

DeepTech4Good

SCALING UP EUROPEAN DEEPTECH STARTUPS

STARTUP
EUROPE



DeepTech4Good

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EDITORIAL

With the emergence of the IoT (Internet of Things), the internet business is changing and a new type of start-up is entering the market.

This form of start-up (typically ICT) copes with the hardware/sensors generating the data as well as the connectivity required to send the data to the cloud and relies on big data and artificial intelligence to allow products to respond intelligently to different environments.

The third wave (DeepTech) is mainly characterized by the recent advances in Artificial Intelligence, and generally hardware, covering new forms of communications IoT/5G, quantum computing, virtual and augmented reality. This is challenging all industries in an even bigger, more disruptive way.

For Europe, which largely missed out on the rise of GAFAM-like start-ups, this third wave, deeply rooted in technology, is a great opportunity to return to the race and support its unsung heroes: the DeepTech Champions.

DeepTech companies promise solutions in a wide range of fields, with a more scientific approach than is typically seen in famous tech companies. *'Instead, they solve problems through meaningful scientific or technological developments. DeepTech investments still carry risk and sometimes face longer roads to liquidity, but their low valuations can provide for significant returns'*, said Swati Chaturvedi, who coined the term in 2014.

It is these different kinds of companies that often face difficulties when it comes to raising funds – which is why, through DeepTech4Good Acceleration Programme, we plan to support them accelerate their growth by helping them to offer their disruptive solutions, whose development will be supported/accelerated through public funding and venture capital, to traditional and emerging markets.

DeepTech4Good is an Acceleration Programme, financed within the Horizon 2020 framework, committed to helping DeepTech start-ups accelerate their development and scale up at European level. DeepTech start-ups offer applications in a wide range of fields and create revolutionary solutions. We at DeepTech4Good chose four domains: Smart Mobility, Smart Cities, Industry 4.0 and Health & Well-Being.

Five DeepTech4Good events are planned throughout the 24 months programme. Two of the five were already successfully held in Paris and Stuttgart in 2018 and attracted an European audience composed of high potential DeepTech start-ups, corporates, VCs and prominent members of the start-up and innovation ecosystems. Three more events will take place in Graz/Austria, Barcelona/Spain and respectively in a location that will be selected to offer the highest visibility of the DT4G Champions and create new collaboration opportunities.

In Paris and Stuttgart, DeepTech4Good already provided a large number of business and fundraising opportunities as well as higher visibility for a lot of high growth potential start-ups who have been selected for these meetings. Furthermore, the Open Innovation Workshops that took place at the DeepTech4Good events gave rise to fruitful projects between the start-ups and DeepTech partners.

It was a great year with exciting scale-ups, big visions, contagious levels of joy and enthusiasm, and promising results. Here we offer an overview of the programme's first successfully completed events and key results.



**HIGHLIGHTS OF
DT4G#PARIS**

DEEPTECH4GOOD#PARIS

74 APPLICANTS

applying start-ups on the F6S platform
to be selected for one of the events

**27 FINALISTS**

start-ups selected to pitch during the events

**8 LAUREATES**

start-ups selected for the acceleration programme
8 per event, 16 overall up to now from Paris and Stuttgart

131 PARTICIPANTS**PITCHS
SESSIONS****23**

Business elevator pitch
sessions

**BUSINESS
MEETINGS****78****21**

Fundraising pitch
sessions

The first DeepTech4Good event was held on 11th of July 2018 at the historic Paris town hall. The Startup Europe initiative aims at discovering the best European high potential start-ups and supporting them in their scale-up efforts. The main objective is to make Europe a global hub for high potential start-ups and create future unicorns.

The DT4G event included pitches, B2B meetings and workshops aimed at bringing together corporate partners, start-ups and experts in the fields of Smart Mobility, Health & Well-Being, Smart Cities and Industry 4.0. During these sessions, topics such as electric mobility, digital patient journeys, AR (Augmented Reality) / VR (Virtual Reality) in cities and robotics for the maintenance of industrial infrastructures were discussed (see results of emerging projects in the scope of #DT4G Open Innovation Workshop in Paris at page 37.)

