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Dotz Announces Strategic Collaboration Agreement with Bar-Ilan University to Pilot an Innovative Electrochemical CO₂ Removal by DAC Technology

*The parties have been awarded a non-dilutive development grant
from Israel Innovation Authority*

Highlights

- **Dotz and Bar-Ilan University sign a strategic collaboration agreement to develop an electrochemical pilot system for CO₂ removal from the atmosphere by Direct Air Capture;**
- **The parties have been awarded a non-dilutive grant of approximately USD250,000 from the Israel Innovation Authority to support the pilot development;**
- **A successful pilot project will lead to an exclusive worldwide, royalty-bearing license agreement between the parties for the commercialization phase.**

Dotz Nano Limited (ASX: DTZ, OTC: DTZZF/DTZNY, "Dotz" or "Company"), a leading developer of innovative climate and industrial nanotechnologies, today announced a technology collaboration with BIRAD Research and Development Ltd. (BIRAD), the technology licensing subsidiary of Bar-Ilan University (BIU), to develop a pioneering electrochemical pilot system for Direct Air Capture (DAC). The parties have applied for and received a non-dilutive grant from the Israel Innovation Authority (IIA) to fund the development of a pilot unit.

Dotz CEO Sharon Malka said: "We are excited to collaborate with BIU, to advance its innovative electrochemical technology for CO₂ removal by DAC. This partnership brings us closer to realizing a field demonstration pilot that addresses critical challenges associated with current DAC electrochemical technologies.

"We are honoured that the IIA has awarded this joint initiative a non-dilutive grant, which will significantly contribute to developing an electrochemical field pilot together with the BIU research team.

"This collaboration expands our reach in the carbon management sector and strengthens our position in the DAC space, which is crucial for achieving global climate goals."

The joint development initiative builds on the ground-breaking work of Professor Doron Aurbach, a principal investigator at BIU, and his research team at BIU, who have developed an efficient electrochemical technology for capturing and releasing CO₂ from the air. The proprietary innovative technology is supported by a proof-of-concept prototype demonstrating low energy consumption.

Under the collaboration agreement, the parties will jointly design, construct, and operate an outdoor field pilot system to demonstrate the technology in real life. The BIU research team will lead the development program, which will be directed and supervised by the BIU principal investigator, leveraging BIRAD's extensive experience and knowledge in electrochemical technologies and gas separation capabilities.

BIU principal investigator, Professor Doron Aurbach said, "As a pioneer in the research and development of chemical and energy technologies, with longstanding experience in electrochemical technologies, we are pleased to be working with Dotz to advance the development of our electrochemical technology for DAC.

"Our team looks forward to working with Dotz's R&D team to advance the technology closer to real-world applications, as we believe that CO₂ removal by DAC technologies are very beneficial for various applications."

CO₂ removal by DAC technology uses electrochemical reactions to capture CO₂ from the atmosphere without using heat or pressure and a successful pilot project would significantly advance Dotz's commercialisation of its carbon capture and storage technologies.

The parties applied for and received approval for a non-dilutive grant from the IIA of approximately USD250,000 under the IIA's Magnet program, for the development of an electrochemical pilot system for CO₂ removal by DAC. BIRAD also granted the Company an option for an exclusive, royalty-bearing worldwide license to commercialise the technology following a successful pilot.

About the technology

The electrochemical approach to DAC represents a significant technological advancement, enabling efficient CO₂ separation from ambient air while simplifying the capture process.

Unlike existing systems that face challenges such as high maintenance costs, susceptibility to fouling, and scalability limitations, the current approach avoids these drawbacks. By employing robust electrochemical reactions, it provides greater flexibility, durability, and efficiency while reducing energy demands. BIU's approach offers a simpler and more efficient pathway, positioning us at the forefront of DAC innovation.

DAC technologies are projected to play a critical role in mitigating climate change, with experts estimating that it may be necessary to capture up to 10 gigatons of CO₂ annually by mid-century¹. The global DAC market is expected to grow from \$57 million in 2022 to over \$3.5 billion by 2030², offering Dotz significant growth opportunities.

This announcement has been authorised for release by the Board of Directors of Dotz Nano.

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¹ [Carbon Dioxide Removal - Center for Climate and Energy Solutions \(c2es.org\)](https://www.c2es.org/)

² [Global Direct Air Capture Systems \(DACs\) Market Size/Share \(globenewswire.com\)](https://www.globenewswire.com/)



About Dotz Nano Limited

Dotz Nano Limited (ASX: DTZ) is a nanotechnology company developing innovative climate and industrial nano-technologies. The Company's primary focus is centered around ground-breaking carbon dioxide (CO₂) management technologies leading towards carbon-neutral future. The Company's proprietary carbon-based solid sorbents, offering an efficient and sustainable approach, facilitating industrial deep decarbonization.

To learn more about Dotz, please visit the website via the following link www.dotz.tech

About BIRAD

BIRAD – Research & Development Company Ltd. was established in order to translate new inventions made at Bar-Ilan University into useful products that can be effectively commercialised, thus strengthening the economy, promoting innovation and improving lives.

BIRAD's innovative approach, combined with Bar-Ilan University's rapid growth leading Israel's growth in students' number, including the largest Nanotechnology center in Israel and new Medical School in Safed, provides BIRAD with a wide range of opportunities. Thus, BIRAD <https://birad.biz/> offers corporate partnerships and alliances, intellectual property management, and technology commercialization through venture creation and licensing.

Future Performance and Forward-Looking Statements

This announcement contains certain statements that constitute forward-looking statements that may be identified by the use of terminology such as "may," "will," "expects," "plans," "anticipates," "estimates," "potential" or "continue" or the negative thereof or other comparable terminology. Examples of such statements include, but are not limited to, statements regarding the design, scope, initiation, conduct and results of our research and development programs; our plans and objectives for future operations; and the potential benefits of our products and research technologies. These statements involve a number of risks and uncertainties that could cause actual results and the timing of events to differ materially from those anticipated by these forward-looking statements. These risks and uncertainties include a variety of factors, some of which are beyond our control. Forward looking statements, opinions and estimates provided in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward looking statements including projections, guidance on future earnings and estimates are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance.