CAMBRIDGE NANOMATERIALS TECHNOLOGY LTD

Cambridge Nanomaterials Technology Ltd

Annual Activity Report 2023

www.cnt-ltd.co.uk

January 2024

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Dear Partners and Friends,

In the last year, we have been very active in organising our meetings and workshops, some in person and others online. We have kept developing the virtual EXPOs. The response to these online EXPOs has been extremely positive and very encouraging.

We have been working hard on our two projects: HORIZON Europe project, AM4BAT, which started in July 2022, and Innovate UK funded HiBarFilm2 project started in March 2022.

We are very proud to announce that our sister company CNT Innovation got its first EU funded HORIZON project, 3D BRICKS, which will start in May 2023. More information on this achievement can be read in the sections below.

We are also proud to announce we started in December 2023, the Horizon Europe project BATTwin, related to battery manufacturing digital twin.

This report aims to inform you about our activities in the past year. Some of our activities you might know very well as you have been involved; however, others might be new to you and you might find them interesting. Please do not hesitate to contact us for a friendly discussion how we can start or develop further our collaboration.

Cambridge, January 2024

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Introduction

The Cambridge Nanomaterials Technology Ltd (CNT Ltd) is an innovation management and nanotechnology consulting company based in Cambridge, UK.

The CNT Ltd helps companies, academic and government institutions to develop world-class innovative solutions for nanomaterials related R&D and IPR strategy, partnership, products, technologies, funding and markets. CNT Ltd is specialised in carbon nanomaterials R&D consulting and collaborative R&D project management, including exploitation and dissemination management, consortium and supply chain building. CNT has done a number of patent landscaping and market research analysis studies regarding production and use of various nanomaterials helping to link inventors and technology developers with end-users and investors.

The CNT Ltd is a leader of two private consortiums: NANO-CARBON ENHANCED MATERIALS (NCEM) and the new ADVANCED MATERIALS FOR ADDITIVE MANUFACTURING (AMAM) with members coming from leading multinational companies and research institutions. Through both private consortiums NCEM and AMAM, as well as private and public contracts, CNT Ltd has established strong relations to the aerospace, automotive, construction, electronics, materials development, biomedical and chemical industry.

In March 2019 CNT Ltd opened a sister company CNT INNOVATION based in Brussels, Belgium, with the aim to support and complement their work, especially in European related activities.

The summary of our services is:

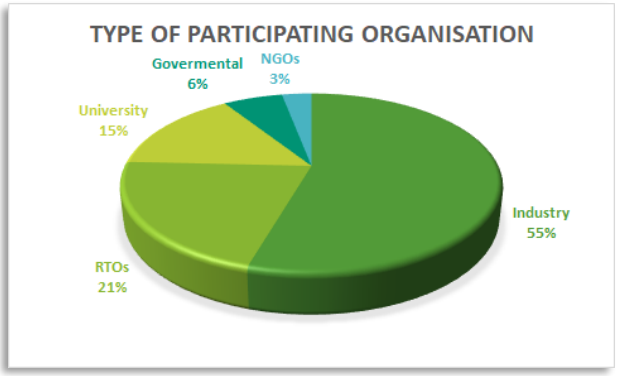
- Consulting and an **expert advice** related to **nanomaterials** regarding their production, composites, applications, key players, funding and market. Experts with more than 20 years of experience in commercialisation of carbon nanomaterials (graphene, carbon nanotubes, carbon nanofibres, etc.).
- **Innovation management** and technology transfer support related to R&D of novel nanomaterials & composites.
- Advice and support related to development of **Intellectual Property (IP) Strategy – patent landscaping reports,** due diligence, invention and protection.
- **Market Research and Strategy - market research** reports, consulting and advice about innovation, new product strategy and development, proof-of-concept, market and funding.
- Organisation of nanomaterials and nanotechnology application related conferences, workshops and customised training, seminars and support multinational companies and research institutions.
- Management in collaborative R&D projects, such as **EU Horizon 2020 projects**, n-TRACK (www.n-track.eu); Oyster (www.oyster-project.eu); M3DLoC (www.m3dloc.eu); Genesis (www.genesis-h2020.eu); Repair3D (www.repair3d.eu), Carbo4Power (www.carbo4power.eu), APOLO (https://project-apolo.eu/), DOME-4.0 (www.dome40.eu), TriAnkle (www.triankle.eu), and NanoMECommons (www.nanomecommons.eu), AM4BAT Project (https://am4batproject.eu/), **EU Horizon Europe project,** BATTwin (www.battwin.eu); as well as **Innovate UK projects**: HiBarFilm 2 (www.hibarfilm.co.uk) , AM4BAT Project (bilateral funded)
- Consortium set-up, grant proposal writing support; exploitation and dissemination management; liaising with EU officials.

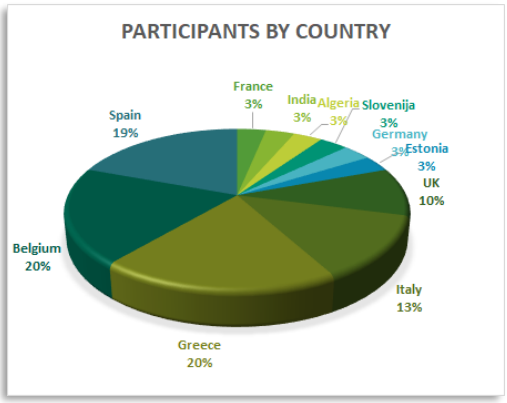
European Projects

H2020 Repair3D – Recycling and Repurposing of Plastic Waste for Advanced 3D Printing Applications (www.repair3d.eu)

The European project: "**Repair3D** – Recycling and Repurposing of Plastic Waste for Advanced 3D Printing Applications". Is aH2020 project (5.9 € Million Grant), is a 49-month project, which started on the 1st January 2019 and finished in May 2023.