Furthermore, about 80 B2B meetings were held throughout the afternoon in the town hall with companies such as Panasonic, Oracle, Orange, EDF and Ericsson and investors like Demeter, ISAI, Partech, Elaia partners, Safran Corporate Ventures and Airbus Ventures.

The DeepTech start-ups delivered the event's highlight with their professional and exciting pitches. 74 applications from all over Europe were screened and 27 finalists were selected. Those lucky 27 had the opportunity to present their innovations to investors, companies and other stakeholders.

At the end of this day, inaugurated by the mayor of Paris Anne Hidalgo, Ming-Lie Wong from Paris & Co and Karl Gedda from Opticsvalley, finally announced the eight winners selected by a hundred investors and companies. These start-ups will be supported throughout their different stages of growth at European level.

Among the eight winners were Partnering Robotics, CAILabs, Teratronics, HySiLabs, Optinvent, DAMAE Medical, VitaDX and Iconem.



SMART HEALTH & WELL-BEING



DAMAE Medical develops an innovative and patented imaging device able to see beneath the skin, at a cellular resolution, by simple contact with the patient skin.

Anaïs BARUT

✉ anais.barut@damaemedical.fr



Vita DX develops a diagnostic tool for healthcare professionals using fluorescence and deep learning technologies.

Allan RODRIGUEZ

✉ allan@vitadx.com

INDUSTRY 4.0



Cailabs provides innovative photonics solutions to fully exploit the potential of optical fibers and solve critical industrial problems.

Jean-François MORIZUR

✉ jf@cailabs.com



Teratonics offers innovative solutions for contactless non-destructive testing and imaging inside dielectric materials and on coated metallic surfaces.

Marco CAVALLARI

✉ marco.cavallari@teratonics.com

SMART MOBILITY



HySiLabs' solution constitutes a technological brick to facilitate hydrogen delivery to a wide range of applications.

Claire BURTIN

✉ cburtin@hysilabs.com



Optinvent creates a disruptive new category of wearable devices that opens the door to a world of possibilities in mobile augmented reality.

Kayvan MIRZA

✉ kayvan.mirza@optinvent.com

SMART CITY



Iconem helps to preserve the endangered places by digitizing them for exploration and study, today and tomorrow.

Etienne TELLIER

✉ et@iconem.com



Partnering robotics the French company that created Diya One, the world first and only neuro-inspired robot that takes care of people and the environment.

Thibaut CAMBON

✉ thibaut.cambon@partnering.fr

**HIGHLIGHTS OF
DT4G#STUTTGART**

DEEPT ECH4GOOD#STUTT GART

80 APPLICANTS

start-ups applying on the F6S platform
to be selected for one of the events

**23 FINALISTS**

start-ups selected to pitch during the events

**8 LAUREATES**

start-ups selected for the acceleration programme
8 per event, 16 overall up to now from Paris and Stuttgart

120 PARTICIPANTS**PITCHS
SESSIONS****23****BUSINESS
MEETINGS****132**

DeepTech4Good#Stuttgart: Support for Future 'DeepTech Unicorns' in the IoT Market

On 7th of November 2018, twenty-three DeepTech start-ups had the opportunity to showcase their ideas at the "Haus der Wirtschaft" in Stuttgart, Germany. The parallel Photonik-Forum Baden-Württemberg event, organized by Photonics BW e.V., provided excellent synergies.

The pitches focused on the following four fields: Industry 4.0, Health & Well-Being, Smart Cities and Smart Mobility. 23 candidates were selected out of 80 applications from all over Europe and had to convince the investors during their five-minute pitches. In the evening Samantha Michaux, project manager at Steinbeis 2i GmbH and ambassador of the Startup Europe initiative, announced the winners. Among them were six German (Adlatus Robotics, ASCon Systems, HD Vision Systems, INERATEC, Skinmade and vialytics), one French (Mobility Work) and one Austrian (EET) start-up. Each

one of them will receive personal coaching, access to the European Network as well as expert advice and support in their scale-up efforts to become the future 'DeepTech Unicorns' in Europe.

The project partners Steinbeis 2i GmbH and Photonics BW e.V. organized DeepTech4Good#Stuttgart. Katrin Schütz, State Secretary for the Ministry of Economic Affairs, Labour and Housing, welcomed the 220 participants in the festive "König-Karl-Halle" at the "Haus der Wirtschaft" and highlighted during her welcome speech the importance of artificial intelligence and therefore the importance of the DeepTech4Good Accelerator Programme.

All DeepTech4Good#Stuttgart attendees had the possibility to take part in Forum sessions regarding ICT & autonomous systems, photonic technologies for the automotive industry, smart manufacturing and smart health as well as to learn about the latest trends and developments in photonics.



SMART CITY



EET produces an innovative photovoltaic and storage system called Solmate for your home.

Jan SENN

✉ jan@e2t.at



ADLATUS Robotics develops, manufactures and distributes Service Robots and offers customers complete solutions including consulting, commissioning, training and service.

Matthias STROBEL

✉ matthias.strobel@adlatus-robotics.com



vialytics is revolutionizing street maintenance through a automated system, which analyzes and evaluates road conditions.

Patrick GLASER

✉ p.glaser@vialytics.de

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SMART HEALTH & WELL-BEING



Skinmade sells personalized skin care products with individual adapted ingredients, based on sensorily measurements from artificial intelligence.

Viktor BALZER

✉ viktor@skinmade.de

INDUSTRY 4.0



ASCon Digital Twin is a unique Software platform for breaking down the physical to digital wall and enabling Industry 4.0.

Alexander von KLEIN

✉ alexander.vonklein@ascon-systems.de



HD Vision Systems are making robots similar to humans for advanced object recognition and quality inspection for automation tasks.

Christoph GARBE

✉ christoph.garbe@hdvisionsystems.com



Mobility Work provides technicians and experts with a smart, user-friendly and mobile next gen tool in order to improve their equipment maintenance and production performance.

Victorine Seigle-Vatte

✉ victorine.sv@mobility-work.com



INERATEC offers a innovative chemical reactor technology, which converts gases into liquid fuels or valuable chemical products.

Philipp ENGELKAMP

✉ philipp.engelkamp@ineratec.de

START-UP TESTIMONIALS

GERMANY

“An Acceleration Programme with such an international dimension is exactly what start-ups need to extend their Go-to-Market approach and get higher visibility at a cross-European level.”

Ingo FRANZ,
KREAXI Ventures



“The international dimension of the consortium is extremely valuable for us, if considering the access to international markets DT4G provide us.”

Christoph GARBE,
HD Vision



AUSTRIA

"DT4G is a great chance to meet interesting people, get new ideas, make great contacts and enhance your visibility throughout the DACH region and beyond. This year we were able to thrill investors and make the first steps towards a very promising collaboration with a big energy company in Germany. The event turned out to be a valuable asset for scale-up possibilities and connecting people and businesses throughout Europe."

Jan SENN,
EET



"The DT4G Stuttgart was a great experience for me! I made some great contacts in the field of Health Tech and I'm looking forward to a cooperation with the potential for growth. I highly encourage start-ups out there to join this kind of event. It's a great opportunity to get in touch with companies from different fields in an informal and nice setting, and present your own ideas."

Michaela SCHICHO,
Sticklett



"It was a real pleasure for us at SCIO to have been selected for DT4G. Before Stuttgart, we were invited to similar events in Hong Kong and Shanghai, but the response in Stuttgart could offer us that decisive step forward. Since we are working in automotive, aerospace, health diagnostics and other industries, we had the possibility to get in touch with one of the biggest suppliers of aerospace components worldwide. They will visit our facility in Linz soon. Just imagine, 20,000 employees compared to our six – we believe that this meeting will have a great impact on our business! Thank you so much!"

