Fighting global warming: MIT recognizes Tec graduate for CO2 capture

Jazmín Salazar, a graduate from **Tec de Monterrey's** **Puebla campus**, has been recognized as one of the **35 highest-achieving innovators in Latin America** by the **Massachusetts Institute of Technology (MIT)** for the creation of system which monitors and neutralizes the carbon dioxide emitted by businesses.

The university listed her among the **35 highest-achieving innovators under the age of 35 in Latin America in 2023** in the "Visionaries" category, which focuses on those who develop technological innovations in the health, transportation, and waste management sectors.

Jazmín has a degree in Business Creation and Development and is the founder and CEO of **Oxtrón**, a startup that measures the **carbon footprint** of companies and offers sustainable solutions to reduce the negative impact of emissions.

The objective is to **obtain pure carbon dioxide (CO2) gas** to reuse it in industrial processes and to create other products.

Oxtrón combines software which **controls carbon dioxide emissions** with a machine that traps the polluting parts of the gas.


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Making use of industrial waste

Jazmín grew up in the state of Puebla, in an environment where it was easy to get to know **farmers** and where she was able to learn about the impact of climate change on vulnerable populations.

She explained that it is this what sparked her interest in creating projects which could positively impact these social groups and help them economically at the same time.

“I saw that I had the ability to do something that would help my community and the environment, and carbon dioxide is one of the biggest destroyers of the planet,” she said.

It was then that she created Oxtrón, a device which captures the greenhouse gases produced by companies and tries to reduce their negative impact.

“The captured emissions pass through a filter that removes grease, ash, soot, and toxic particles which can cause respiratory diseases and even cancer,” explained Salazar.

“I knew that I had the ability to do something that would help my community and the environment.”

Jazmín explained that, after passing through this filter, the gases undergo a chemical process which eliminates **hydrogen sulfide**, a toxic gas, leaving CO2 and other gases in a pure form.

At this point, the CO2 is captured and pressurized so it can be stored and sold to other industries and used in the production of plastics, fuels, and other chemical products.

It also promotes the **use of clean technologies** that provide economically profitable solutions to environmental problems and create new business opportunities.

Reducing the carbon footprint of restaurants and factories

Jazmín hopes to use Oxtrón to reduce the carbon footprint generated by **factories and restaurants** in their processes.

She is focused on emissions generated through combustion processes, such as restaurant grills, industrial chimneys, and the burning of coal, fuel, or gas.

They are often essential processes for companies, hence the importance of taking them into consideration.

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Companies have the opportunity to choose if they want to implement the whole technology package or simply want to include a particular part of the process, such as measurement, control, or the capture of emissions.

The idea is that businesses gradually take up this clean technology, regardless of the size of the factory or restaurant, because “*what isn’t measured can’t be controlled*,” she said.

She shared that her product has been acquired mainly by companies in the restaurant and cremation industries which are interested in making their processes more ecological. This will allow her to expand the project across Mexico and **then throughout Latin America.**

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