

Building an Ecosystem for the up-scaling of lightweight multi-functional concrete and ceramic materials and structures



The Open Call



LIGHTCOCE

Contents

This is the sisxth edition of the newsletter related to the LightCoce Project.

This issue is dedicated to an overview of the LightCoce Spin-off Company, focusing on the ecosystem, the value chain, and the pilot-scale facilities.

Moreover, the last news will be presented.

- The Spin-off Company
- Breaking News
- LightCoce Partners
- Contacts



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What is LightCoce project?

LightCoce is a research project funded by the European Community under the H2020 program, with the aim of creating an ecosystem of business innovation capable of upscaling and testing new multifunctional lightweight materials for SMEs.

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How LightCoce helps you overcome complex standards and regulations?

Standardization and regulatory compliance are key issues for further exploitation and commercialization of innovations.

Testing will be in alignment with international standards (CEN, ISO, ASTM, etc.) and regulatory framework aiming to develop products towards EU standards.



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Which is the target market of LightCoce?

LightCoce can address different types of customers such as: Banks, Funds / Investors, Incubators / Accelerators Public Bodies and Owners of Infrastructures Research Institutes / Universities, Large Enterprises, SMEs, Startup / New Ventures Industrial Associations or GroupsRaw Materials Providers.



Do you need to innovate your business?

Innovation services are open access under specific fees to all parties, such as: development of business model, marketability assessment, suggesting technology to enable your value proposition or embodying it in a product / service in favour of the user, ensuring the proper protection of the IP developed and identifying the funding opportunitiesat local or EU scale.

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Can large-scale modeling help you evaluate new opportunities?

The Modeling Group focuses on process modeling and simulation through the development of holistic models of processes through multi-scale modeling of materials and unitary operations. Moreover, predictive modeling at different levels will be implemented to generate a chain of models that leadto full-scale simulation of real structures, to evaluate the overall performance of solutions at a global level.

Which professionals can benefit from LightCoce services?

The relevant reference markets are different, such as: Constructions Industry, Bricks and Tiles Industry, Aerospace Industry, Automotive Industry, Defense Industry.

LightCoce Spin-off Company

The **spinoff LightCoce OITB** has been recently established in the framework of the EU-funded project LightCoce coordinated by NTUA.

The purpose of the spin-off is to create an **open-access business ecosystem** that will offer **specialized services** in the fields of **concrete and ceramic** materials for the construction, automotive, and aerospace industry.

The spin-off mission is to become a **onestop provider** of holistic services for the development of novel concepts related to lightweight concrete, conventional and advanced ceramics, covering the **whole value chain** from the upscaling of new products, materials, or technology, to the commercialization.

More analytically, the development upscaling and testing services are provided by **5 pilotscale facilities** that can produce materials on a scale closer to the industrial one, working to cover the gap between laboratory development and full-scale production.

If a company has concluded the upscale trial on a new product and wishes to investigate the potential of industrial production then it is important to conduct trials on a larger scale in order to access the upscaling potential, to identify possible problems related to the scale effect, and to find all the parameters for the real scale production. The company aspires to become a **singleentry point** for its clients. In fact, apart from the pilot-scale services, it offers all complementary services required to support the commercialization of these materials, such as characterization, process modelling, quality assurance, monitoring, standardization, safety, market uptake, and innovation management.

LightCoce vision is to support the needs of industry and especially the small and medium enterprises which do not have the resources and infrastructures needed for research and to become a pan-European access point for services' delivery and innovation for the industries under concern.

LightCoce Spin-off on YouTube

Follow the LightCoce Spin-off on:

- LinkedIn
- Facebook

Breaking News

LightCoce Open Call – Get on board



Take part into the LightCoce Open call!

Are Lightweight Ceramics or Concrete an essential part of your business?

Are you interested in developing a novel business idea within the lightweight materials' value chain, free of chargew?

Gain access to services driven by your special business needs.

Follow our Open Call https://lightcoce.com/open-call/

LightCoce at Space Tech Expo 2021 **Bremen (Germany)**

Space Tech Expo is the leading event in Europe for space technology. In 2019, it brought more than 400 exhibitors and 5,000 experts from all over the world to Bremen, a city that is one of the space centres in Germany and Europe. From now on the B2B event for the space industry has been held annually.

In the November 2021 edition, Azimut Space **GmbH** exhibited the recent successes in developing re-usable, high temperature (2000°C) materials for thermal protection of re-entry vehicles.



LightCoce at the UniSMART **Community Social Event**

The 2nd of December, 2021 the LightCoce Open call has been presented to the **UniSMART Community** dinner. The annual event that brings together more than two hundred Italian companies from the innovating ecosystem of the University of Padova.

The event has been an incredible opportunity to disseminate the LightCoce open innovation and to engage new companies in our value chain.







The LightCoce Spin-off company - LightCoce Newsletter n° 6 - 5

Welcome to LightCoce partners 4 / 26 - sixth group



AZIMUT SPACE GMBH

Azimut Space GmbH is a Space Engineering company with more than 14 years of experience in thermo-mechanical engineering and in the development of payloads and subsystems.

The company, founded in 2007 primarily as a thermal engineering company, has expanded its portfolio over the years, and now offers complete thermal solutions, thermal engineering services, thermal hardware as well as development of instruments and subsystems.

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STAM

Stam is a private engineering company, based in Genoa, Italy. The main mission of the company is to provide engineering services to industries. Since its establishment in 1997, the company has been specializing in design and development of high-tech solutions, based on conventional and non-conventional robotics and mechatronics.

Stam invests a significant part of its turnover in R&D thus providing their customers with most qualified and edging competencies to drive development based on availability and affordability of technological trends. Innovation, research and development are the core competencies of Stam.

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SUSTAINABLE INNOVATIONS EUROPE

Technical University of Nuremberg (THN): Sustainable Innovations Europe is a Faculty of Materials Engineering: The THN Spanish engineering SME whose technical currently has over 13,500 students in 12 team has more than 10 years of experience faculties. THN is very active in research in European research collaborative and has the highest third-party funding of projects. The company main goal is to fill all Bavarian universities. An interdisciplinary the gap between research activities and and application-oriented cooperation market implementation, that's to say turning with industrial partners and associations sustainable ideas into profitable and takes place in around 100 well-equipped environmentally friendly business models. laboratories at the university. Since 1973 SIE expertise lies on research to market, when, THN was funded, the knowledge business strategies and sustainable of the bricks and their properties as well communication methods, helping as the associated production processes organizations promote their innovations have been passed on to the students under a sustainable and circular economy in the Faculty of Materials Technology. thinking method. The core competencies Energy Campus Nuremberg (EnCN): offered by SIE, which are associated THN has been a partner of the Energie with the connection between research Campus Nuremberg (EnCN) since 2011. activities, are structured in four main pillars; EnCN is working on realizing the vision Research2Market, Business Strategy, of a sustainable energy industry based Communication and Training, that can be on renewable energies. It is a new summarized on the knowledge in legal research platform for the development and economic barriers for the market and demonstration of a closed renewable uptake combined with the dissemination energy chain from energy generation, & communication of new technologies at storage/transport to the efficient use of European and International level. energy.

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Inspiration



"The best way to predict the future is to create it."

Alan Kay

Connect with us!

Are you eager to know more about the state of the art of lightweight concrete and ceramics?

Are you a professional or a company providing services that LightCoce might need?

Are you an expert in the field of lightweight materials?

Contact us to share your feedbacks and ideas on this page: info@ lightcoce-oitb.eu





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