Dunia.ai raises \$11.5 Million

to Accelerate Clean Energy Innovations

Berlin, [October 23, 2024] – Dunia Innovations GmbH, a pioneering force in AI-driven material discovery, today announced it has secured \$11.5 million in funding co-led by Elaia and redalpine. Other backers include the EIC, Pace Ventures, Kindred Capital, Deep Science Ventures, and Anglo American as well as industry expert angels.

Catalyzing the Energy Transition

Founded in 2022, Dunia uniquely combines novel science-based AI algorithms with a proprietary self-driving lab to massively accelerate the discovery of new advanced materials. Focusing on power-to-x electrocatalysts used for green hydrogen or ammonia generation, as well as the conversion of CO2 into more advanced chemical products, Dunia's platform addresses the critical bottleneck in realizing the global energy transition towards low-carbon fuels and chemicals.

Michael Sidler, Founding Partner at redalpine, said: "With humanity's fast-growing need for power and the reliance on petrochemicals, the discovery of novel ways to create sustainable fuels and chemicals has become crucial. We need radical disruption to the existing R&D processes to create novel catalyzing agents for the efficient synthesis of such fuels. Dunia's AI-driven lab approach is the foundation of the discovery of these world-changing catalysts."

Focus on Electrocatalysts

Catalysts crucially drive 90% of today's chemical processes and play a vital role in the energy transition. The global market for electrochemical technologies is projected to reach 1.5 trillion dollars by 2050 (ERV), highlighting a significant commercial opportunity. With conventional innovation cycles lasting decades, Dunia's self-driving lab aims to reduce this timeframe to under three years, providing a compelling market opportunity with immense environmental benefits.

"You can't solve this problem with software alone but by combining machine learning with chemical robotics, we can iterate faster and generate high-quality data, drastically cutting down the time needed to discover new materials." said Dr. Alexander Hammer, Co-Founder of Dunia.

Revolutionary Platform

Traditional chemical research relies on slow and inefficient "design, make, test, analyze" (DMTA) cycles. Dunia rethinks this process by using advanced chemical-robotic workflows and proprietary quantum chemistry-derived material representations. These representations together with their in-house proprietary datasets give Dunia's machine learning (ML) systems a competitive edge over other black-box ML approaches, allowing for faster material discovery.

"We've always known that digitization could revolutionize materials science, but the technology was never quite ready—until now. Dunia is stepping in at the perfect time to capitalize on recent advances in scientific AI and chemical robotics as these tools have finally matured. They're poised to drive the breakthroughs we've been waiting for in clean energy and materials discovery." said Professor Lee Cronin, Regius Chair of Chemistry and Founder of Chemify.

Dunia's cutting-edge technology addresses the urgent need for sustainable innovation and positions the company at the forefront of a trillion-dollar market opportunity in the race to Net Zero. Dunia has also been awarded with significant grants from the IBB and the EIC Accelerator and lauded by prestigious programs like the NZTC's TechX Clean Energy Accelerator, Henry Royce Institute, and RMI's Third Derivative Accelerator.

Chris Gibson, Founder and CEO at Recursion, said: "Dunia is taking the same bold approach to clean energy materials that we've taken at Recursion in biotech—applying AI and automation to transform a traditionally slow-moving industry. AI automation has already transformed biotech, and Dunia is perfectly positioned to bring this level of disruption to the chemical industry."

Dr. Udo Jung, Senior Advisor & Senior Partner Emeritus at BCG, said: "Dunia truly has the potential to move the world. By focusing on 'essential essentials'—electrochemical materials—they've found the leverage point to allow companies to integrate sustainable solutions while increasing margins. It's a rare combination of innovation and financial sense."

Uniting Expertise

The founding team consists of scientists and engineers with deep expertise in chemistry, machine learning, and robotics, and the company is backed by angels including Dr Udo Jung (founder and long-term leader of both the chemicals and petrochemicals divisions at BCG), Dr Chris Gibson (CEO and co-founder of Recursion), Prof. Lee Cronin (Regius Chair of Chemistry and CEO of Chemify), and Dr Carlos Haertel (Former Executive at GE and ex-CTO of Climeworks) who will serve as Chairman of the company board. Over the past two years, Dunia has validated its technology in a proof-of-concept on accelerated electrocatalyst ink formulation where the platform outperformed human researchers in both speed and performance.

Céline Passedouet, Investment Director at Elaia said: "We were first drawn to the Dunia adventure by the vision and ambition of the founders and were convinced by their ability to execute quickly while retaining a strategic perspective. New materials discovery requires deep scientific backgrounds for which the Dunia team is well-positioned with many years of experience and published research."

About Dunia

Dunia Innovations GmbH is a Berlin-based deep tech startup, founded to solve the hardest problems blocking Net Zero. By integrating AI x Robotics, Dunia is shifting the paradigm of electroactive material discovery, accelerating GTM for climate critical technologies by 10x and aiming to decarbonise the chemical industry one process at a time.

Learn more at https://dunia.ai

About Elaia

Elaia Partners is a European top-tier Venture Capital firm with a strong technology DNA, investing in technology disruptors with global ambition from early stage to growth development. For the past 20 years, our commitment has been to deliver high performance with values. We are proud to have been an active partner in over 100 startups including success stories such as Criteo (Nasdaq), Orchestra Networks (acquired by Tibco), Volterra (acquired by F5), Mirakl (valued \$3.5B in Series E), Shift Technology (valued \$1B+ in Series D), Mablink Bioscience (acquired by Eli Lilly), Agemia and Alice&Bob.

Learn more at www.elaia.com

About redalpine

redalpine is the pan-European venture capital firm that empowers Game Changers. Founded in Zurich in 2006, with offices in Berlin, London, and a presence in San Francisco, redalpine brings together financial investment, operational expertise, and a vast international network to help ambitious entrepreneurs transform their vision into a reality.

redalpine has over \$1bn in assets under management and has backed some of Europe's most disruptive software and science companies, including N26, Taxfix, Mistral, 9fin, Carvolution, Klarna, and Infinite Roots. With a multi-stage investment approach, redalpine invests Europe-wide and counts over 100 companies in its portfolio. Find out more at www.redalpine.com.

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