# LIAB Award 2020: improving curcumin’s bioaccessibility for therapeutic treatments

26 November 2020 Contact: Adam Walder Tel: + 352 275 888 2323 E-mail: adam.walder@list.lu

**Dr Ozan N. Ciftci, a world leader in food chemistry and engineering and his discovery of a novel green-based approach to improve curcumin’s bioaccessibility is the winner of LIST’s second International Award in Bioinnovation (LIAB Award 2020).**

On Thursday 26 November 2020, the official ceremony of the LIAB Award 2020 took place in the presence of the Luxembourg press and the Minister of Economy, Franz Fayot. During the online ceremony, the work of Dr Ozan N. Ciftci, who runs a unique laboratory positioned amongst the world leaders in green food lipid chemistry and engineering at the University of Nebraska-Lincoln, United States, was rewarded with the second LIAB Award, receiving a cheque of 10,000 euros from Sammy el Ghoul, PM-International Chief Sales Officer for the Americas. In his in-depth video presentation, Ozan Ciftci demonstrated his latest discoveries on how to improve curcumin’s bioaccessibility. Curcumin is a well-known compound for its therapeutic effects in the treatment of cancer, cardiovascular or neurodegenerative diseases for example. However, its characteristics make it very poorly bioavailable. It has the disadvantage, among other things, of being only slightly soluble in water or other liquids. Dr Ozan N. Ciftci and his colleague developed a green nanoparticle formation approach tackling these main challenges. Their work, published in the prestigious Nature research magazine, is at the intersection of chemistry, engineering, nutrition, and health to bring innovative solutions for therapeutic treatments.

**A celebration of collaborative research**

Through the LIAB Award and its 30 candidates from 13 countries, the Luxembourg Institute of Science and Technology (LIST) and its partner PM-International have succeeded in connecting Luxembourg to world-leading researchers in the field of bioinnovation. Healthcare is a central priority in Luxembourg's research strategy and Luxembourg needs biomedical research that will ultimately be beneficial to the patient and contribute to the consolidation of an innovative, sustainable and efficient health system.

Exemplified by Ozan Ciftci’s work, the LIAB award rewards research findings and technologies that are particularly likely to be transferred to the market. The award takes a deep look into natural objects found in our environment, like plants. This type of research is carried out at LIST as part of its environmental activities and especially in its GreenTech Innovation Centre (GTIC): a one-stop-shop for the complete development of bio-based products and processes.

**Shared laboratories with PM-International**

The LIAB Award is sponsored by PM-International, a Luxembourg-based nutrition company specialised in premium dietary supplements and health products. This collaboration is in no way coincidental. LIST and PM-International have been working together on innovative bioactive molecules for dietary supplements and cosmetics for about four years.

Shared laboratories between the two partners have been set-up in LIST’s main laboratory building in Belvaux. This joint infrastructure facilitates operations and investments in the extraction and transformation of plant-derived molecules. Thanks to this type of research based on close collaboration with industrial partners, LIST meets the concrete needs of the market and fulfils its mission of pushing the frontiers of research for high-impact innovation.

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