



Rapid.Tech + FabCon 3.D
25-27 June 2019
Messe Erfurt

International experts in 3D printing for the medical industry convene in Erfurt
Rapid.Tech + FabCon 3.D's Medical, Dental and Orthopaedic Technology forum will be held on 25 June 2019

(Erfurt, 11 April 2019). The market for 3D-printed medical products is expanding rapidly. According to a recent report by Future Markets Insights (FMI), it is expected to see an annual growth rate of 17.7 percent through to 2026. As one of the first sectors to utilise additive manufacturing, medical technology is also a key driver behind the qualitative development of materials, processes and procedures. According to FMI, North America, Western Europe and Asia, particularly Japan, are the dominant regions in the field. This leadership in innovation is reflected in the programme for the Medical, Dental and Orthopaedic Technology forum on 25 June 2019, the opening day of the three-day Rapid.Tech + FabCon 3.D event in Erfurt. "At the forum we will be welcoming speakers from well-known companies and research institutions in the USA, Israel, Austria, Japan and Germany. The demand for the seven speaking slots was enormous, and shows that Erfurt is one of the key international venues for presenting the latest discoveries in additive manufacturing for the medical sector and discussing them with experts," says Michael Kynast, CEO of Messe Erfurt GmbH.

Selecting the presentations and content of the forum was once again largely the responsibility of Ralf Schumacher, Head of Mimedix Digital Surgical Solutions at the Swiss company Medartis AG. "In this forum, we will provide an overview of the current status of 3D printing applications, predominately in the dental and orthopaedic sectors. It is not only the printing technologies themselves that play a role here, but the up- and downstream processes and process validation too. The forum will also explore further developments in established plastic processes, particularly from a biocompatibility angle, and innovations from the fields of ceramic and metallic 3D printing for medical products."

A talk by 3D Systems, the US company co-founded by the inventor of 3D printing Chuck Hull, will describe the process of using direct metal printing to create tested medical products. Medical applications involving additive manufacture using high-performance and bioresorbable ceramics will be discussed in presentations by Israel's Xjet and Lithoz from Austria. Xjet will demonstrate how nanoparticle jetting technology can be used to create high-quality medical products from ceramic, while Lithoz will explain the opportunities associated with the LCM (lithography-based ceramic manufacturing) process in modern medical technology.

The Japanese company Okamoto's talk will discuss a new approach to manufacturing a kind of dental correction device known as an aligner. The material and processes involved improve the product's properties and robustness, and avoid the yellowing often seen in traditional devices. Another dental application will be presented by the Würzburg-based Fraunhofer Institute for Silicate Research ISC. The research institution is working on biocompatible, resin-based 3D-printing materials for dental prosthetics with high-quality mechanical properties. The materials currently used are insufficiently robust to be suitable for permanent replacements.

A talk entitled "From precision casting to additive manufacturing" by the endoprosthesis development partner endocon from Neckargemünd in Germany will look at how highly durable orthopaedic instruments



can be manufactured efficiently. And Laser Zentrum Hannover will explain the process of manufacturing intricate, biodegradable support structures known as scaffolds using selective laser melting.

The Medical, Dental and Orthopaedic Technology forum is one of 14 sector-specific forums on the conference programme for Rapid.Tech + FabCon 3.D. Three forums – Software & Processes, Plastics, and Standardization & Occupational Safety – are appearing on the agenda for the first time. Alongside these new additions, the programme will feature the established forums on Automotive Industry; Aviation; Contract Additive Manufacturing; 3D Printed Electronics & Functions; Design; Tool, Mould & Jig Construction; Metal; and Law. As in previous years, a session by the Fraunhofer Additive Manufacturing Alliance and the two-day AM Science forum are further highlights on the agenda. Overall, over the three days of the conference, there will be more than 100 lectures presenting the latest developments, trends and findings relating to additive technologies and applications in theory and practice.

The 3D Printing Conference and the redesigned presentation spaces and networking opportunities in the exhibition will also help attendees to share their knowledge and experiences and to build and maintain their networks.

For their 16th edition, Rapid.Tech + FabCon 3.D are yet again expecting over 200 exhibitors from Germany and abroad, as well as more than 5,000 international trade visitors and conference delegates.

Further information: www.rapidtech-fabcon.com

Messe Erfurt GmbH press contact

Katrin Bratner
Tel: +49 361 400 17 70
Mob: +49 173 389 89 98
<mailto:bratner@messe-erfurt.de>

Trade press contact

Ina Reichel
– Freelance Journalist –
Tel: +49 371 774 35 10
Mob: +49 172 602 94 78
inareichel@ma-reichel.de