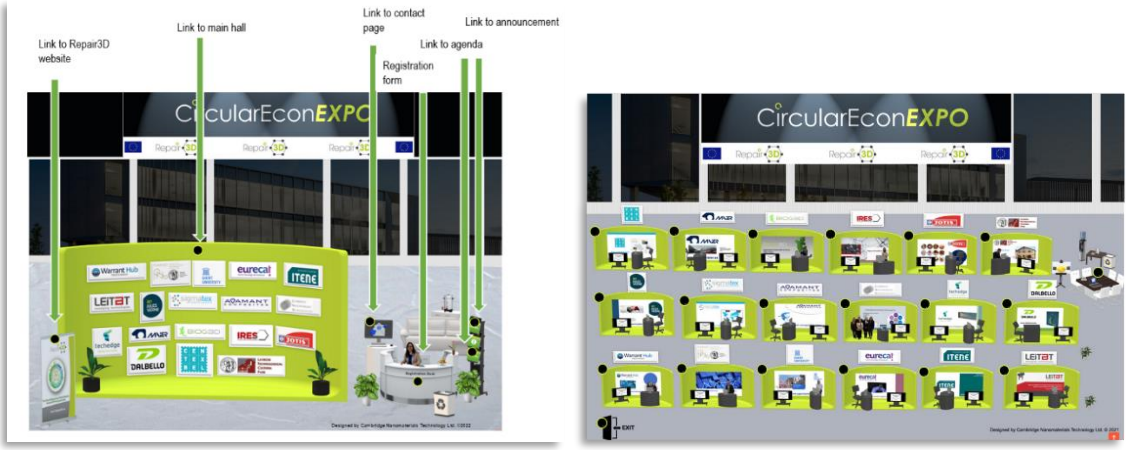
The Repair3D project held **the 2nd Open Day Workshop** on the 30th May 2023 in Brussels, at the DoubleTree by Hilton Brussels City as a hybrid event. A total of 71 people registered to participate in the Open Day (35 in person, 36 online), from which over 35 belong to external organisations. Confirmed external participants to the Open Day came from the following leading industrial organisations, research institutions and universities: BAE Systems, AVANZARE, National Composites Centre, CRTI, ELVEZ, Prysmian Group, HTWK-Leipzig, UP Catalyst, LEITAT, AIJU Technological Center, MONDRAGON Corporation, University of Nottingham, Vrije Universiteit Brussel, Megara Resins and The Art of Making Foundation, among others. Out of all participating organisations, 55% came from industry, 21% from research organisations and 15% from universities.





Repair3DProject EXPO - www.circulareconexpo.net

Repair3D Partners have a virtual exhibition desk each, available at the EXPO section on the project website or directly accessed through the above web address.



Screenshots of the reception area and main exhibition hall

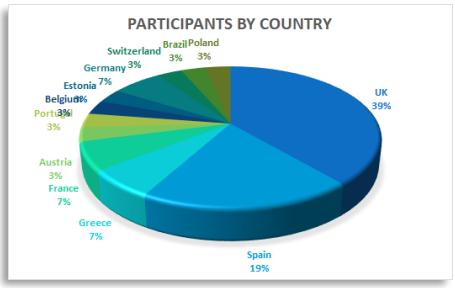
Screenshots of some virtual exhibits

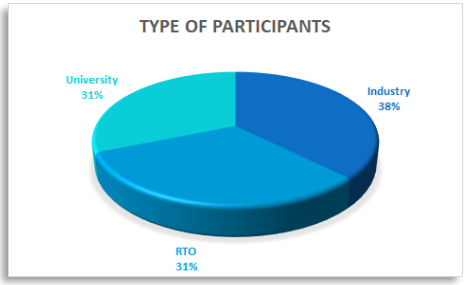
H2020 Carbo4Power - New generation of offshore turbine blades with intelligent architectures of hybrid, nano-enabled multi-materials via advanced manufacturing (www.carbo4power.eu)

