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Photo 1 Bartosz Wyrwa of the Heritage Studio illustrates the process of making natural dyes for textiles

Photo 2
Paweł Ślusarczyk, from
Greenfill3D, accessibly
explains the details of how
biodegradable materials can
be used in 3D printing

EXPLORING CLIMATE SOLUTIONS IN VIENNA

In an era marked by global warming, escalating carbon footprints, and the alarming destruction of biodiversity, we are constantly inundated with information about our planet's environmental crises. What proactive steps can we actually take to make a difference?

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PAS Scientific Center in Vienna

he PAS Scientific Center in Vienna has sketched out a few potential answers. The Center's "open days" event in 2023 – themed "Ecology and Sustainable Development for a Better Future" and forming part of the annual celebration of Polish science in Vienna each September – offered an opportunity to explore various innovative and ecological solutions, all linked to Polish science. The event kicked off with a screening of "It's OK to Panic," a thought-provoking documentary featuring Prof. Szymon Malinowski, a leading atmospheric physicist from the University of Warsaw's Institute of Geophysics, who has spent many years studying climate change.

The second day featured with a variety of engaging workshops, demonstrations, and lectures. Paweł Ślusarczyk, representing the startup Greenfill3D,

showcased the latest in biodegradable filaments and the intricacies of recycling, biodegradability, and composting. Dr. Maciej Raś discussed the challenges related to water usage, a critical resource. Professor Tadeusz Malewski gave a lecture on the potential for studying and analyzing environmental biodiversity. Our guests not only shared their expertise but also sparked lively discussions and encouraged attendees to pursue their own further inquiry.

Complementing the lectures, a set of workshops allowed participants to see firsthand how Greenfill3D employs innovative technologies and ecofriendly materials to produce three-dimensional prints. Attendees learned how recycled plastics could be transformed into various products, including home accessories. We also discovered the numerous benefits of ecological 3D printing. Using recycled materials helps reduce waste generated during production and allows for the precise customization of projects to meet individual needs, which minimizes resource use. The Heritage Studio's workshops, which demonstrated traditional methods of creating cos-







metics, were particularly intriguing. Participants had the chance to create their own products using natural ingredients like oils, butters, and plant extracts, and to customize these cosmetics to their preferences.

The final workshop featured the Prusa Mk4 printer and the Recreator Mk5 device, which converts PET bottles into filament. These recycled materials were used to print a life-sized model of a Tyrannosaurus skeleton. This modern technology not only enables the creation of remarkable items, while also helping to take care of our planet.

The open days are an opportunity not only to acquire new knowledge but also to discover new passions and inspirations. Under the leadership of Prof. Lech Majewski from the Academy of Fine Arts in Warsaw, art students prepared a series of posters focused on environmental protection and related challenges.

Overall, the "open days" at the Scientific Center of the Polish Academy of Sciences in Vienna provide a unique chance to meet distinguished scientists first-hand and discover the latest projects being undertaken by Polish researchers.

Photo 3

Vernissage of an ecology--themed poster exhibition, curated by Prof. Lech Majewski from the Academy of Fine Arts in Warsaw

Photo 4

A 1:1 scale model of a two-year-old Tyrannosaurus skeleton, 3D printed from recycled plastic



Photo 5 Given Vienna's status as a cultural capital, a musical performance was an essential addition to the "open days" event

