



**3D Pioneers Challenge**  
**Rapid.Tech3D, Messe Erfurt**

**The coveted trophy of 3D Pioneers Challenge 2021 goes to Hexr, UK.**

*(Erfurt/Stuttgart 23 June 2021)*

The first prize - awarded with 10,000 EUR - was given in an entertaining and high-quality digital awards ceremony on 22 June. The 3DPC-trophy of the 3D Pioneers Challenge 2021 also goes to the "3DPC 2021 Main Winner": Hexr from Great Britain.

All winners of the nine categories could be seen live on screen when the prizes were announced. With confetti and a traditional gimlet after-show party, the lucky winner in the category FashionTech Robin Spicer and his team were celebrated virtually at the Stuttgart film set.

"Again – we are thrilled of this years pioneers. Every time we think there is no increase possible, advanced technologies teach us better – these creative minds never stop pushing boundaries. We are proud that it is the 3DPC platform where everyone can feel the paradigm shift of this pulsating epoch. With the agency Jangled Nerves we won a strong supporter to produce an exciting digital happening to give a stage to the finalists, winners and partners", said Simone and Christoph Völcker (founder of 3D Pioneers Challenge).

In the sixth year of the innovation competition, submissions from 32 countries and 5 continents faced the top-class 21-member international jury.

The focus of the 3D Pioneers Challenge 2021 was not only on the core of Additive Manufacturing but also on innovations in Advanced Technologies. The group of participants included pioneers of professionals, young professionals, start-ups as well as students.

The nominees for the 2021 final clearly indicated a "paradigm shift" - projects and products were being rethought through digital processes and technologies. Consequently, the jury expanded the categories this year to include "Technology & Process" in order to take into account the holistic idea of innovative manufacturing processes.

Sustainability plays a major role in the "new normal", both ecologically and economically. Social-innovative concepts are taking steps into a progressive era of change. Back to the roots with new possibilities. The desire for the individual in a "New World" characterised by consciousness.

"What if..." our nature would be allowed to endure sustainably forever through new technologies and their cycles? "What if..." natural materials find their way into industrial use?

**The Digital Award Ceremony**

Directly after the first day of the "RapidTech.3D digital" congress, held on 22 and 23 June, the virtual 3DPC awards ceremony was streamed live from Stuttgart.

In addition to the winning projects being awarded by the jury members, the digital awards ceremony also offered other highlights. Anja Lange (moderator) was impressed: "The founders of 3DPC draw all cards of their network". So did Patrik Schumacher (CEO Zaha Hadid architects) who gave a keynote as attunement to celebrate the pioneers of advanced technologies and underlined the opportunities opened up by the exchange around new technologies on the 3DPC platform and its community. The Thuringian Minister for Economic Affairs, Science and Digital Society Wolfgang Tiefensee as well as the Director of the Messe Erfurt Michael Kynast sent greetings to the audience. In an interview with Simone Völcker (3DPC), Jennifer Arroyo (NTopology, New York) talked about this year's "Special Feature" of 3DPC&Friends, which gave participants access to new types of digital tools - continuing education at the next level! Right before the eagerly awaited live announcement of the main winner, Autodesk, broadcasting from Toronto (CAN), awarded the three "Special Mention by Autodesk" winners.

From all over the world, excited spectators watched as Simone Völcker opened the golden envelope and announced the "3DPC 2021 Main Winner" "Hexr".



The 3D Pioneers Challenge 2021 found its final in a very successful, high-quality produced and entertaining digital award ceremony in the studio of Jangled Nerves, Stuttgart, following the motto "Best ideas happen in the kitchen".

"How meaningful the network in those challenging times is, you can see with our partners who stick together with us for many years as well as also our stunning jury members – the creative community of the 3D Pioneers Challenge lives the Paradigm shift by not stopping to push the boundaries together", points out Christoph Völcker (3DPC).

### Prizes and Awards

This year's main prize winner "Hexr" was awarded in the category **FashionTech**, with its customised bicycle helmet, which was realised using advanced technologies and brought to the market as a sustainable concept. Robin Spicer and his British team received the coveted **3DPC Trophy** and an nTopology licence in addition to the prize money of 10,000 EUR.

The winner, Felicia Hamm from Darmstadt University of Applied Sciences, was awarded the "**Best Student Award**" in the design category. She won 4,000 EUR for "Self Adjusting Fire" and the **Makerbot Sketch 3D printer**.

Winners in the categories Digital, Architecture, MedTech, Mobility, Material, Sustainability and Technology & Process each received prize money of 3,500 EUR.

In addition, the project "The Brush" by Büro Süß & Friends won the second nTopology licence in the Digital category, with a value of over 15,000 EUR.

The three projects "Waam" from Italy, "The Brush" from Germany and "Protomycokion" from Denmark by Vanessa Sigurdson and Matthew Sprinelli (Autodesk Technology Centers) were awarded the "**Special Mention by Autodesk**".

The winners will have the opportunity to join the Autodesk Oversight Network - a global community of industry leaders, entrepreneurs and researchers who are developing cutting-edge technologies in design, AEC, manufacturing and more that will change our world.