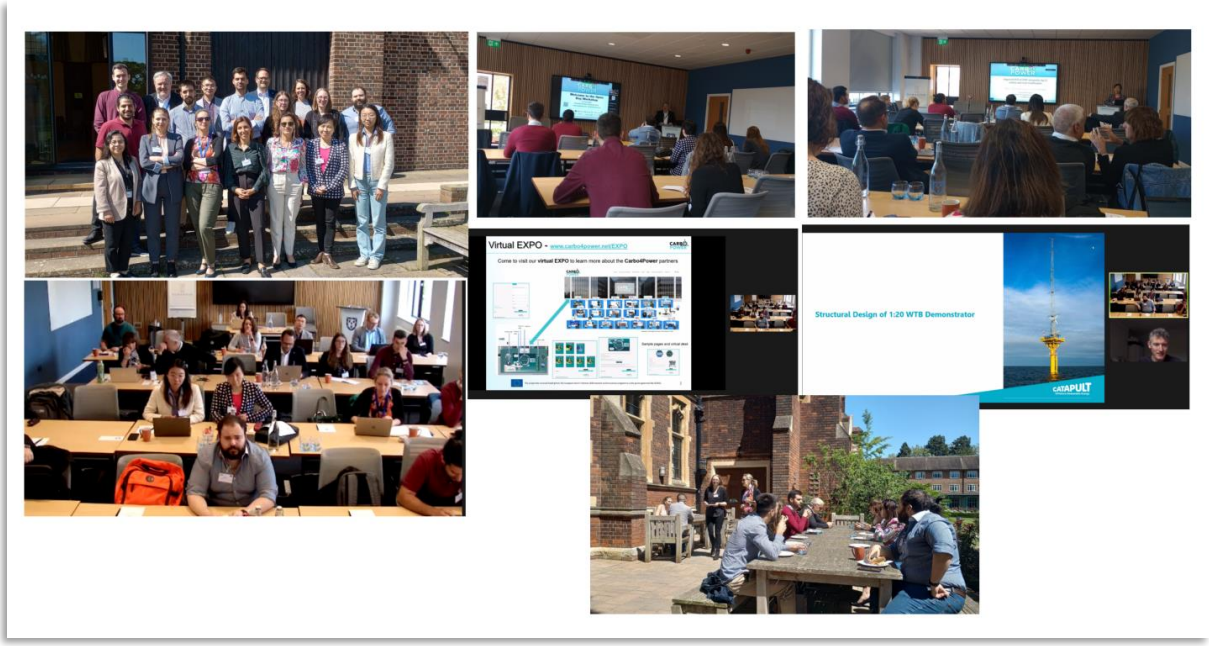
This H2020 **Carbo4Power** - New generation of offshore turbine blades with intelligent architectures of hybrid, nanoenabled multi-materials via advanced manufacturing (€ 7 8 million – Grant Agreement 953192) is a 4-year project which started in November 2020 and it is led by National Technical University of Athens (NTUA). It has the participation of 18 partner organisations. CNT is the partner responsible of the Exploitation and Dissemination activities.

The **1st Open Day** took place in Cambridge, UK, on the 8th June 2023 as a hybrid event at the Bamford and Skillicorn Room, in Homerton College, Cambridge. 54 people registered to participate in the Open Day. Confirmed external participants to the Open Day came from the following leading commercial organisations, research institutions and universities: Cambridge University, UCL, City,

University of London, TWI, Leitat Technology Centre, Cranfield University, Fraunhofer IGCV, Fraunhofer IWM, TMBK, NanoLayr, TÜV, Cepsa energy and Omya international AG, among others. The majority of participants came from industry (38%) followed by Universities and RTOs participants.

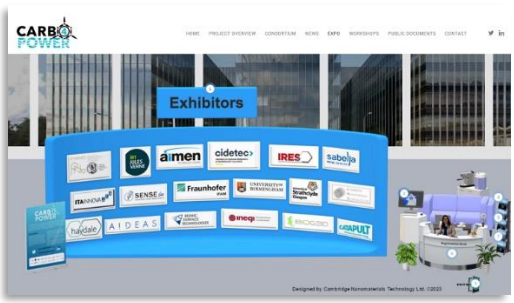






Carbo4PowerProject EXPO (www.carbo4power.net/expo/)

Carbo4Power Partners have a virtual exhibition desk each, available at the EXPO section on the project website or directly through the following website: https://windpowerexpo.net/

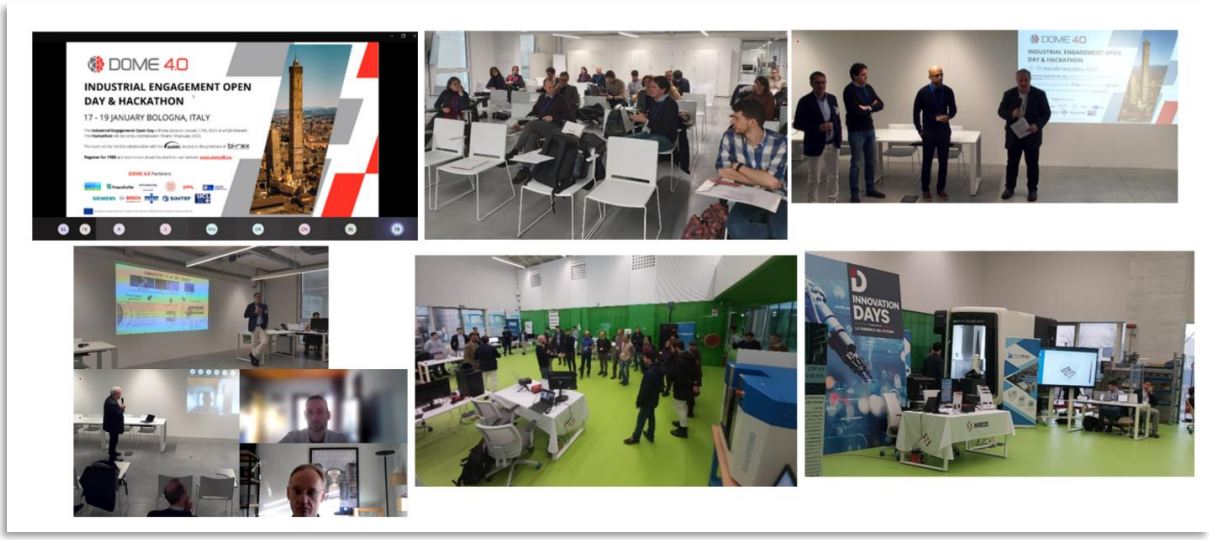


H2020 Dome 4.0 - Digital Open Marketplace Ecosystem 4.0 (www.dome40.eu)

