



AMIRES

portfolio presentation

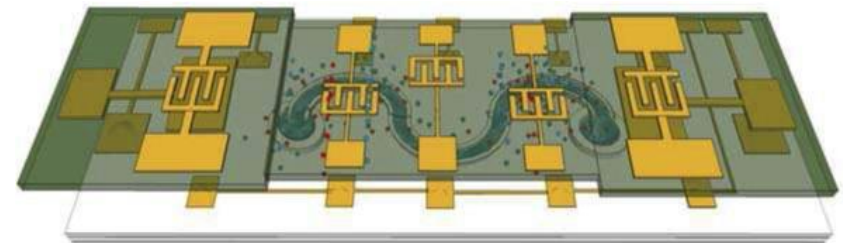
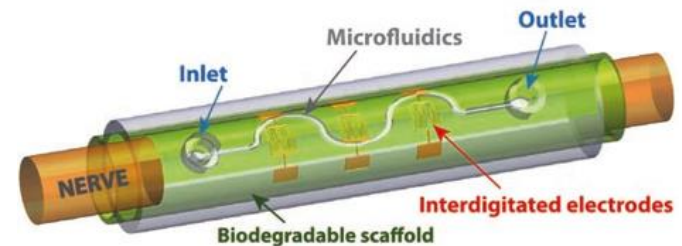
Start: 03/2012 End: 02/2015 Funding: € 3.8 M Call: FP7-NMP-2011-SMALL-5

Project objective:

Development and testing of flexible organic electronics for the treatment of Spinal Cord Injury (SCI). Several devices able to stimulate stem cells with electro-chemical cues, supply drugs and growth factors, and monitor the evolution of neuronal cells, were integrated into an Active Multifunctional Implantable Device (AMID) that will be surgically implanted in a mouse model of SCI.

AMID features are:

- long-term stability, biocompatibility and safety,
- reduced risk of a host versus graft immune response,
- mimicking the local microenvironment for stem/precursor cell recruitment and differentiation,
- monitoring the functionality of the regenerated nerve cells,
- local stimulation with tunable electric fields,
- delivery of locally growth factors, neurotransmitters, and drugs.
















Project Coordinator: Prof. Fabio Biscarini
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Project Manager: Rudolf Fryček, PhD.
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Consortium

University of Modena	
National Research Council	
University of Cambridge	
Scriba nanotecnologie srl	
University of Linköping	
Spanish National Research Council (CSIC)	
University of Algarve	
French National Centre for Scientific Research (CNRS)	
University of Bologna	
Contipro Biotech s.r.o.	
Amires sàrl	



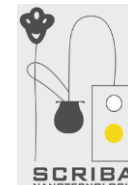
UNIVERSITÀ DEGLI STUDI
DI MODENA E REGGIO EMILIA



UNIVERSITY OF
CAMBRIDGE



Linköping University



CONTIPRO

AMIRES

Website: www.ione-fp7.eu

The project iONE-FP7 receives funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 280772.

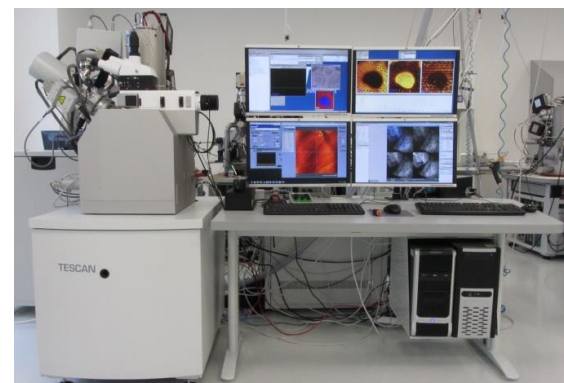
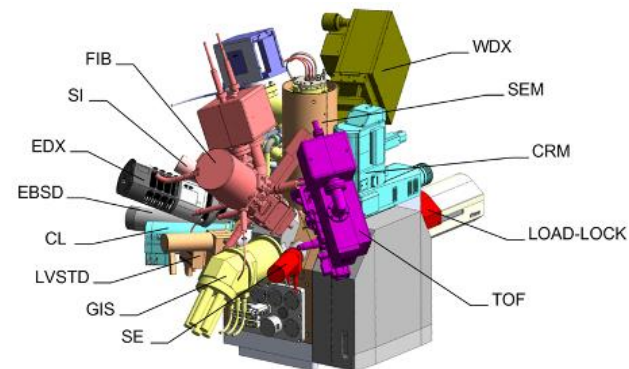