Alexander KRAUSER,
SCIO



FRANCE

"Being the laureate of the Industry 4.0 category of the #DeepTech4Good Acceleration Programme, supported by start-up Europe, is a real opportunity for our start-up – TeraTonic! The #DeepTech4Good Paris event, that took place on July 11th, allowed us to improved our visibility and we have been contacted several times through our web site following the event. We had the opportunity to discuss with relevant corporate players during the event and also established promising contacts with private investors. Being the winner of the Industry 4.0 category represents for TeraTonic, beyond the Acceleration Programme we've joined that will allow us to speed up our development, a real recognition of our potential and of the value offered by our solution and we will proudly put forward the #DeepTech4Good Industry 4.0 laureate label."

Uli SCHMIDHAMMER,
TeraTonic



**BOARD OF
PARTNERS & INVESTORS**

ASTER CAPITAL



Aster is a VC fund based in Paris, with offices in San Francisco and Tel Aviv. We invest in Energy, Mobility, and Industry 4.0, from seed to series B – meaning ticket size from €500,000 to €10M. We cover France, Europe and the USA.

We are looking for three verticals:

- New Mobilities (Smart infrastructures, global digital Transformation of operators, vehicles manufacturers and infrastructure providers - Transportation and Smart Cities, urban mobility - Connected and autonomous cars)
- Energy Transition (Energy management, storage, and efficiency - Smart building - Solar and Wind Energies - Wireless Power)
- Smart Industry (Robotics and logistics - IoT and Industrial connectivity, human-machine interface - Predictive maintenance, analytics / efficiency - Inspection and quality prediction software - Simulation software)

AVCO



AVCO is the national association for Austria's private equity industry and corporate finance service providers. AVCO encompasses private equity houses – from venture capital and expansion financing to buy-outs – as well as various other institutions and companies which are interested in developing the private equity and venture capital industry in Austria – from service providers, banks, investors to portfolio companies and professionals. AVCO's purpose is to communicate private equity and venture capital activities and issues to the appropriate target audience and the general public. Furthermore, the exchange of ideas and cooperation between the members and the private equity and venture capital community is encouraged.

#DT4G

BOARD OF PARTNERS & INVESTORS



BREEGA CAPITAL



Breega is a European venture capital fund designed to finance start-ups in the digital economy. The fund, comprised of experienced investors with entrepreneurial experience, exercises an approach to financing that includes providing on-the-ground support to its start-ups by an in-house team of specialists focused on providing sectorial and operational expertise. Leading the way in transforming the modern VC, Breega invests in Seed and Series A rounds, up to €10M.

Maximilien began his career at Beijaflora, a management consulting firm, in which he served as a consultant specialized in Telecom. After launching Tele2's ADSL Triple Play offer, he founded Titane Conseil, a consulting company specialized in digital transformation, which he led for seven years before co-founding Breega Capital in 2013.

KREAXI VENTURES



For almost 20 years, **KREAXI**'s team (resulting from the merger in 2016 of Banexi Ventures Partners and Rhône-Alpes Création) has invested in companies that are transforming the core of industries by either technology or service innovations or new business models. Kreaxi is an established European Venture Capital firm with team of 15 people based in Lyon, Paris and Frankfurt. Over €500M raised from institutional investors in last 20 years. Out of 540 start-up investments, 27 companies went public. Kreaxi is regulated by the AMF.

Kreaxi is managing venture funds and regional seed investment funds. Kreaxi has >80 companies in its actual fund's portfolios. Our value creation strategy is to develop investments to « hyper growth » by a combination of internal and external growth plans.

LEA PARTNERS GMBH

LEA

PARTNERS

LEA Partners is an entrepreneurial-minded multi-stage private equity firm supporting founders and management teams in various development stages to achieve growth and market leadership. Operating out of Karlsruhe, one of Europe's largest tech clusters, LEA Partners has facilitated investments into more than 40 companies since 2002. With two investment vehicles for all business stages and a strong network of operational industry experts and strategic partners, LEA Partners adds substantial value to the development of tech companies.

