# Celebrating innovation in additive manufacturing at Formnext 2024



Last week, the Formnext trade show, held in Frankfurt, Germany, concluded with a celebration of innovation in the field of additive manufacturing. The Formnext Awards, presented in a revamped format for 2024, highlighted the industry's versatility across six categories. Attendees, having witnessed the presentations of numerous finalists, participated in an audience vote that served as a supplementary evaluation alongside a jury's decision. The awards, sponsored by entities including Trumpf and Renishaw, recognised significant contributions in the field.

Among the winners, Axolotl Biosciences received the Start-Up Award for its development of xeno-free TissuePrint bioink, designed for creating human tissue models. The Rookie Award went to Oryx Medicals for its groundbreaking 3D-printed aortic valve aimed at treating stenosis. Additionally, Ceratizit was recognised with the Sustainability Award for its innovative metal 3D printing process, while the Siemens/3D-PROCESS consortium garnered the Design Award for its sustainable reactor design. The (R)Evolution Award was awarded to the Fraunhofer Institute for its advanced three-material powder bed fusion project for battery components. Finally, the AMbassador Award recognised AM of Bones from the University of Stuttgart for its contributions to dental bone grafting.

In a related advancement, America Makes, based in Ohio, announced Edward D. Herderick, PhD, as its new Director of Education and Workforce Development. Dr. Herderick brings nearly two decades of experience in industrial additive manufacturing and is set to lead initiatives aimed at enhancing educational and career pathways within the industry. His previous roles included Vice President for Science and Technology Development at NSL Analytical and Director of Additive Manufacturing at The Ohio State University’s Centre for Design and Manufacturing Excellence.

In further developments, Dyndrite unveiled its SMART Script, a pioneering automation tool developed as part of the ASTM Consortium for Materials Data and Standardization. This new Python script streamlines the process of generating compliant build layouts for additive manufacturing, a task that traditionally took significant manual time. With proposed labour savings of approximately 99%, the SMART Script aims to enhance economic viability in industries where compliance with regulatory standards is critical, such as medical and aerospace.

Additionally, Eplus3D launched its EP-M4750, a quad-laser large-format metal 3D printer designed for batch production. The new printer aims to transform metal additive manufacturing from a prototyping tool into a direct production solution, offering a significant build chamber and compatibility with various alloys. This innovation positions Eplus3D as a strong competitor in meeting increasing production demands in sectors like aviation and automotive.

Lastly, Ukrainian startup LEMKI Robotix, in partnership with German firm iScale3D, introduced the DISCOVER 3D mobile home, 3D printed from eco-friendly materials. The prototype combines recycled plastics and advanced features such as solar panel connectivity and smart sensors, offering a sustainable and comfortable travel option for families. With an emphasis on efficient production and reduced costs, the DISCOVER 3D represents a novel approach to mobile living spaces.

These advancements reflect an ongoing commitment within diverse sectors to leverage additive manufacturing and automation technologies, driving growth and innovation in the industry.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

* <https://formnext.mesago.com/frankfurt/en/about-us/press/press-releases/formnext-press-releases/winnerawards.html> - Corroborates the revamped format of the Formnext Awards, the categories, and the winners including Axolotl Biosciences, Oryx Medicals, Ceratizit, Siemens/3D-PROCESS consortium, Fraunhofer Institute, and AM of Bones.
* <https://3dprint.com/314778/3d-printing-news-briefs-11-23-2024/> - Supports the details of the Formnext Awards winners, the audience vote process, and the sponsors of the awards.
* <https://formnext.mesago.com/frankfurt/en/about-us/press/press-releases.html> - Provides context on the Formnext Awards, including the new format and the recognition of young innovative companies, sustainable business ideas, and pioneering technologies.
* <https://formnext.mesago.com/frankfurt/en/expo-convention/program/award.html> - Details the Formnext Awards categories, the voting process, and the recognition of various winners and their innovations.
* <https://formnext.mesago.com/frankfurt/en.html> - Describes Formnext as a hub for additive manufacturing, the trade show in Frankfurt, and the announcement of the Formnext Awards winners.
* <https://3dprint.com/314778/3d-printing-news-briefs-11-23-2024/> - Mentions Dr. Edward Herderick's appointment as the new Director of Education and Workforce Development at America Makes and his background in industrial additive manufacturing.
* <https://3dprint.com/314778/3d-printing-news-briefs-11-23-2024/> - Discusses Dyndrite's SMART Script and its role in streamlining the process of generating compliant build layouts for additive manufacturing.
* <https://3dprint.com/314778/3d-printing-news-briefs-11-23-2024/> - Introduces Eplus3D's EP-M4750 quad-laser large-format metal 3D printer and its potential impact on batch production in sectors like aviation and automotive.
* <https://3dprint.com/314778/3d-printing-news-briefs-11-23-2024/> - Mentions the launch of new technologies and products at Formnext, including the DISCOVER 3D mobile home by LEMKI Robotix and iScale3D.
* <https://formnext.mesago.com/frankfurt/en/expo-convention/program/award.html> - Details the sponsors of the Formnext Awards, including Trumpf, Renishaw, 3D Printing Industry, AM Ventures, and Voxeljet.
* <https://formnext.mesago.com/frankfurt/en/about-us/press/press-releases/formnext-press-releases/winnerawards.html> - Corroborates the innovative projects and awards received by the winners, such as the Fraunhofer Institute's three-material powder bed fusion project and AM of Bones' dental bone grafting contributions.
* <https://news.google.com/rss/articles/CBMib0FVX3lxTFBQMmI1MFViNEV6Y3lwRU9JZk53YzZYSkVpOFNaeVd0SVdjS0hCNHk4NmNpSFA5T3NPV0pUWTByRGZDUVQxM0pKTUFHZHBjY1g1SXdJYlpTQzB2WXQ3UnUtem1HM2k2Z0NpV0k1MERxb9IBdEFVX3lxTE1sWXIxQllJS2RzR0xHcGN6RHFITEV6b0lxcnh5djNrS0RYZlBISXlwcmJkVDZqdHJQdGxJTFJmdHZwallKWTF5NVNjQ1BWZzlsVS00SmFEU0tIanExNV9YY21KWXlwcnVCY3hkVHZha2htaGtM?oc=5&hl=en-US&gl=US&ceid=US:en> - Please view link - unable to able to access data