Start: 04/2012 End: 03/2015 Funding: € 3.6 M Call: FP7-NMP-2011-SME-5

Project objective:

Development of a novel multimodal tool combining:









- **a vision capability** by integrating scanning electron (SEM), scanning probe (SPM) and optical microscopy (OM) thus enabling multimodal microscopy,
- **a chemical analysis** capability by time-of-flight secondary ion mass spectroscopy (TOF-SIMS) and energy dispersive X-ray (EDX),
- **structural characterization** by electron backscattered diffraction (EBSD),
- **a non-destructive optical analysis** capability by confocal Raman spectroscopy and cathodoluminescence (CL),
- **a tomography capability** by complementary use of novel 3D orthogonal TOF-SIMS, 3D EBSD and 3D confocal Raman tomography (the last method being non-destructive) thus **enabling correlation between alternative 3D methods.**





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Consortium	
Tescan, a.s.	
Max Planck Institute – Science of Light	
EMPA Thun	
Witec GmbH	
Tofwerk AG	
Specs surface nano analysis GmbH	
Brno University of Technology	
Amires sàrl	



MAX-PLANCK-GESELLSCHAFT



Website: www.univsem.eu

The project UnivSEM receives funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 280566.



AMBASSADOR



Autonomous management system developed for building and district levels

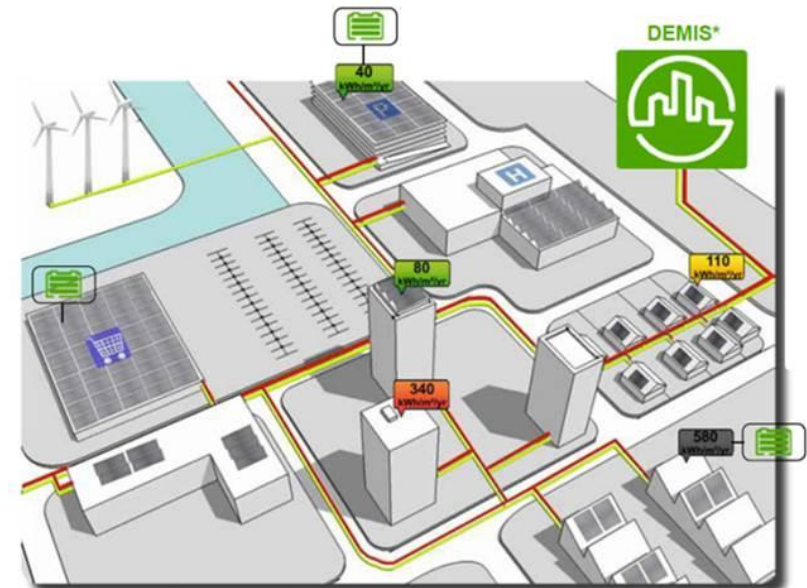
Start: 11/2012 End: 10/2016 Funding: € 6.5 M Call: FP7-EeB.NMP.2012-1

Project objective:

The ultimate purpose of the AMBASSADOR project is to study, develop and experiment systems and tools that will aim at optimising the energy usage in the perimeter of a district by managing the energy flows, predicting and mastering energy consumption and energy production.

The main objectives of AMBASSADOR are as following:

- development of a **holistic energy optimisation system** for a district, taking advantage of the possible shared usage of the local energy production and storage and the complementarity of energy consumption profiles;
- development of **management system functionalities** to optimise building energy consumption;
- **validation** through a number of selected scenarios some functions or services proposed by the system on the three validation sites
- To study **different business models** that can be successfully implemented.