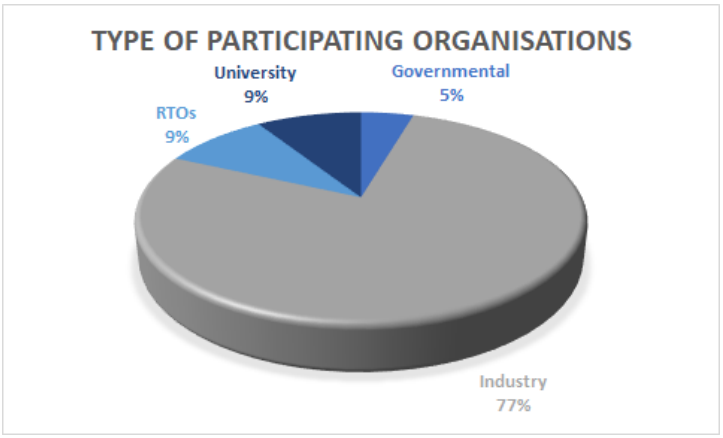
This is a 4-year project, funded by the European Union H2020 Industrial Leadership Programmes (Grant Agreement 953163), which started in December 2020. The Digital Open Marketplace Ecosystem (DOME) 4.0 aims at developing a comprehensive industrial data ecosystem aligned with the Open Science and Open Innovation objectives to enable sharing of business-to-business (B2B) data for the purpose of value generation and creation of new or enhanced products, processes, and services.

The DOME 4.0 held the **1st Industrial Engagement Open Day (IEOD**) on 17-19 January 2023, and was co-organised in partnership with the SimDOME Project. This event gave an opportunity to learn about standard data handling and data management practices in industrial organisations and understand how to develop compatibility between proposed data management solutions with already existing data management practices in the industry as well as the novel Business Models. The aim was to actively engage industrial partners and established corporate networks within and outside of the consortium in supporting further development of proposed solutions by providing ideas, guidance, technical recommendations and exploitation optimal strategies to ensure future compatibility with data management handling and practices within different organisations. A total of 74 people registered to participate on the IEOD, with the majority attending in person. An exhibition was organized for the in-person participants by the hosts, BI-REX National Competence Center - Big Data Research and Innovation Excellence. The exhibitors were: Caboto, Nextema, Cell Dynamics, Nireos, Data River, Astreo, and Energy Group.

Participants came from organisations such as: Airbus, ESRF, HaDEA, UKRI, Goldbeck Consulting, Fraunhofer, NETCOMPANY-INTRASOFT, SINTEF, UCL, AIM, Astreo, CellDynamics, DataRiver Srl, Energy Group, NIREOS, UMICORE, Rekeep, C Quadra, Caboto, Var Group, Yiotis, Youbiquo, Politecnico di Torino, University of Bologna, MEP, National Technical University of Athens, and Nextema, among others.



The **2nd Industrial Engagement Open Day (IEOD)** was organised as a hybrid event on 10th October 2023 in Leuven, Brussels, hosted by DOME 4.0 partner Siemens Digital Industries Software, at their premises. At this Open Day, 44 people registered to participate (16 in person and 28 online). 77% of the participants belong to industry. Registered participants came from leading organizations and institutions such as: Airbus, Siemens Digital Industries Software, BOSCH, Ansys Inc., NIREOS SRL, Keysight Technologies, Datariver, SINTEF, Novartis Pharma (CH), UKRI, Fraunhofer IWM, EPFL, ESRF, BI-REX, The Innovation Loop, University of Cambridge, UCL, among others.



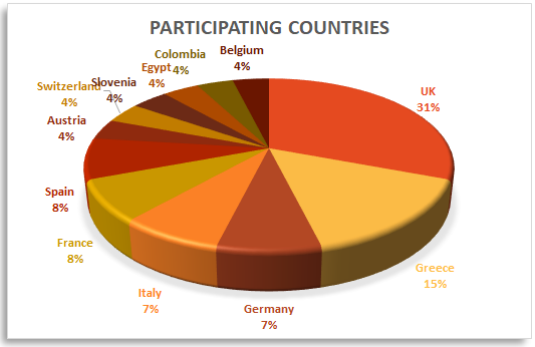
H2020 TRiAnkle - 3D Bio printed personalized scaffolds for tissue regeneration of ankle joint (https://triankle.eu/)

The **TRiAnkle** is a 4- year project funded by the H2020 EU programme, Grant Agreement 952981. TRiAnkle proposes to develop 3D bioprinted scaffolds based on collagen and gelatine, functionalised with stem cells and/or nanoencapsulated regenerative factors. The surgical implantation of these new functionalised biomaterials will enable the targeted delivery of the mentioned biologically active agents to promote cell growth and differentiation to enable better and faster regeneration of injured collagen-rich tissues like articular cartilage, ligament and tendon of the ankle.

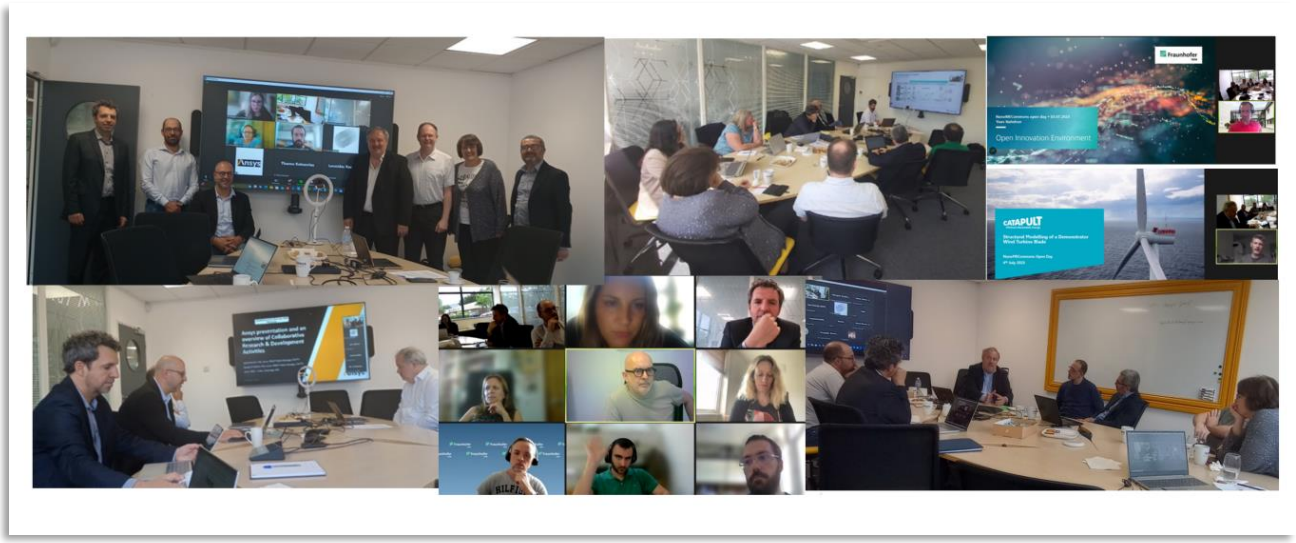
NanoMECommons - Harmonisation of EU-wide nanomechanics protocols and relevant data exchange procedures, across representative cases; standardisation, interoperability, data workflow (www.NanoMECommons.eu)

NanoMECommons is a 4-year project, which started in February 2021 and it is led by the National Technical University of Athens (NTUA). This project is funded by the EU H2020 Research and Innovation action - RIA (€ 5 9 million – Grant Agreement 952869 - Call: DT- NMBP-35-2020). It has the participation of 19 partners (11 from industry and 8 academia and research), coming from 10 countries.

The nanoMECommons held the **1st Open Day Exploitation and Dissemination Workshop** in Cambridge, UK, on 3 & 4 July 2023 and was hosted as a hybrid event, at the offices of Ansys UK Ltd (nanoMECommons partner). 40 people registered to participate on this Open Day, from which 14 belong to external organisations. The majority of participating organisations belong to industry.



Coordinators and key partners from sister projects were invited to participate in the Open Day. The guest participating projects were: i-Tribomat, DOME 4.0 and NANOPAT.



nanoMECommons EXPO (www.nanomecommons.net/expo/)

CNAT prepared this virtual EXPO (www.nanomecommons.net/expo/), with the objective to give partners the opportunity to showcase their products and services. The virtual EXPO was prepared prior to the Open Day, and it was made accessible prior, during and after the event.

Gen. 4b Solid State Li-ion battery by additive manufacturing – AM4BAT (https://am4batproject.eu/)

The AM4BAT is a 48-month project, that will develop innovative component materials and assemble an anode-free all-solid-state battery (ASSB) manufactured by a cost-competitive and sustainable vat photopolymerization 3D printing. The objective is to reach a high-performance battery for electric vehicles applications. The project is an EC Horizon (Grant Agreement 101069756). UK partners are funded by Innovate UK (CNT project ref:10048455). The AM4BAT project started in July 2022.

BATTwin - Flexible and scalable digital-twin platform for enhanced production efficiency and yield in battery cell production lines (www.battwin.eu)

The BATTwin is a 42-month project, which receive funding from the European Climate, Infrastructure and Environment Executive Agency under grant agreement No. 101137954. This project is led by the Politecnico di Milano, and has the participation of 16 partners. The objective of BATTwin is to support the high demand for battery manufacturing equipment in Europe, by developing a novel Multi-level Digital Twin platform towards Zero-Defect Manufacturing in battery production, that will reduce defect rates in battery production lines. The solution integrates four pillars, namely (i) a multi-sensor data acquisition and management layer, supported by data semantics through a Digital Battery Passport data model, (ii) process-level digital twins, modeling the critical stages of electrode manufacturing, cell assembly and conditioning through multi-physics, data-driven and hybrid approaches, (iii) system-level digital twins, based on simulation and analytical modeling, (iv) user-centric, goal-driven digital twin workflows, increasing the explainability of digital twins and driving the user in system design and control.

UK Projects

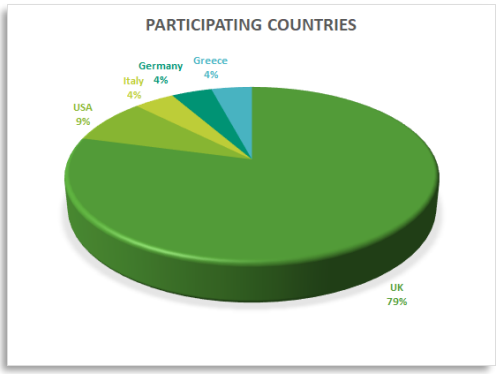
High barrier monomaterial flexible films for food contact applications – HiBarFilm2 (www.hibarfilm.co.uk)

The HiBarFilm2 Project is an Innovate UK funded project (project, reference: 10015317) that started in March 2022 and is expected to run for 30 months. Haydale Composite Solutions Ltd is leading the consortium of nine companies - BASF, Bangor University, Cambridge Nanomaterials Technologies, Dunbia, Fre-Energy, Parkside Flexibles, Recycling Technologies, and Wells Plastics - to develop the next generation of high barrier films for food packaging using functionalised nanomaterials ("HiBarFilm2 Consortium").