The Thuringian Ministry for Economic Affairs, Science and Digital Society once again provided the prize money totalling 35,000 EUR. Books from partners avedition and 3DHubs round off the package of prizes for all winners.

The 3D Pioneers Challenge is thus the most highly endowed and prestigious design competition of its kind in the world for advanced technologies, with a total prize value of over **70,000 EUR**, in addition to the inestimable value of the international community and awareness, or the limited 3DPC Trophy from Ross Lovegrove, Hyperganic and Materialise.

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3D Pioneers Challenge award ceremony is available to watch again on the #3D Pioneers Challenge **YouTube Chanal**: [www.youtube.com/channel/UCJ4Yt8M936R0hp\\_CjflziYQ](https://www.youtube.com/channel/UCJ4Yt8M936R0hp_CjflziYQ)

### 3D Pioneers Challenge 2022

Call for entries for 3DPC2022 will be announced in November 2021.

**Save te date: Rapid.Tech3D 2022, Messe Erfurt: 16 -18 May 2022**



## Winners 3DPC 2021 and Juryannouncements:

### “3DPC2021 Winner FashionTech“ // Main winner: Hexr

*James Cook, Henry Neilson, Aleksandr Mattal, Mark Brown, Jess Lewis, George Jary, Theo Clarke, Chris Davies, Annebeth Buis, Marija Trachtenberg, Joanne Clarke, Robin Spicer, Nia Simpson*  
GREATBRITAIN

The custom fit cycle helmet. Our unique design uses a honeycomb structure to offer market-leading head protection while ensuring maximum comfort.

// 10,000 EUR, 3DPC Trophy, nTopology License

Jurystatement by Anna Wilhelmi, adidas Future team:

“Does the product solve a real problem for the user?”

“Has AM been used in an innovative way to solve the problem?”

“Is the process and the materilisation sustainable?”

“Do the design aesthetics appear to the consumer?”

The jury was clear that Hexr wins, as the four questions to win in this category FashionTech could be answered with four clear “YES!”.

### “3DPC2021 Winner Design“ // Best student: Self adjusting fire

*Hochschule Darmstadt // Felicia Hamm \_ Prof. Tom Philipps*  
DEUTSCHLAND

What if 4D-and metal-printing would be combined?

Static objects could be thought in a new way- as the concept of a morphing, self-adjustable oven.

// 4,000 EUR, Makerbot Sketch 3D printer

Jurystatement by Lutz Dietzold, German Design Council:

“This design convinces through it’s application to rethink the problems of emisson by also pushing the boundaries of 4D-metal-printing and smart materials. This concept combines sustainable consumption, contemporary design and is bringing atmosphere to our homes.“

### “3DPC2021 Winner Digital“: THE BRUSH - Recreating humankind’s first tool

*Süb & friends // Philipp Süß*  
GERMANY

The reinvention of mankind’s oldest tool, the brush, by 3D-printing complex natural structures with a flexible material.

// 3,500 EUR, nTopology License, Special Mention by Autodesk

Jurystatement by Valentina Kerst, State secretary Ministry of Economics, Science and Digital Society Thuringia:

“Advanced Technologys are used so wisely in this winning entry. They rethink a traditional product from the ground up and completely redesign its performance. The jury was impressed about how the team used digital tools to realise the concept.“

### “3DPC2021 Winner Nachhaltigkeit und Material“: Protomycokion

*Lund University // Ana Goidea, David Andréen*  
DENMARK

3D Printed mycelium biomaterials for sustainable construction, grown as a living system into a full size architectural column

// 3,500 EUR, Special Mention by Autodesk

Jurycomment byJoachim Stumpp, raumprobe Stuttgart:

“This project convinced in both categories - because what can be better than sustainable materials? But to be successful you need to focus on how to produce and implement latest technologies like regrowing materials. This winning concept could change so many applications already today and could be transferred to packaging solutions for example or many more in the future.“



„**3DPC2021 Winner Architektur**“: **HivE**

*Lithium Designers GmbH // Dr.-Ing Alamir Mohsen, Dr.-Ing Michael Drass, Lorenz Riedel, Benjamin Kryts, Ghaith Tish*  
GERMANY

HivE is the 1st freeform façade in Germany and the world that is built using 3D printed topology-optimized façade nodes and a standard façade system.  
// 3,500 EUR

Juryannouncement by Sonja Rasch, Sales Director and BD serial production/aerospace at Materialise:

"This real project combines intelligent parametric design and sustainable aspects to rethink façade design. We are excited to see these façades everywhere in the world!"

„**3DPC2021 Winner Technology & Process**“: **MeaTech**

*MeaTech3D // Sharon Fima, CEO and CTO / Dan Kozlovski, VP of R&D / Matan Livne / Itamar Atzmony / Timofey Schmal / Tal Kalkstein / Tal Kollek / Lior Yedidya / Shiri Arnon / Nadav Noor / Daria Petrov / Dorit Eliyaev / Dana Hillel / Diana Rapoport / Itay Nakdimon / Peter Berenstein / Chen Azulay*  
ISRAEL

MeaTech aims to 3D-print the first real beef steak using sustainable cultured meat production, cellular agriculture and bioprinting technologies.