* DEMIS : District Energy Management Information System
hot water network
electric grid





AMBASSADOR



Autonomous management system developed for building and district levels

Project Coordinator: Alfredo Samperio
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Consortium

Schneider Electric Industries SAS



Swiss Centre for Electronics and Microtechnology (CSEM)



Commissariat a l'Energie Atomique et aux Energie Alternatives (CEA)



Neurobat AG



Leclanché GmbH



FUNDACIÓN TEKNIKER



Zigor R&D



D'Appolonia S.p.A.



National Technical University of Athens (NTUA)



Planair SA



European Consluting Brussels



Teknologian Tutkimuskeskus VTT



ZEDfactory



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Website: www.ambassador-fp7.eu

The project AMBASSADOR receives funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 314175.





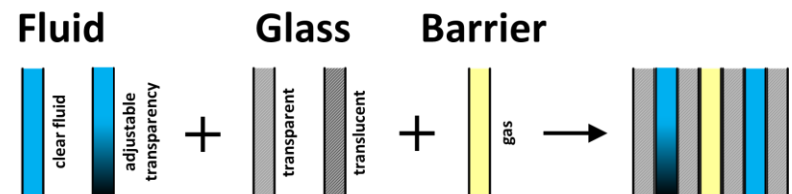
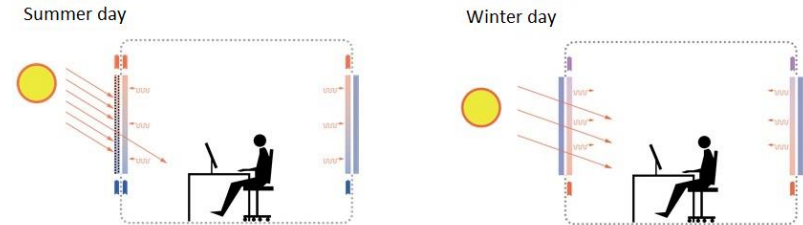
Start: 09/2013 End: 08/2017 Funding: € 3.9 M Call: FP7-ENERGY-2013-1

Project objective:

Development of a new and innovative concept for multifunctional solar thermal glass facades systems. The FLUIDGLASS approach turns passive glass facades into active transparent solar collectors while at the same time controlling the energy flow through the building envelope.

FLUIDGLASS unites four key functionalities in one integrated system:

- fully transparent **solar thermal collector**, which enables harvesting of solar energy even in buildings with large glass share,
- transparent **insulation layer**
- **control device** for the solar radiation transmission and inner glass surface temperature thus increasing the thermal user comfort and reducing the demand for heating, cooling and lighting,
- **substitution for conventional HVAC** components such as cooling and heating panels.





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Consortium

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Mayer Glastechnik GmbH	
Interstate University of Applied Sciences and Technology	
Technical University of Munich	
GLASSX AG	
HOVAL Aktiengesellschaft	
Commissariat à l'Énergie Atomique et aux Énergies Alternatives	
University of Stuttgart	
Cyprus Research and Innovation Center	
ALCOA Europe Commercial SAS (Kawneer Innovation Centre)	
AMIRES s.r.o.	



