

## The Neuroelectronics Group of the Technical University Munich in Germany has emphasized its choice of CeraPrinter F-Serie – All-in-one State-of-the-art Digital Materials Deposition Platform



“Moving forward for new achievements and results in innovative research together with our customers we are pleased and proud to underline the choice of our cutting-edge CeraPrinter F-Serie by the Neuroelectronics Group of the Technical University Munich. Being such a prestigious institution, combining multidisciplinary research groups working on complex biomedical applications, the Neuroelectronics Group has emphasized its investment and choice of CERADROP system. The F-Serie is a hybrid digital materials deposition printer offers Inkjet and multi post-processes combined with Aerosol Jet® technologies with such an important flexibility for various materials jetting capability, high printing resolution, accuracy and repeatability with its numerous drying and curing modules integrated. The machine permits the user to go quickly from design to functional devices manufacturing.”

stated **Nicolas BERNARDIN, Deputy Managing Director at CERADROP.**



“Our newly founded research team is interested in novel printing-based fabrication approaches for bioelectronics devices. Naturally, the choice of a printer manufacturer was thus a very important one for us. When researching the market and preparing the grant proposal for the purchase of a high-end inkjet printer for printed electronics, we quickly realized that the CERADROP F-Serie was the only choice that would allow us to tackle the research problems we had in mind. The sensor arrays we intend to print crucially rely on a high resolution and reliable interlayer alignment. In addition, some of our chips will use experimental inks that need to be jetted through Dimatix Material Cartridges. Lastly, several of our processes require the combination of inkjet printing with other materials deposition processes to print viscous inks.

All of these requirements are met with the F-Serie: high motor precision, full support of Dimatix material cartridges and the option to integrate Aerosol Jet® technology. Most important, the F-Serie allows several options for post-processing modules (such as UV, NIR, or photonic sintering) that offer the possibility to run complex processes without realignment problems caused by external post-processing steps.

Having the machine in operation for some 1.5 months, we also particularly value the software tools that come with it. The flexibility of planning a print with different filling strategies free of the constraints of matrix-based printing approaches down to the placement of individual droplets is promising for many of our more complex sensor layouts. Overall, we are certain that we have made a good choice with CERADROP and that the F-Serie's technology will best allow us to realize our research goals.”

noted **Dr. rer. nat. Philipp Rinklin, Technical University of Munich, Department of Electrical and Computer Engineering, Neuroelectronics group.**



“We express our gratitude to TUM's Neuroelectronics group for their choice and recognition of our technology. Furthermore, their research teams' satisfaction and well proven results in so important life-science applications are the best proof of concept and motivation for us to move forward for new technological developments.”

concluded **Nicolas BERNARDIN.**

Learn more about CERADROP Equipment range  
at [www.ceradrop.fr/en](http://www.ceradrop.fr/en)



## ABOUT CERADROP, A MGI GROUP COMPANY

The MGI Group is composed of MGI Digital Technology, headquartered in Fresnes, France, CERADROP, located in Limoges, France and KÖRA-PACKMAT, located in Villingendorf, Germany. Founded in 1982, MGI Digital Technology designs, manufactures and markets a full and innovative range of award-winning digital presses and a complete line of versatile finishing solutions.

CERADROP designs and markets Materials Deposition Digital Printers exclusively for Printed Electronics Industry and Smart 3D Printing. Thanks to its modular-based scalable concept, CeraPrinter Series models present new opportunities for feasibility study and launch of new products into the Printed Electronics market. Combining several materials deposition technologies as well as the latest generation of curing modules, this equipment line permits to reach a wide range of application fields such as: membrane switch, antennas, sensors, passive components, interconnection, flexible solar cells (OPV), OLED Displays and others...

As the subsidiary of MGI Group focused on Printed Electronics and Smart 3D Printing, CERADROP can call up more than 60 engineers specialized in inkjet engine, mechanics, automation, software, chemistry, and ink management to supply the best materials deposition digital printing solution from advanced R&D up to 24/7 high performance manufacturing including photonic curing and high throughput manufacturing capacity of several m<sup>2</sup>/min. Moreover, CERADROP is supported by the MGI Group network in 70 countries with 50 representatives. Achieving more than 75% of its turnover from export and providing a unique process support to its customers, CERADROP makes easier and more efficient use of Digital Printing technology for Printed Electronics and Smart 3D Printing worldwide.



## ABOUT TUM'S NEUROELECTRONICS GROUP

The Neuroelectronics group is part of the Department of Electrical and Computer Engineering and was newly founded in May 2015. Its research aims at developing novel fabrication methods for life-science and point-of-care applications. In particular, the team is interested in bioelectronic interfaces and sensor arrays for the stimulation and recording of chemical and electrical signals in neuronal networks. Their goal is to develop microfluidic biohybrid devices to investigate network-scale phenomena including cellular signal propagation, lesion response, and progressive neurodegeneration.

PRESS CONTACT:

**Nicolas Bernardin**

Deputy Managing Director  
CERADROP, a MGI Group company  
32 rue de Soyouz, Parc d'ESTER,  
87068 Limoges, FRANCE  
Tel: +33 555 38 26 96  
E-mail: [n\\_bernardin@ceradrop.fr](mailto:n_bernardin@ceradrop.fr)



Discover our Youtube channel

For more information

[www.ceradrop.fr/en/](http://www.ceradrop.fr/en/)