The HiBarFilm project held their **1st Open Day** held in Cambridge, at the Cambridge Belfry Hotel & Spa (QHotel) on the 29 June 2023. This event was organised as a hybrid event. In the 1st Open Day 36 people registered for participation in person and online. They came from the following leading companies, organisations, research institutions and universities: University of Cambridge, Novartis Pharma (CH), The Coop, University of Strathclyde, Queen Mary University of London, University of South Wales, Bimbo Bakeries USA, Ourobio, Algreen Ltd, Pulpex, Haleon, Echo Packaging Limited, one • five, Yiotis SA, among others.

Two Smart sustainable plastic packaging (SSPP) projects were invited by Mr Gavin Lewis who is an Innovation Lead in UKRI (Innovate UK's SSPP Team): Prof James Elliott from the Department of Materials Science & Metallurgy, University of Cambridge presented the S2UPPlant project; and. Dr Samuel Davis from Algreen Ltd., presented this startup.

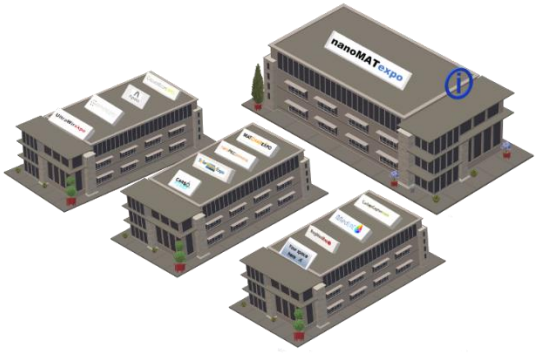
HiBarFilm2 Partners had the opportunity to bring materials and pop-up banners to the event for displaying.

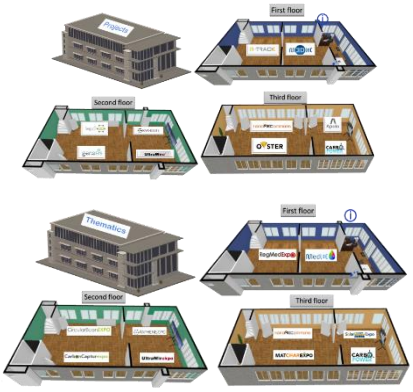


Other Activities

nanoMATexpo - www.nanomatexpo.net

The **nanoMATexpo,** is the virtual exhibition place dedicated to support commercialisation of nanomaterial applications. You can visit the Projects developing various nanomaterials applications or you can browse the exhibition place through various Thematics, such as: ultra-conductive materials, graphene, circular economy, medical devices, materials characterisation among others. Projects and Thematics exhibitions are covering a number of different sectors, including: energy, Biomedicine, Environmental, Circular Economy, Additive Manufacturing, Characterisation, Construction, Data Management, Aerospace, Automotive and Sports.





Advanced Materials for Additive Manufacturing (AMAM) Consortium

The **Advanced Materials for Additive Manufacturing** (**AMAM-1**) consortium was launched on the 21st November 2018 in Barcelona by the Centre for Business Innovation Ltd (www.cfbi.com), in order to provide the consortium members a unique insight into use of advanced materials in additive manufacturing, development of additive manufacturing technologies for various applications, and to facilitate the commercial uptake and bring together potential users with a shared interest to address commercialisation challenges. The consortium leader Dr Bojan Boskovic, from Cambridge Nanomaterials Technology Ltd (www.cnt-ltd.co.uk), is an expert in advanced materials commercialisation including nanomaterials such as carbon nanotubes and graphene.

The AMAM consortium could be used by the members to develop additive manufacturing commercialisation strategy and supply chain through an active technology watch and direct engagement programme. It will provide a unique insight into state-of-the art of use of advanced materials in additive manufacturing and key player strategies. The aim is also to help to secure IP and develop additive manufacturing technologies through participations in collaborative R&D programmes and direct commercialisation partnerships with the AMAM members and presenting organisations.

Nano-Carbon Enhanced Materials (NCEM) Consortium

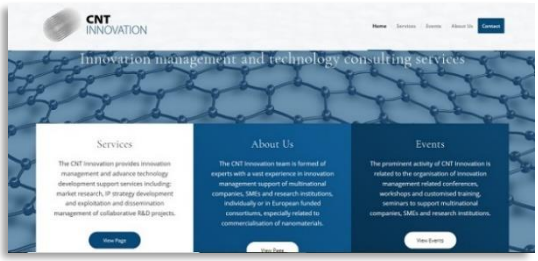
The Nano-Carbon Enhanced Materials (**NCEM**) consortium has been run successfully for the last seven years. This initiative was launched in April 2012 by the Centre for Business Innovation Ltd (www.cfbi.com), in order to provide the consortium members a unique insight into nano-carbon materials, such as graphene and carbon nanotubes, facilitate the commercial uptake and bring together potential users with a shared interest to address commercialisation challenges. The consortium leader is Dr Bojan Boskovic, CEO of the Cambridge Nanomaterials Technology Ltd.