Website: www.fluidglass.eu

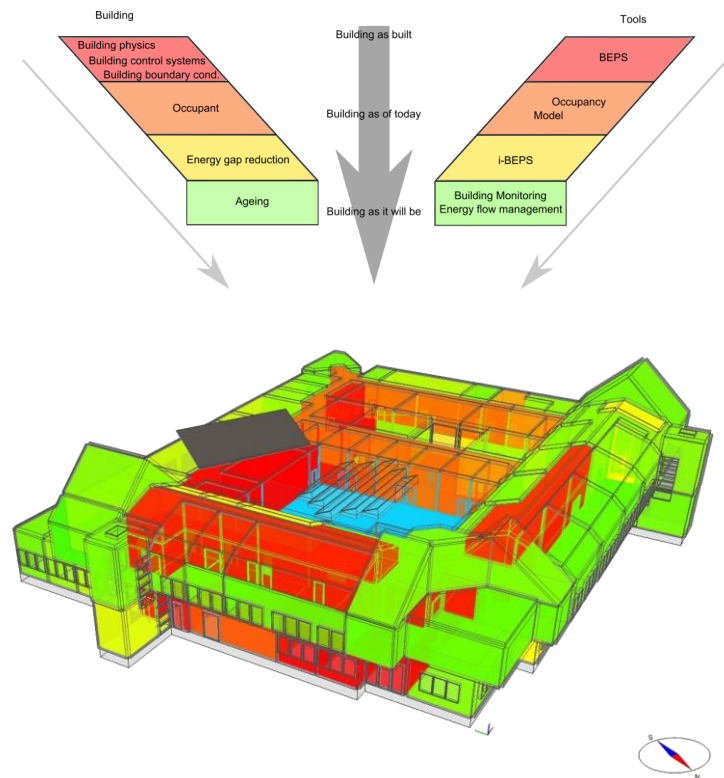
The project FLUIDGLASS receives funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 608509.

Project objective:

Minimization of the gap between computed and measured energy performances through the improvement of the predictive capability of a state-of-the-art commercial BEPS. TRIBUTE extends the use of this tool to the commissioning and operation stages of a building. For existing buildings, M&V techniques are being developed and deployed to connect the BEPS model in real time to the pivotal wireless sensing and control systems of a monitored building.

To reduce the gap, the TRIBUTE main steps are as following:

- Determination of a **key parameter set** having the greatest impact on building energy performance.
- Identification of these key parameters in real time through a **set of wireless sensor networks**, to be fed back in the selected BEPS and incorporated via the learnt occupancy model into the BEPS.
- Institution of **continuous building monitoring** (after retrofit, if necessary) and energy flow management.





Take the energy bill back to the promised building performance

Project Coordinator: Martin Sénéclauze
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Consortium

Swiss Centre for Electronics and Microtechnology (CSEM)



Schneider Electric Industries SAS



Cork Institute of Technology



IBM Ireland Limited



Technical University of Dresden



TBC Innovations SAS



EQUA Simulation AB



Communauté d'Agglomération de La Rochelle



University of La Rochelle



City of Torino



Politecnico di Torino



ZEDFactory Europe Limited



Catalonia Institute for Energy Research (IREC)



TEKEVER – Tecnologias de Informacao, S.A.



NXP Semiconductors Netherlands BV



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CITTA' DI TORINO



Website: www.tribute-fp7.eu

The project TRIBUTE receives funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 608790.

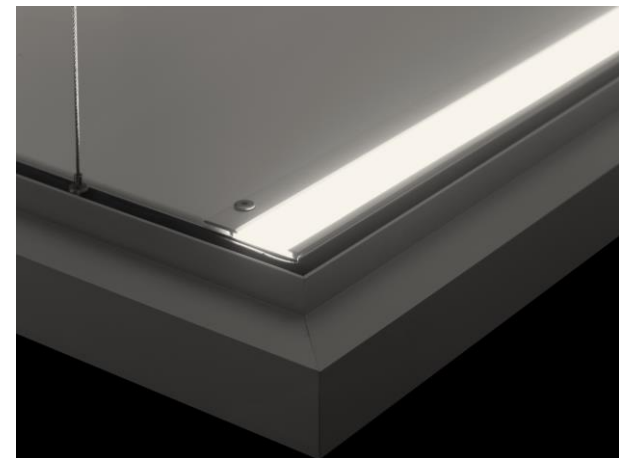


Start: 01/2014 End: 12/2016 Funding: € 3.2 M Call: FP7-ICT-2013-11

Project objective:

Implementation of large-area and low-cost intelligent SSL modules with high efficiency and high lighting quality, while assessing their environmental footprint. The project targets in particular the professional and architectural lighting sectors.