OMNES CAPITAL



Omnes raises between €25-40M each year and invests in A and B series from €1M to €5M (ticket size) as a co-investor (lead or follower).

The technologies and markets targeted by Omnes include the following sectors:

Advanced software, high-end sensors/semiconductors, new (in)organic materials. Start-ups in the so-called "deep tech" sector share the following characteristics (as opposed to "low tech" start-ups): disruptive technology, high barriers to entry, high R&D, intellectual property, complex technology, capital intensive. Omnes also invests in Biotech start-up.

RING



Ring Capital is a €165M growth fund: they provide capital to fast growing digital scale-ups and mentor ambitious French entrepreneurs. Ring Capital is currently raising a 2nd vehicle, dedicated to supporting Tech4Good early stage start-ups in France and abroad. The new philosophy is the ability to both finance and support impact-tech early stage companies with dedication and humility. Digital operational skills and proven track record to invest and support the entrepreneurs' team in growing and scaling up their business. Currently Ring Capital is gathering a community of 50+ tech mentors to support entrepreneurs on on-demand issues, and 30+ entrepreneurs to mentor entrepreneurs throughout the holding period on transversal issues.

VENTECH



VENTECH

Ventech is an early stage VC fund created in 1998 in Paris and has developed internationally, with the openings of offices in Munich in 2013 and Helsinki in 2018 and the launch of a sister company in China in 2008. Reason for that is that they believe in "Global reach, local touch" and they provide internationalization support to their start-ups through their local networks and investments in various geographies. Ventech has a team of 9 investment professionals in Europe, with General Partners having two fund lifecycles behind them and meaningful exits (>60). Initially invest is between €1-4M per company, with reserves going up to €8M per company.

KEY PARTICIPANTS

BOSCH VENTURE CAPITAL

Robert Bosch Venture Capital invests in seed, early-, and late-stage Venture Capital rounds and participates in the follow-on investments in privately held companies. Depending on the stage of the company the initial amount of investment ranges from below EUR 500k for a seed funding to more than EUR 5m in an early- to late-stage funding round. Our typical aggregate investment allocation per portfolio company ranges, including follow-on investments, typically between EUR 6 and 15 million for usually a 10 to 25% equity position in each company. We prefer to syndicate our investments with existing or new investors in the company and can take the lead as necessary. In addition, RBVC invests in select regional or industry-specific independent VC funds.

DEMETER

Demeter is a major European player in private equity for ecological and energy transition. Its funds invest from €500K to €30M to support companies in this sector at all stages of their development: innovative startups, fast-growing SMEs and midcaps companies as well as infrastructure projects. Demeter's team, which includes 33 people based in Paris, Grenoble, Metz and Madrid, manages €1B and has completed 120 investments in 12 years.

ELAIA PARTNERS



ElaiA Partners was founded in 2002 as an independent venture capital fund specialising in the Digital Economy. ElaiA Partners now manages over €250M, invests in high-growth start-ups offering ground-breaking technologies, products and services, from the initial financing rounds through to their emergence as global leaders and supports its best performers to reach a massive scale. ElaiA Partners aims to lead the initial financing round and to play a hands-on role in supporting entrepreneurs, notably by joining the Board of Directors.

EURONEXT



Euronext is the first pan-European exchange, spanning Belgium, France, Ireland, the Netherlands, Portugal and the UK. Our unique model unites marketplaces that date back as far as the start of the 17th century, and is designed to incorporate the individual strengths and assets of each market, combining heritage and forward-looking modernity. We operate four national regulated securities and derivatives markets in Amsterdam, Brussels, Lisbon and Paris, a regulated securities market in Ireland and the UK-based regulated securities market, Euronext London.

We provide listing and trading on our regulated markets, facilitating the exchange of capital, risk and goods by organising supply and demand to meet the needs of our customers and users.



EVONIK VENTURE CAPITAL GMBH



Evonik Venture Capital is the corporate venture arm of Evonik Industries AG, one of the world's leading providers of specialty chemicals. We make medium-term investments in start-ups and venture capital funds throughout the world. We invest globally with a focus on Europe, North America and Asia.