The NCEM consortium is entering its 8th year (**NCEM-8**). Current and past Consortium members coming from the following organisations: Airbus Group (UK), Prysmian Group (Italy), RTE (France), Rolls Royce (UK), Whirlpool Corporation (USA), ArcelorMittal (Spain), NISSAN (UK-Russia), Tecnalia (Spain), and Johnson Matthey (UK).

The NCEM-1, NCEM-2, NCEM-3, NCEM-4. NCEM-5, NCEM-6 -NCEM-7 consortium members: University of Cambridge (UK); Nokia Research Centre (UK); ST Microelectronics (Italy); International Copper Association (USA); Nexans (France); Bosch (Germany); Thales (UK), Henkel (Germany), Codelco (Chile), National Grid (UK), Trinity College Dublin (Ireland), Arup (UK), Statnett (Norway), Schneider Electric (France), RTE (France), AIRBUS Defence & Space (UK,), LML Products (UK), GE (USA) and Bose (USA).

CNT Innovation – www.cnt-innovation.com

Cambridge Nanomaterials Technology Ltd opened its sister company "**CNT Innovation**" (CNT Innovation SPRL/BVBA, registration number: 0723.767.874). The new company is based in Brussels, Belgium (Rue des Colonies/ Koloniënstraat 11, 1000 Brussels). This company officially started its operations in March 2019.



The new company will support and complement the work of Cambridge Nanomaterials Technology, especially in European related activities.

CNT Innovation has been granted its **first EU Horizon Europe project**. **3D Bricks –** *3D Biofabricated high-perfoRmance dna-carbon nanotube dIgital **e**lectroniCKS* (project number 101099125). This a 36-month project which started in May 2023. This project has the participation of 9 partners led by the Istituto Italiano di Tecnologia (IIT).

HORIZON Europe Project

3D Bricks (https://3d-bricks.eu/)

3D-BRICKS is a Horizon Europe Project, which has is supported by nine partners from research institutes, universities and companies based in five European countries. The project will provide a novel platform for the next-generation of electronic nanodevices (logics, digital circuits and memories). Hybrid DNA-nanostructures/carbon nanotubes (CNTs) will be developed for the realization of three-dimensional (3D) stacked transistors at high density, combined with a new series of designs for reproducing all the fundamental logic ports that will be fast, reliable and easily interconnected via planar (2D) and 3D configurations. Moreover, the same approach will be used to implement storage circuits (non-volatile memory) based on CNTs. The development of hybrid DNA/CNTs systems will be a paradigm change for nanoelectronics and computing, areas in which the current demand of new devices is rapidly outpacing the capabilities offered by semiconductor technologies.

Our Team

The **CNT team** is formed by experts with a vast experience in innovation management support of multinational companies, SMEs and research institutions, individually or in European & UK funded consortiums, especially related to commercialisation of nanomaterials.

DR BOJAN BOSKOVIC is a Founder, Managing Director and Principal Consultant of the company. He has more than 20 years of hands-on experience with carbon nanomaterials and composites from industry and academia in the UK and Europe. Previously, he worked as a R&D Manager at Nanocyl, one of leading carbon nanotube Dmanufacturing companies in Europe. He also worked on carbon nanotube synthesis and applications as a Principal Engineer-Carbon Scientist at Meggitt Aircraft Braking Systems, as a Research Associate at the University of Cambridge, and as a Senior Specialist at Morgan Advanced Materials. During his PhD studies at the University of Surrey he invented low temperature synthesis method for production of carbon nanomaterials that has been used as a foundation patent for the start-up company Surrey Nanosystems. He was a member of the Steering and Review Group for the Mini-IGT in Nanotechnology that advised the UK Government on the first nanotechnology strategy policy document. Dr Boskovic was working as an advisor for the European Commission (EC) on Engineering and Upscaling Clustering and on setting up of the European Pilot Production Network (EPPN) and European Materials Charaterisation Cluster (EMCC). He has experience in exploitation and dissemination management on a number of FP7 and H2020 European projects, including UltraWire, NanoLeap, OYSTER, M3DLoC, Genesis, nTRACK, APOLO, TriAnkle, Carbo4Power, DOME 4.0 and NanoMECommons, and also in UK Government Innovate UK funded projects, such as UltraMAT, GRAPHOSITE and HiBarFilm. He is also a leader of a private Nano-Carbon Enhanced Materials (NCEM) consortium and Advanced Materials for Additive Manufacturing (AMAM) consortium. Dr Boskovic has experience of advising VC investors with their investments of over $20M to nanomaterials-based product development companies.

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DR JELENA ALEKSIC is a Head of Innovation Strategy at CNT Ltd. She has wide project management, R&D and teaching experience. While she was working as a scientific associate at the University of Applied Sciences in Stralsund, Germany she taught subjects Fluid Mechanics, Gas Dynamics and Mathematics. During her PhD studies in fluid mechanics related to crystal growth at the University of Rostock, Germany, she developed a new temperature measurement method for fluids based on thermochromic liquid crystals (TLC). Her thesis was awarded with the first prize at the South-eastern Conference on Theoretical and Applied Mechanics in Orlando, FL, USA. She organised scientific conferences and edited an internationally published science magazine. At the CNT Ltd. she has been working extensively on developing business strategies, and preparation of customised patent landscaping and market research reports in the field of nanomaterials. Dr Aleksic has also been working on management of European collaborative R&D EC FP7 & H2020 projects (UltraWire, NanoLeap, EPPN, nTRACK, OYSTER, M3DLoC, Genesis, Repair3D, APOLO, TriAnkle, Carbo4Power, DOME 4.0 and NanoMECommons) involving tasks such as innovation management, Business Model and Plan development, identification and analysis of Key Exploitable Results, mapping and engagement with stakeholders and other relevant exploitation and dissemination tasks. She is also acting as Exploitation and Innovation Manager on the EC H2020 n-TRACK and as Exploitation Manager on the EC H2020 Genesis project. Through her business development activities, Dr Aleksic raised around €2M funding for CNT Ltd. Previously she worked in many different industries including renewable energies, construction and social media and she is fluent in English, German, Spanish and Serbo-Croatian. She joined CNT in August 2012.