The project aims to achieve progress beyond the state-of-the-art in terms of size, flexibility, efficiency, lighting quality and beam-shaping, lifetime, added intelligence for light out-put control, and production costs. It will do so by **integrating light-management** structures and **new color-changing coatings** with heat-management solutions by means of an innovative **roll-to-roll** production technology compatible with flexible substrates.





LASSIE-FP7

Large area solid state intelligent efficient luminaires



Project Coordinator: Dr. Rolando Ferrini
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Consortium

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Fraunhofer-Gesellschaft	
VTT Technical Research Centre of Finland	
REGENT Beleuchtungskörper AG	
BASF Schweiz AG	
Fundacion GAIKER	
LFoundry S.r.l.	
AMIRES s.r.o.	



Website: www.lassie-fp7.eu

The project LASSIE-FP7 receives funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 619556.

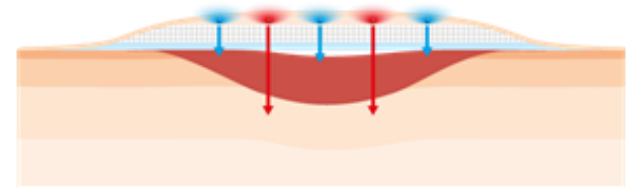


Project objective:

Fabrication of a medical device for professional wound care. The device will use recently proven therapeutic effects of visible light to enhance the self-healing process and monitor the status and history of the wound during therapy. Light exposure in the red part of the spectrum (620 - 750nm) induces growth of keratinocytes and fibroblasts in deeper layers of the skin. The blue part of the spectrum (450 - 495nm) is known to have antibacterial effects predominantly at the surface layers of the skin.

In order to be compliant with hygiene requirements the system will consist of two parts:

- a **disposable wound dressing** with embedded optical waveguides and integrated sensors for the delivery of light and monitoring at the wound,
- a soft and compliant **electronic module** for multiple use containing LEDs, a photodiode, a controller, analog data acquisition, a rechargeable battery, and a data transmission unit. to the sensors.





Miniaturized smart system for light stimulation and monitoring of wound healing

Project Coordinator: Dr. Dionysios Manassis
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Consortium

Technical University of Berlin



Laboratoires URGO



Heidelberg University



Swiss Centre for Electronics and Microtechnology (CSEM)



SignalGeneriX Ltd



Microsemi Semiconductor Limited



AMIRES s.r.o.



UNIVERSITÄT
HEIDELBERG
ZUKUNFT
SEIT 1386



Website: www.medilight-project.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 644267, project MEDILIGHT.



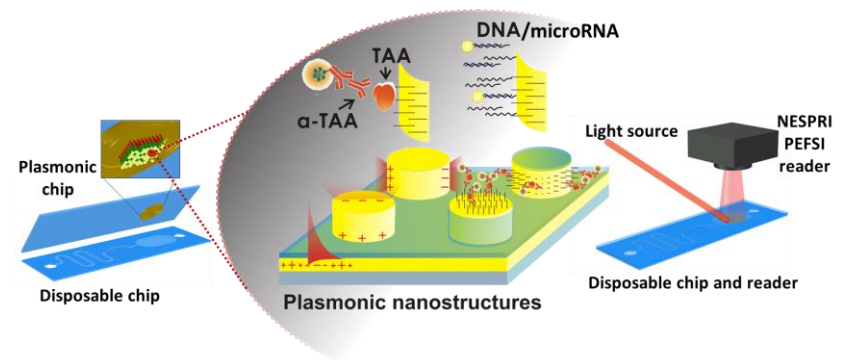
Start: 05/2015 End: 10/2018 Funding: € 6.0 M Call: H2020-PHC-10-2014

Project objective:

Development of a novel robust in-vitro diagnostic system for early cancer diagnosis, prognosis, patient follow-up and therapy efficacy assessment based on molecular analysis of peripheral blood (liquid biopsy).

The use of innovative optical analytical techniques that take advantage of plasmonic metallic nanostructures will advance the state-of-art of colorectal cancer biomarker detection.

