

Time to get tough

A compelling keynote speech set the tone for the latest **IULTCS International Congress** in the historic German city of Dresden, which aimed to illustrate the vital importance of green chemistry and sustainability.

Since the last IULTCS Congress in Chennai in 2017, there have been many advancements in leather chemistry and technology that provide an ever-reliable foundation of optimism about the future of leather, and the dedication to it.

The keynote Heidemann Lecture, entitled 'As tough as leather', was delivered by Professor Kheng Lim Goh, leader at the Advanced Composite Research Group at Newcastle University, and the Newcastle Research and Innovation Institute, both in Singapore – and set the tone for the rest of the event.

'Benign by design' was the overarching theme for this edition to illustrate the vital importance of green chemistry and current sustainability initiatives.

In-between rounds of lecture sessions, an adjacent exhibition hall had Poster Sessions, or abstracts and synopses on display for further discussions.

New to this Congress were the Speed Science sessions, bite-sized, three-minute blasts that gave more people the chance to showcase their work in front of about 500 people. However, some speakers looked under pressure to deliver under such time constraints, and with English being a second language in many cases, three minutes came and went too quickly and they left the stage a little bewildered.

There was the exhibition hall next door to get a more detailed and relaxed explanation, but there were critics who said it was a bit of a disservice to the speakers, and it remains to be seen if this will be part of the next congresses in Addis Ababa and Chengdu. There were also talks given in seminar rooms off the main hall, so decisions had to be made as to where people wanted to be: 'Traceability of hides and skins' by Thierry Poncet or 'Cold Milling by Adriano Peruzzi', for example.

A diverse itinerary

The first day's programme had more than 20 lectures split into three sessions, and topics ranged from revolutionary methods of unhairing, the circular economy with bio-based solutions, and a review of the scientific and technological literature of fungicides in the tannery industry by ATC Tannery Chemicals executive director Zulfe Biehl, which was a standout before the afternoon coffee break.

To kick off the second day of lectures, 70 participants of the Freiberg Leather Days, run by leather research body FILK in nearby Freiberg, joined the discussions and lectures. The main topics were divided into scientific and engineering, and participants, once again, had to choose one or the other, or jump from one to the other to get the most out of what was on offer.

Just before another Speed Science session, Silvateam's Eric Poles talked about a study on the antibacterial properties of leathers tanned with natural tannins and their interactions with footwear-inhabiting bacteria.

"If tannins would perform an antibacterial activity in a vegetable-tanned leather, this effect could be very interesting for all the applications in which the leather, being in contact with sweat and bacteria, becomes a solution to reduce hyperhidrosis and bromhidrosis," he writes in the paper's abstract.

"The goal of the study was the assessment of the antibacterial activity of vegetable tanned leathers with natural tannins to produce articles in direct contact with human skin and, therefore, their effect on sweat, bacterial growth and metabolite production."

This could well have been a relevant topic later in the evening at the gala dinner when the band got into gear and the dance floor filled up.

The following morning, the last day of the congress, Stahl's Michael Costello spoke about using big data to harness the environmental impact of leather, echoing the theme of 'Benign by design', while celebrating the science and technology behind it. ●

18.4%

The reduction in the use of water in leather manufacturing since 2003.

2018 Italian Leather Sustainability Report

IULTCS attendees were treated to a variety of lectures on key issues impacting the industry.