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DR ANA BANKOVIC CASSIDY is a Senior Innovation Consultant. She joined CNT team in February 2021. Ana graduated from the Faculty of Physics, University of Belgrade Serbia, winning the award for the best BSc (Honors) Thesis of the year 2007. The main aim of her PhD study and further research was to identify and explain specific kinetic phenomena that occur in positron transport in electric and magnetic field due to non-conservative nature of positronium formation. Ana applied the basic phenomenology of charged particle swarms to study the interaction of positrons with biologically relevant molecules, in order to develop and establish a benchmark for Monte Carlo codes used in positron emission tomography (PET) modelling. Her research activities were undertaken in Centre for Non-Equilibrium Processes at the Institute of Physics in Belgrade, Serbia, a large interdisciplinary group with interests ranging from theoretical, numerical and experimental studies of low temperature plasmas, to studies of positron swarms and their applications, modelling particle detectors and conducting experiments at applying plasma physics methodologies to medicine and biological applications.

As a Visiting Researcher at the Open University, Milton Keynes in 2014/15, she worked on quantum chemistry treatment of positron interactions with atoms and molecules using the UKRmol quantum chemistry software.

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DR KAREN BRACE joined CNT as an Innovation Consultant in February 2022. Karen graduated from Imperial College with a BSc. in Chemistry (First Class with Honours). As part of her degree, she completed a 1-year ERASMUS research project at Ecole Supérieure de Physique et Chimie Industrielle in Paris. She has a PhD in electrochemistry from the University of Southampton. Her dissertation focused on bio-membrane electrodes for the electrochemical detection of phospholipase enzymes. Following her PhD, she spent 2 years in Kenya as a high school science teacher for Voluntary Services Overseas. On returning to the UK, she took up postdoctoral positions at the University of Southampton in both combinatorial electrocatalysis discovery for fuel cells in collaboration with Johnson Matthey and in liquid crystal templated nanostructures for supercapacitor, battery and solar cell applications. She joined Ilika in 2004 as a senior scientist working on high throughput catalyst deposition and screening for fuel cell applications for both commercial and EU funded projects. She worked at C-Tech Innovation Ltd as a project manager on numerous UK and EU funded projects in energy and renewables including fuels cells, electric vehicle batteries, redox flow batteries, ionic liquids and metal finishing. Project included both lab and pilot scale processes. Karen has also worked as an independent electrochemistry consultant primarily in the field of batteries and fuel cells.

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ALEXANDER RAMOVIC ROJAS received a BSc Physics from Bristol University in 2016. Since then, he has worked at PatSnap for approximately 2 years, consulting existing clients and speaking to potential new ones on their IP and R&D strategy. This involved providing better understanding of patent data and how it should be used to inform R&D pathways. After leaving PatSnap, he received a master's in environmental engineering at UCL. Here he completed his dissertation on infusing graphene oxide in concrete and studying how it affects its mechanical properties such as compressive, flexural and chloride penetration tests. Furthermore, through an internship at Cambridge Nanomaterials Technology, he gathered information on the future of nanomaterials and additive manufacturing within the built environment and construction industry. Since then, he worked as an environmental consultant for buildings conducting, energy and heat analyses before re-joining the Cambridge Nanomaterials Technology team in the position of Innovation and Investment Consultant working part-time since August 2021.

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MÓNICA SPREADBURY is a bilingual (Spanish and English) Senior Administrative Officer at the CNT Ltd with large experience gained within a variety of organisations in the private and public sector, both internationally and in the UK. In CNT Ltd. she has been working for NCEM and AMAM private consortiums, UK funded Projects and EC projects preparing Open Day Workshops, meeting agenda, coordinating administrative activities, communicating with project partners and meeting guests and speakers, facilitating and supervising exhibition stands and taking care of the registration desk. Before joining CNT Ltd she worked as a Regional Service Assistant/Officer for the British Council in Cambridge and for the BirdLife International, as Office Manager in the Americas Division (Ecuador) and as a regional co-ordinator of the World Bird Festival (UK). She joined the company in August 2014.

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CAMILLA TACCONIS completed her bachelor's degree in Physics at University College London (UCL) and proceeded to take the MASt in Physics at Cambridge University where she specialised in Solid State and Condensed Matter Physics. She has now continued her studies at the University of Cambridge and is undertaking a PhD in Functional Energy Materials in the Dutton Group. Her research focus is on polyanion cathode materials for rechargeable magnesium-ion batteries. She joined Cambridge Nanomaterials Technologies Ltd. (CNT) as an Associate Innovation Consultant in March 2022 to take part in the innovative projects that CNT manages and develops.

Contact Us

For more information and to discuss opportunities for collaboration please do not hesitate to contact us:

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