3D Systems and UC Berkeley Bring Stunning 3D-Printed Cement Architectural Structure to Life

- UC Berkeley College of Environmental Design leverages 3DS ColorJet printing technology for architectural-scale production
- Stunning, intricate geometry underscores creative and commercial potential of 3D printing for artists, architects and engineers

ROCK HILL, South Carolina, March 9, 2015 – 3D Systems (NYSE:DDD) today announced the unveiling of “Bloom,” a spectacular 3D printed architectural-scale structure created at UC Berkeley using 3DS’ ColorJet printing technology. The work of Associate Professor of Architecture Ronald Rael and his graduate student team, the project was unveiled at the fifth annual Berkeley Circus.

Measuring approximately 12’ W x 12’ D x 9’ H, this groundbreaking architectural work is the largest and most precise 3D-printed polymer structure to date. Brought to life by 3DS’ ProJet x60 printers, “Bloom” demonstrates how artists, architects and engineers increasingly rely on 3D printing technology to design and produce complex structures with uncompromised speed, cost, accuracy and creative freedom.

“3D printing is emerging as a revolutionary tool in fine art, design and construction,” said Cathy Lewis, Chief Marketing Officer, 3DS. “These tools empower everyone to conceive and create any geometry, no matter how complex. ‘Bloom’ is an inspiring example of the boundless creative and commercial possibilities that these technologies bring.”
“Bloom” is a freestanding, organically shaped room built from 840 mass-customized blocks, all of which were 3D printed on the 3DS ProJet x60 using a cement polymer developed by Rael. Because the ProJet x60 series creates incredibly accurate, full-color parts like no other 3D printer can, it allowed the team members to quickly transform their ideas into physical parts. Rael and his collaborators fabricated each unique numbered block using 11 ProJet x60s, and then assembled them by hand. Each block allows varying amounts of light to pass through the wall, creating a dynamic visual effect that interacts with floral patterns on the structure.

“While there are a handful of people currently experimenting with printing 3D architecture, only a few are looking at 3D printing with cement-based materials and all are extruding wet cement through a nozzle to produce rough panels,” said Rael. “We are mixing polymers with cement and fibers to produce very strong, lightweight, high-resolution parts on readily available equipment. This project is the genesis of a realistic, marketable process with the potential to transform the way we think about building a structure.”

3DS offers a variety of 3D technology that generates new possibilities for architectural planning, visualization and presentation. Using powerful tools like ColorJet printing, desktop drafting on the CubePro® and Sense™ 3D scanning, architects and engineers can communicate their visions and go beyond the blueprint. Go to www.3dsystems.com/solutions/architecture-geo to find out more.
After the Berkeley Circus, “Bloom” will tour various locations around the world. For more information about “Bloom” go to www.emergingobjects.com.

For more information about how 3D Systems is manufacturing the future now, go to www.3dsystems.com.

About 3D Systems
3D Systems provides the most advanced and comprehensive 3D digital design and fabrication solutions available today, including 3D printers, print materials and cloud-sourced custom parts. Its powerful ecosystem transforms entire industries by empowering professionals and consumers everywhere to bring their ideas to life using its vast material selection, including plastics, metals, ceramics and edibles. 3DS’ leading personalized medicine capabilities save lives and include end-to-end simulation, training and planning, and printing of surgical instruments and devices for personalized surgery and patient specific medical and dental devices. Its democratized 3D digital design, fabrication and inspection products provide seamless interoperability and incorporate the latest immersive computing technologies. 3DS’ products and services disrupt traditional methods, deliver improved results and empower its customers to manufacture the future now.

Leadership Through Innovation and Technology

• 3DS invented 3D printing with its Stereolithography (SLA) printer and was the first to commercialize it in 1989.

• 3DS invented Selective Laser Sintering (SLS) printing and was the first to commercialize it in 1992.

• 3DS invented the ColorJet Printing (CJP) class of 3D printers and was the first to commercialize 3D powder-based systems in 1994.

• 3DS invented MultiJet Printing (MJP) printers and was the first to commercialize it in 1996.

• 3DS Medical Modeling pioneered virtual surgical planning (VSP) and its services
are world-leading, helping many thousands of patients on an annual basis.

Today its comprehensive range of 3D printers is the industry’s benchmark for production-grade manufacturing in aerospace, automotive, patient specific medical device and a variety of consumer, electronic and fashion accessories.

More information on the company is available at [www.3dsystems.com](http://www.3dsystems.com).