The project is focused at developing a **compact plasmonic-based** device with an **integrated microfluidic** circuit and **functionalized nanostructures** for the detection of DNA, microRNA and tumor autoantibodies. The aim is to detect these cancer biomarkers circulating in blood with improvement in sensitivity, reduction in cost of platform compared to today's available techniques and analysis time less than 1h.





Project Coordinator: Prof. Giuseppe Spoto
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Project Manager: Elena Turco
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Consortium

National Institute of Biostructures and Biosystems



Austrian Institute of Technology



Institute of Photonics and Electronics



Italian National Cancer Institute Regina Elena



University of Twente



University of Siegen



University of Ferrara



VTT Technical Research Centre of Finland



Scriba Nanotechnologie



Ginolis Oy



Future Diagnostics Solutions



Horiba Jobin Yvon SAS



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Website: www.ultraplacad.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 633937, project ULTRAPLACAD.

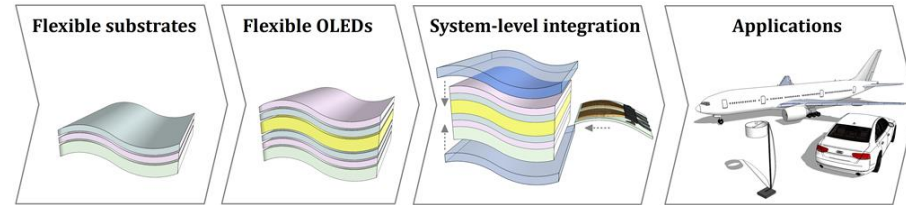


Start: 01/2016 End: 12/2018 Funding: € 14.0 M Call: H2020-ICT-2015

Project objective:

PI-SCALE has the ambition to **create a World-leading open access pilot line** for companies interested in the manufacture and system-level integration of flexible OLEDs into products. This will be achieved by bringing together the very best of the existing European infrastructure and knowhow on flexible OLEDs from different partner locations into one pilot line.

The pilot line is positioned to bridge the gap between R&D and mass production, offering small-to-medium scale pre-production runs of customised flexible OLED devices with a volume of up to 5000 m² of OLEDs/year. This will enable companies of all sizes to quickly and cost effectively test and scale up their flexible OLED lighting or signage concepts and bring them to a level where they are ready to be transferred to a mass production facility. It will enable companies to make important decisions about their final product design, and have large numbers of product prototypes for application-specific operational testing (TRL7). The pilot line will serve diverse industries such as architectural lighting, automotive, aerospace, consumer electronics and the built environment.



PI - SCALE

Bringing flexible organic electronics to pilot innovation scale



Project Coordinator: Joanne Wilson, PhD.
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Consortium	
TNO / Holst Centre	
Fraunhofer FEP	
VTT Technical Research Centre of Finland Ltd	
Centre for Process Innovation Limited	
M-Solv Ltd	
FlexEnable Ltd	
DuPont Teijin Films Europe	
Brabant Development Agency	
AUDI AG	
emdedesign Gmbh	
REHAU AG + Co	
Pilkington Technology Management LTD	
Coatema Coating Machinery GmbH	
AMIRES s.r.o.	



Website: www.pi-scale.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 688093, project PI-SCALE.



Start: 01/2016 End: 12/2019 Funding: € 5.9 M Call: H2020-LCE-2015

Project objective:

WASCO P brings together leading EU and Moroccan Institutions, Universities, and commercial SMEs and industrials in order to develop and validate a **flexible and adaptive integrated solution encompassing different innovative technologies and optimized strategies for both the cooling of the power-block and the cleaning of the solar field optical surfaces.**

The WASCO P holistic solution will provide an effective combination of technologies adaptable to any solar field and power-block type and CSP plant location. **WASCO P will allow a significant reduction in water consumption (up to 70% - 90%) and a significant improvement in the water management of CSP plants.**



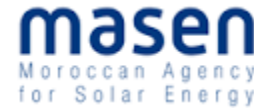


Project Coordinator: Delphine Bourdon
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Project Manager: Fabrizio Perrotta
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Consortium

Commissariat à l’Energie Atomique et aux Energies Alternatives	
Deutsches Zentrum für Luft- und Raumfahrt	
Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas	
Cranfield University	
Fundacion Tekniker	
Moroccan Agency for Solar Energy SA	
Rioglass Solar S.A	
Archimede Solar Energy Srl	
OMT Solutions BV	
Hamon d’Hondt	
AMIRES s.r.o.	