We are an active investor with strategic objectives as a partner for innovative, market-oriented technology companies with a clear growth strategy and high growth potential, a highly motivated, focused management team, a clear, distinctive selling point and a secure IP position.

Evonik as one of the world's leading providers of specialty chemicals brings additional strategic capabilities to the partnership: Technological expertise and infrastructure, market experience and access, a global distribution network, expertise in patent strategies and on issues of industrial property rights.

HI INOV



Hi inov supports young and innovative digital BtoB companies, from their very beginnings, and stimulates their long term growth to help them become tomorrow's leading companies. Committed to the entrepreneurial values and management methods that secured Dentressangle's success, Hi Inov offers digital start-ups a long-term vision built on innovation. Hi inov invests between €500,000 and €15 million in start-ups that provide digital transformation solutions to major companies and SMEs. These start-ups target large markets and have strong technological barriers or innovative business models. They operate in the following sectors: #Mobility Innovative BtoB solutions #E-Services Disruptive business models #Data Point of sale and data technology #IoT Mobile internet and industrial connected objects #SaaS #PaaS Software dedicated to business digitization.

STARQUEST



Starquest Capital SAS is a venture capital firm specializing in seed, startup, early venture, mid venture and late venture investments. The firm invests in all sectors, with a particular focus on sustainable development and associated technologies, services, new energies and associated technologies, IT security, big data, software, healthcare, web, greentech, and Business to Business services. It typically invests between €0.5M and €1.5M in companies with sales values of €0.3M and €1.5M. The firm typically exits its investments after two to seven years. Starquest Capital SAS was founded in 2009 and is based in Paris, France.

**EMERGING PROJECTS
RESULTING FROM THE
#DT4G OPEN INNOVATION
WORKSHOP IN PARIS**

SARA

in response to: [LC-GV-03-2019](#)

User centric charging infrastructure institute VEDECOM

SARA focuses on the automatized charging station for electric vehicles (EV) and originates from the [Drim´in Saclay](#) challenges organized by the Essonne Commerce Chamber. SARA was one of the winning teams that was selected and supported by Opticsvalley; several project emergence meetings were organized culminating with the mobility workshop at DeepTech4Good which was held in July 2018.

The concept: The EV is automatically identified at the entrance and then directed towards a suitable loading point. Several options are hereby possible: fast charging, accelerated charging, or autonomy extension. For the quick charging points the vehicle is automatically connected by a robotic arm. Transparent, flexible and interconnected payment systems for the maximum availability of the charging infrastructure will be offered. The classic additional services of common petrol stations are also available (catering, trade, washing, etc.) The electric powers involved, and the possible in-situ

energy production will allow the station operator to go to the electricity market for its energy supply and network services. An application is being prepared for the LC-GV-03-2019: User centric charging infrastructure call.

INSPECTOR

in response to: [ICT-09-2019-2020](#)

Inspection solutions platform to evaluate critical targets condition through "Online Robotics"

The project idea is situated in the context of the HORIZON 2020 Innovation Action of the "ICT-09-2019-2020 – Robotics in Application Areas" calling for large-scale pilots, which should demonstrate the use of "robotics at scale" for infrastructure inspection and maintenance applications.

The INSPECTOR approach will implement a pilot allowing to lead in the longer run from the automatic to the autonomous supervision and maintenance of critical infrastructures by robots and drones. Starting from three use-cases from different application domains in different European regions, the approach will define the architecture of the robotics platform inspired from the existing approaches; aggregate the technologies needed for mission and autonomy purposes; prototype the solutions and test them in the field; attract a community of technology providers and end-users; and connect them through a dedicated marketplace.

