating solutions can find application in a broad range of sectors, which span from gas sensing to biotechnology.

PATENTS/LICENSES/TRADE MARKS/QUALITY CERTIFICATIONS: With five patents registered and two trade mark products, Tethis is growing also in certification of its products and quality system.

INNOVATIVE

PROCESSES/SERVICES/PRODUCTS: Based on two different technologies, Tethis nanopowders and nanostructured thin films sources produce a new class of nanostructured materials which can be easily interfaced with almost all type of substrate and devices.

NETWORKING: The participation in financed projects increased Tethis contacts network, gathering both industrial and academic partners.

R&D: Tethis R&D targets on the incorporation of nanotechnology into devices but represent also an added value for Tethis customers and partners who can find it in Tethis products, technical consulting and services but also in collaborative projects on device development and prototyping.

EXPERTISE: Tethis expertises arise from a multidisciplinary background from the integration of scientific experience coming from top-end university research and economic know-how at the SME as well as the international market level.

Type of cooperation

- ✓ Activation of new projects (R&D)
- ✓ Development of new products
- ✓ Meeting potential clients

Partnership proposal

Tethis offers innovative systems and technologies for the production of nanoparticles and nanoparticles coating.

UNIVERSITA' DEGLI STUDI DI MILANO-BICOCCA DIP. DI INFORMATICA, SISTEMI E COMUNICAZIONE (IRELAB)

Address: Building U14, viale Sarca 336, 20126, Milano

Telephone: 02-64487801

Fax:

E-Mail: domenico.sorrenti@unimib.it

Web-Site: www.disco.unimib.it

Contact person: Domenico Sorrenti

At a Glance

Type of organization: University

Turnover (€/Y): ~1.1M€ (2008)

Number of employees: >50

Sector

Robotics

Vision technologies

Main activity

DISCo has a faculty staff of more than thirty professors and more than forty doctoral students and researchers. The primary objective of DISCo is the development of research and teaching in Computer Science and Engineering, in order to contribute to the innovation of the European and Italian productive systems. The DISCo research areas are:

- Software architecture, distributed systems, imaging, computer vision, and robotics;
 - Databases and information systems, artificial intelligence, cooperative technologies;
 - Bioinformatics, complex systems;
 - Information, finance, and environment computational networks and decision sciences.
- DISCo will be represented by the **Informatics and Robotics for Automation Lab**. The research activities of the laboratory are:
- indoor and outdoor mobile robotics, as for today outdoor is just urban;
 - world modeling 2D/3D, mainly vision-based (mono and pluri ocular);
 - mobile observer self-localization (all kind of Bayes filters);
 - object detection and tracking from a mobile observer;
 - traffic (vehicular and pedestrian) monitoring;
 - object detection and tracking.

Type of cooperation

- ✓ Activation of new projects (R&D)
- ✓ Technology transfer or production licensing
- ✓ Joint creation of an enterprise or consortium
- ✓ Development of new products

Company Strengthpoints

HIGH END PRODUCTS: design and physical construction of omnidirectional catadioptric vision systems; design and software development of object detection and tracking algorithms; design and software development of world modeling algorithms, mainly based on vision as sensor; design and software development of self-localization, based on different range sensors; design and physical construction of mobile robots and other mechatronic devices;

NETWORKING:

Universities and research centres in different European countries (Italy, U.K., Germany, France, Spain, Switzerland). Private companies (Italy).

EXPERTISE:

- computer and robot vision (camera calibration, 3D reconstruction, object detection and tracking);
- processing of data from range sensors other than vision;
- mobile robotics middleware;
- microcontroller-based boards and development of mechatronic devices based on DC motors;

Partnership proposal

- Design and physical construction of:
 - omnidirectional catadioptric vision systems
 - mobile robots and other mechatronic devices
- Design and software development of:
 - object detection and tracking algorithms
 - world modeling algorithms, mainly based on vision as sensor
 - self-localization, based on different range sensors
 - Autonomous driving