Jurystatement by Joris Peels, Vice President Consulting at SmarTech Analysis and Executive Editor at 3DPrint.com:

"This company brings the most fundamental change and is the biggest pioneer in the area how things are produced. This will really affect how the world makes sense."

„**3DPC2021 Winner Mobility**“: **Waldwiesel - the first 3D printed Gravel E-Bike**

*Urwahn Engineering GmbH // Sebastian Meinecke, Ramon Thomas*  
GERMANY

The Waldwiesel is the first gravel e-bike to be produced using metallurgical 3D printing and sets new functional standards.  
// 3,500 EUR

Juryannouncement by Ross Lovegrove:

"In the new age of design-engineering and design converges, dealing in a new way with energy. The new generation of cyclist is being privileged to be able to ride this elegant and advanced bike."

„**3DPC2021 Winner MedTech**“: **Custom made mitral valve**

*3D Medlab // Laura Revol, Donatien Champion*  
FRANCE

// 3,500 EUR

A mitral valve replacement device, 3D printed in NiTi, improving survival rate of patient by being tailored on their anatomy, improving performance.

Jurystatement by Dr. Cora Lüders-Theuerkauf, Medical goes Additive e.V / Mobility goes Additive e.V.:

"These pioneers are using AM in such an innovative way for medical applications currently and are setting the milestone for more exciting developments in the future."



## Press contacts

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**#3DPioneersChallenge**

## Facts 3DPC 2021

### Jury 3DPC 2021

Frank Beckmann \_ Fraunhofer IAPT  
Dr. Justus Bobke \_ Verband 3DDruck e.V.  
Lutz Dietzold \_ German Design Council  
Prof. Mareike Gast \_ Burg Giebichenstein, University of Art and Design Halle  
Valentina Kerst \_ Thuringian Ministry of Economics, Science and Digital Society  
Sonita Lontoh \_ HP 3D Printing Business  
Ross Lovegrove \_ Lovegrove Studio  
Dr. Cora Lüders-Theuerkauf \_ Medical goes Additive, MgA e.V.  
Prof. Shlomo Magdassi \_ Hebrew University of Jerusalem  
Silvia Olp \_ aed e.V., Architecture, Engineering and Design  
Joris Peels \_ SmarTech Analysis, 3DPrint.com  
Sonja Rasch \_ Materialise  
Jasna Rokegem \_ Jasna Rok FashionTech  
Prof. Patrik Schumacher \_ Zaha Hadid Architects  
Vanessa Sigurdson \_ Autodesk Technology Centers  
Dr. Dirk Simon \_ FARSOON Europe  
Joachim Stumpp \_ raumPROBE  
Andreas Velten \_ IFA3D Medical Solutions  
Dr. Andreas Vlahinos \_ Advanced Engineering Solutions  
Christoph Völcker \_ Innovation Lab AM, Würth Elektronik  
Anna Wilhemi \_ adidas Future Team

### Partner 3DPC 2021

Thuringian Ministry of Economics, Science and Digital Society, 3D Hubs, 3D natives, 3dbpm, 3DPrint.com, 3Druck.com, aed e.V., AI People, ALL3DP, AMVentures, Autodesk, av edition, BildManufaktur, CANTO, ChaCha, DB Deutsche Bahn, designspotter, Farsoon Europe, FIT AG, Fraunhofer IAPT, Haute Innovation, hp Inc., GinSTR, Jangled Nerves, MakerBot, materialise, Medical goes Additive e.V., Mobility goes Additive e.V., ndion\_News on Design, nTopology, German Design Council, raumPROBE, Stratasys, Verband 3DDruck e.V.

### Rapid.Tech 3D

Rapid.Tech 3D digital took place from 22 to 23 June 2021 at Messe Erfurt as a purely digital event:  
The focus was on the brand core as a user-related trade congress in this exceptional trade fair year. The guests of the online event were able to experience an attractive user-related programme with live stream conference, virtual expo and digital networking.

### About 3D Pioneers Challenge

The international design competition for Additive Manufacturing processes and Advanced Technologies is the most prestigious award of its kind and is one of the most highly endowed worldwide. The annual announcement and presentation of the finalists is considered to be the innovation monitor of the industry. Unique in its structure, the competition has been addressing specialists who think outside the box since 2015 - pushing boundaries!

### About 3DPC Platform

Over the years, the Challenge has become a platform with a worldwide network and is an interface for creative future-makers, pioneers of advanced technologies and innovators from research and industry.

### About „3DPC & Friends“

Under the umbrella of „3DPC & Friends“, 3DPC brings together the creative minds and high-tech pioneers of the 3DPC platform in an interdisciplinary way, resulting in new, groundbreaking projects in which everyone can contribute and live out their expertise - design rethinks! The 3DPC shows today what tomorrow will bring - pushing boundaries.