More detailed, the first project objective is to implement an overall pilot covering core robotics hardware, associated payload technologies, as well as software and data processing. According to the specifications of the use-cases, prototypes will be developed and tested in the field with the assets owners to collect the REX and quantify the impacts to spread the adoption of the solution. Secondly, an on-line platform with cloud resources will be developed/reinforced with the purpose of acting as a "Robotic-based services marketplace" for infrastructures monitoring/maintenance. Thirdly, the robotics payload-tech and data exploitation ecosystem will be analyzed to map the value-chains and build a community of users. The last objective is to connect the complete technology value chain and enhance cross technological domains collaborations.

START-UP RAISING FUNDS

DEEPTECH4GOOD#PARIS

79 APPLICANTS

SEEKING TO RAISE FUNDS



OVERALL INVESTMENTS
SOUGHT:

418.842.000,00 €



DEEPTECH4GOOD#STUTTGART

83 APPLICANTS

SEEKING TO RAISE FUNDS



OVERALL INVESTMENTS
SOUGHT:

170.350.000,00 €



**PROJECTS SUBMITTED
IN 2018**

NECTARINE

in response to: [DT-NMBP-01-2018](#)

The recent extensive efforts in the field of nano-enabled smart composite materials and components allowed not only to reduce weight, but also to reach a high level of performance in terms of mechanical, electrical and thermal properties, as well as to introduce additional functionalities (de/anti-icing, erosion resistance, lightning strike protection, damage sensing, etc.). The discovery of carbon nanomaterials such as graphene and carbon nanotubes (CNTs) in particular opened promising perspectives for the design and manufacturing of lightweight composites applications with a tailored multi-functional performance. The current state of developments allows to envision a new generation of composite materials hierarchically designed down to the nanoscale with reinforcements of various scales being combined.

Even though impressive results have been obtained for the mechanical performance of composite materials using the nano-materials, their outstanding individual properties (strength, toughness, etc.) at the nano-metric level were not reached equivalently at the macroscopic level. Despite the remarkable progress, several challenges related to the difficulty to uniformly disperse the CNTs to achieve efficient load

transfer and uniform stress distribution, and to minimize stress-concentrations still need to be overcome.

To contribute to the industrial up-taking of the most promising scientific and technical results in the field of nano-enabled materials and manufacturing processes, the NECTARINE project has the overall objective of creating an open innovation testbed acting as a crossroad for R&D facilities and expertise, end-users industrial issues and priorities and emerging technology providers (with a focus on SMEs), while simultaneously advancing the state of the art of nano-engineered composite materials, the manufacturing process of nano-enhanced composite parts and the associated on-line quality control methods.

To overcome the challenges facing the upscaling of technologies and process for the manufacturing of nanoenhanced composite materials and parts for the fields of automotive, aerospace and energy, the NECTARINE project aims to develop an approach covering the complete value chain from the design of new materials to the certification of the parts.

AVATAR

in response to: [DT-ICT-07-2018-2019](#)

The AVATAR project aims to develop a platform supporting the compatibility and interoperability, an associated methodology to implement the Industry 4.0 solutions and transfer them to industrial environments of SMEs, midcaps and corporates from the automotive, medical, aerospace and consumer/luxury goods value-chains, and to build a community of users to help centering the industrial value-chain on the end-user's preferences, while simultaneously allowing to increase the

efficiency of the manufacturing process, ensure the traceability and guarantee the quality of the products.

To achieve these outcomes, our approach will use leverage from several emerging technologies implemented on the piloting platforms of the consortium members, that are considered to play a key role for the Industry 4.0. The interactions between the value chain stakeholders and the process workflow will be managed through the "Digital Twin"; several implementations will be defined according to the most relevant use-cases. The AVATAR platform will act as a "digital marketplace", coordinating the interactions between the members of the value networks, allowing the "subcontractors" to cover all the links of the chain: starting from the digital design of the product or its parts made available to the end user through a "catalogue", also integrating the "feasibility" constraints according to product's properties (topological optimization, mechanical strength, etc.), the product will be monitored throughout all its production cycle.

