



Rapid.Tech + FabCon 3.D,
25. bis 27. Juni 2019, Messe Erfurt

Winners of „3D Pioneers Challenge 2019“ have been selected.

– The industry's highlights could look forward to a total prize money of EUR 35,000.

(Erfurt, 27 June 2019) The 3D Pioneers Challenge, the international design competition, could assure its position as platform for the latest trends in additive manufacturing. With submissions ranging from groundbreaking concepts to pioneering design solutions, it is again a highlight in its fourth year at Rapid.Tech + FabCon 3.D tradeshow for additive technologies in Erfurt.

Once again, the Challenge was able to inspire specialists all over the world to look beyond their own horizons - pushing boundaries!

In 2019, the range of past years was surpassed with a response from 23 countries and 5 continents.

The 60 m² special area presented the "Who is Who" in Erfurt and was a crowd-puller. Not least due to the forward-looking, digital exhibition concept, in which more detailed information about the exhibits could be discovered via AR.

The strong quality and the orientation of this year's 36 finalists were praised both by the top-class partners and by the expert jury such as the London designer Ross Lovegrove: „My appreciation of what 3D Pioneers Challenge has established in supporting the positive emergence of additive technologies in the 21st Century!“

The organizers Simone and Christoph Völcker summarize the 3D printing trends for 2019: "The latest developments in the three pillars of additive manufacturing technologies - materials, technology and data generation - are reflected in new designs with increasing performance and in the trend towards sustainable projects for people and the environment. 3D printing goes far beyond the technical world. It can no longer be seen only in competition with other manufacturing technologies, but acts as an enabler in the overall context of industrial applications. Additive manufacturing processes is bridging the gap to new business fields. As a hidden champion and problem solver, it also manages to inspire emotion with groundbreaking concepts."

The "3DPC Winners 2019" were selected by the final jury after a multi-stage jury procedure on 26 June on site at Messe Erfurt and received their awards at the Rapid.Tech + FabCon 3.D evening event. Valentina Kerst, the Thuringian State Secretary in the Ministry for Economy, Science and Digital Society, did not miss the opportunity to open the event and congratulate the winners personally.

The finalists were presented in the eight categories: Design, Digital, Architecture, Materials, FashionTech, MedTech, Mobility and Sustainability.

In total, prizes worth over € 40,000 were awarded to the winners.

The prize money of € 35,000 was donated by the Thuringian Ministry of Economics, Science and the Digital Society. This makes the "3D Pioneers Challenge" to one of the most highly prized awards for innovation in the field of 3D printing.

The winners furthermore received Autodesk Fusion 360 and NetFabb licenses, all finalists received the 3D Printing Handbook from 3DHubs.

A new highlight in 2019 is the award "Special Mention by Autodesk". Three projects were selected to participate in its prestigious Autodesk Technology Centers Residency program in North America in San Francisco, Boston or Toronto to continue their projects. The three winners "Gravity Jetsuit" from Gravity Industries, "Swarm 3D Printing and Assembly Robots" from AMBOTS from University of Arkansas and "AMIE 1.0 - Additive Manufacturing Integrated Energy" from the University of Tennessee are provided



with dedicated project areas in a technology center, access to advanced fabrication machinery, training, and connections to industry experts and the technology center community.

Among the winners is the team around Nadav Noor with Dr. Assaf Shapira, Dr. Tal Dvir, Dr. Reuven Edri, Idan Gal and Lior Wertheim of the Tel Aviv University with their project "3D Printing heart" – the first 3D printed heart with major blood vessels by using anatomical geometries and patients own materials and cells. For the jury this „breathtaking innovation with a lot of heart“ was the main winner in the vertical MedTech with a prize money of € 10,000.

Obasogie Okpamen und Obasogie Osasumwen of the Landmark University from Nigeria, with their entry "Alfa Romeo Twin Spark CON ROD", a topology optimized redesign, was awarded as "best student work" and received the MakerBot Replicator Mini+, as well as € 4,000.

The entry from Switzerland "Stealth Padlock and Key" by Urban Alps with Dr. Alejandro Ojeda, Jiri Holda, Dr. Alexander Schnell, Otakar Flek and Jana Bradlova was awarded with € 3,500 in the category Design for their concept of 3D printing coupled with aerospace materials. A pioneering combination of the 3D printed stealth key with a super-alloy lock housing and shackle. „Urban Alps is bringing a 3D printing product in everyones pocket.“

Winner in the vertical Material was Adam Jakus from Dimension Inx LLC with his entry "3D-Painted Hyperelastic Bone" and prize money of € 3,500. The jury was excited about the "Amazing flexible material for bone implants". A revolutionary, 3D-printable bioceramic that transforms into natural bone after implantation is highly surgically friendly, and very scalable.

The submission of the Dutch team Elzelinde van Doleweerd and Vita Broeken "Upprinting Food" won in the category Sustainability and received the prize-money of € 3,500. The "well tasting solution manifesting environmental and social responsibility" convinced the jury about the project that focuses on sustainability and food, to create valuable food concepts from food waste with the 3D food printing technology.

Also in the vertical Sustainability Emerging Object with Ronald Rael, Virginia San Fratello, Sandy Curth, Logman Arja and SECORE won € 3,500 with "Design of Coral Reef Seed Units". Based on years of coral restoration research, they developed a new generation of 3D printed coral seed units. "Impressive contribution to oceans sustainability."