Website: www.wascop.eu

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement no. 654479, project WASCOP.



Product Manager: Fabrizio Perrotta
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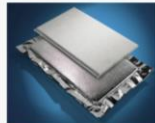
Project objective:

EffiBUILDING.eu is a database of **novel materials and products as well as prototypes** within the area of **energy efficient products & solutions of buildings**. It is an overview and benchmarking tool of the latest state of the art components and systems available on the market and also latest research results and prototypes. This innovative tool simplifies access to know-how of energy efficient products for all users involved in building industry.

The database is currently specialized in **efficient windows, facades systems, innovative photovoltaic models and sensors**, and it includes data from public sources, fairs/conferences, private businesses, research organizations and universities of all over the world. Currently it covers over 329 products and 73 prototypes and it grows every day. Each product in the database has its own technical datasheet making easier the benchmarking between products.




Microtherm Slim Vac



Description:
 Vacuum insulation panel with an impermeable polymer outer envelope. Applicable as floor, roof, terrace, façade and door insulation. Core material is incombustible, completely recyclable and available in a range of styles.

Further info:
[Link](#)

Type: Product	Class: façade
Category: panels, glazings, insulated foams	Country: Belgium
Technical specification:	Parameters:
	Density [kg/m ³]: 160 - 220
	Thermcon [W/(mK)]: 0.0042
	U-Value [W/(m ² K)]: 0.21

COMPANY INFORMATION:

Name: Microtherm NV	Contact name:
Company info: http://www.microthermgroup.com/slider.aspx	Contact email: sales@microtherm.be

[CLOSE](#)

Website: www.effibuilding.eu



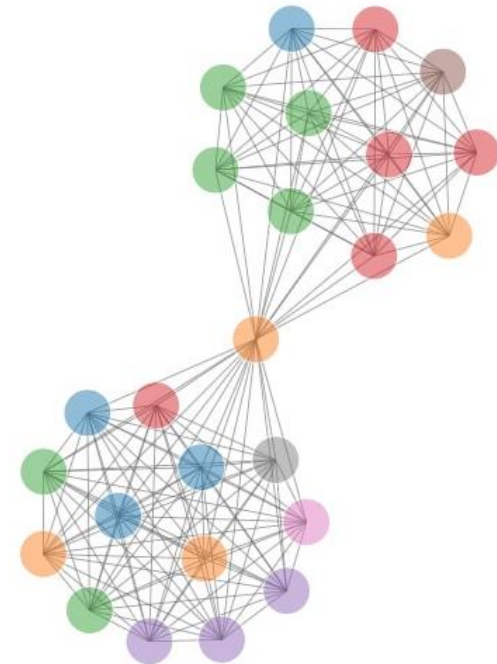
Product Manager: Rudolf Fryček
(frycek@amires.eu)

Product objective:

AMIPlexus, a cooperation visualization engine, is an essential tool for H2020 project coordinators, innovation project managers, group leaders, technology scouts, advisors and coaches. It uses big data visualization for a competitive edge in development of innovation collaborative projects and provides a fundamental overview of any type of technology of application field, including key movers and their relations.

Key Features

- Abstract search of all Horizon 2020 funded projects
- Visualization of cooperation networks and key partners
- Search by call, topic, funding scheme, acronym, organizations
- Identification of strong cooperation links
- Visualization of leading partners and countries in selected domains
- Self-adjustable visual presentation



Website: www.amiplexus.eu

Contacts



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