AMBIENT

in response to: [ICT-04-2018](#)

To answer the current challenges in the field of connected lighting and stimulate the market uptake of Visible Light Communications (VLC) based solutions, the AMBIENT consortium proposes an approach aiming to develop the architecture of a multi-functional VLC-enabled system, implement the mechanisms allowing to guarantee its transparent integration with sensor networks and offering high-added value applications - VLC communications, indoor localization and guidance, detection and counting, advanced analytics, etc. - starting with two sectors having the

potential to upscale the technologies: Smart Cities and public administration and retail/supermarkets.

The AMBIENT project has the ambition to develop, in close collaboration with end-users from two emerging, high-potential application domains, a system and network architecture allowing the deployment of VLC-IoT enabled solutions delivering new services. We are fully convinced that a thorough integration of these emerging technologies, using the leverage of current trends in the field (Intelligent Lighting, Internet of Things, 5G Communications, Smart Anything Everywhere, Ubiquitous Computing, Ambient Intelligence), will contribute bringing to the market new high added-value solutions that will allow the commercial applications of the VLC technology to take off. Beyond the technological developments at the system and network levels, we are aiming thus through the AMBIENT approach to enhance widespread adoption of VLC-based technologies and applications and lead to the consolidation of the market by exploiting the emerging opportunity offered by the "Internet of Things".

ICT VIENNA 2018

ICT VIENNA 2018

The European Commission's flagship event „Imagine digital, Connect Europe - ICT 2018“ took place in Vienna from 4th to 6th of December 2018. This research and innovation event, organized by the European Commission and the Austrian Presidency of the Council of the European Union, focused on the European Union's priorities in the digital transformation of society and industry. It provided an opportunity for the people involved in this transformation to share their experience and vision of Europe in the digital age.

The conference programme featured influential speakers and debates around the EU's digital policy and involved relevant parties from industry, research and public bodies.

In the framework of H2020 the European Commission gave the opportunity to three Austrian start-ups ([Nynea](#), [Leftshift One](#) and [Edera Safety](#)), which will be a part of the upcoming DT4G programme, to exhibit their market-ready services and products in the innovation start-ups village for free. The feedback of the start-ups about the exhibition was very positive. They had the possibility to exchange their results, ideas and especially know-how with attendees and visitors who were also professionals, to discover possible solutions to the issues they are facing, to visit conferences with different topics and to get in touch with corporates and further business representatives.



UPCOMING EVENTS

#DT4G GRAZ/AUSTRIA

The third DT4G event will take place at Messe Congress Graz in Austria on 26th of March 2019. This occasion will be connected to the [#LetsCluster](#) Summit, an event gathering the European Tech-Elite allowing to explore the smart world of tomorrow. More than 8 Side Events, a HighTech Expo with the greats of the national and international micro- and nanoelectronic ecosystem and an outstanding B2B matchmaking opportunity round up the immersive three-day programme are planned. The scope of #LetsCluster is to emphasize the strengths of the important flagship enterprises in the application fields of Smart Living, Smart Mobility, Health Tech, Artificial Intelligence, Robotics, Cyber Security and Industry 4.0.

To increase the visibility, a cooperation with AVCO was established. AVCO - Austrian Private Equity and Venture Capital Organization - is the umbrella organization of Austrian venture capitalists and corporate finance service providers. It is organized as an association and acts as the central point of contact for all questions concerning private equity, as an active networking institution, as a representative of the interests of the Austrian venture capital industry and as an interface to international organizations. This cooperation makes sure potential investors are aware of the opportunities with respect to DT4G. In addition, the AVCO supports DT4G with feedback related to needs and expectations of investors.



#DT4G BARCELONA/SPAIN

The fourth event will take place on 25th of April 2019 at Pier01 in Barcelona. Located in Palau de Mar, Pier01 is one of Barcelona Tech City's most ambitious projects to date. This 11.000 m² facility, which provides a locus for the daily activities of approximately 1.000 sector employees working for over 100 companies and start-ups, features a co-working area, showrooms and common areas devoted to innovation and collaboration.



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**www.deeptechforgood.eu
contact@deeptechforgood.eu**