"Gravity Jetsuit" won in 2 verticals the prize money of € 3,500. Gravity Industries with Richard Browning, Sam Rogers and Alex Wilson from Great Britain as well as EOS "combine Mobility and FashionTech- a suit that fits like a rocket!" This Jet Suit is supposed to give people a unique flying experience.

The project "Rocket combustion chamber Demonstrator built through generative algorithms" makes "a paradigm shift in design." The German Team around Hyperganic Technologies AG with Lin Kayser, Markus Finke, Michael Gallo, Duy-Anh Pham and Stefan Bindl won therefore in the category Digital € 3,500.

In 2019, the pioneering achievements in the award-winning categories clearly stood out from the other verticals.

The exhibition of the finalists will be shown as a roadshow over one year at various national and international locations. Among others, there will be two stops at events organised by the 3DDruck e.V. association in Berlin: the 3DKonzeptLab on 12 and 13 September and the 3DCafé in the German Bundestag. The 3D Pioneers Challenge will once again present the highlights of the challenge 2019 to politics as an international platform for 3D printing.



Jury 2019

Dr. Justus Bobke_ 3D Druck Verband
Diana Drewes_ Haute Innovation
Stephan Eelman_ BASF 3D Printing Solutions
Sarah Goehrke_ Additive Integrity LLC
Arno Held_ AM Ventures Holding GmbH
Andrej Kupetz_ German Design Council
Ross Lovegrove_ Lovegrove Studio
Silvia Olp_ aed
Prof. Gilles Retsin_ UCL Bartlett
Prof. Wolfgang Sattler_ Bauhaus University Weimar
Patrik Schumacher_ Zaha Hadid Architects
Vanessa Sigurdson_ Autodesk Technology Centers
Dr. Dirk Simon_ FARSOON Europe
Joachim Stumpp_ raumPROBE
Andreas Velten_ IFA3D Medical Solutions
Christoph Völcker_ Würth Elektronik eiSos
Wolf Udo Wagner_ Studio Wagner:Design, DDC
Anouk Wipprecht_ FashionTech Designer

Partner „3D Pioneers Challenge“ 2019

Thuringian Ministry for Economy, Science and Digital Society, Messe Erfurt - Rapid.Tech + FabCon 3.D, d.sign21, 3DHubs, 3dpbm, 3Druck.com, 100 Jahre Bauhaus Weimar, aed, All3DP, Autodesk, avedition, BASF, Canto, Deutsche Bahn, DDC Deutscher Designer Club, designreport, Designspotter, Fabb-It, FARSOON Europe, FIT AG, Haute Innovation, Makerbot, raumPROBE, Rat für Formgebung, Stratasys, 3D Druck Verband e.V., Würth Elektronik eiSos
Patronage: DDC Deutscher Designer Club, Studio Deussen AR exhibition

About d.sign21

The company for design and consultancy with a wealth of experience in developing and organising design challenges. Its expertise in design, additive technologies and the global network supports the 3D Pioneers Challenge.

About 3DPC

3DPC - the international platform for pioneers in 3d printing. The international competition for additive manufacturing builds the stage for all enthusiasts who deal with new technologies and use 3d printing to push their projects.

Facts 3DPC 2019

4th edition of 3D Pioneers Challenge in Erfurt at Rapid.Tech + FabCon 3.D

Jury: 18 specialists of the industry and verticals

Verticals 8 Design, Digital, Architecture, Material, FashionTech, MedTech, Mobility, Sustainability

Partner: 25 Industry, Press, Design, Universities, Software

Submissions from: 23 countries

Finalists: 36

prize money of € 35,000 was donated by the Thuringian Ministry of Economics, Science and the Digital Society.

First prize 10.000 EUR

Best Student: Makerbot and Prize money



Special Mention by Autodesk: participation in its prestigious Autodesk Technology Centers Residency program in North America in San Francisco, Boston or Toronto to continue their projects.

Further prizes by partners

About Rapid.Tech + FabCon 3.D

Rapid.Tech + FabCon 3.D is one of Europe's most important events in the field of additive manufacturing. It has been providing information about the status and development of Rapid Prototyping, the direct production of end products by using additive manufacturing as well as the way into series production. With more than 100 user-oriented lectures in the specialist conference and the 3D Printing Conference as well as more than 180 exhibitors on the show floor Rapid.Tech + FabCon 3.D is a high-class industry get-together which is unique in this form. From 25 to 27 June 2019 more than 4,500 international trade visitors and conference participants were welcomed to Erfurt.

Press contact of Messe Erfurt GmbH:

Anne Apel

Tel: +49 (0) 361 400 1350

apelr@messe-erfurt.de

www.rapidtech-fabcon.com

Contact 3D Pioneers Challenge:

Simone Völcker

Tel: +49 (0) 711 477 2748-0

info@3dpc.io

www.3dpc.io

Messe Erfurt GmbH

Gothaer Straße 34 . 99094 Erfurt
T +49 361 400-0 . F +49 361 400-1111
info@messe-erfurt.de
www.messe-erfurt.de

Aufsichtsratsvorsitzende:

Valentina Kerst,
Staatssekretärin
Geschäftsführer:
Michael Kynast

Amtsgericht Jena

HRB 504079
Steuer-Nr.: 151/114/08472
UST-Id.Nr.: DE173364228

Commerzbank Erfurt

BLZ 820 400 00
Konto 1000 90 000
IBAN: DE13 8204 0000 0100 0900 00
BIC: COBADEFFXXX

Sparkasse Mittelthüringen

BLZ 820 510 00
Konto 600 055 914
IBAN: DE32 8205 1000 0600 0559 14
BIC: HELADEF1WEM