

We make Digital Printed Electronics and Smart 3D Printing easier worldwide

Press Release For Immediate Release

Limoges, FR. – 05 June 2018

LAAS-CNRS targets R&D strategic axis with Cutting-edge CeraPrinter F-Serie by CERADROP-MGI



LAAS team in Inkjet area

CERADROP, a MGI Group company, has supplied LAAS-CNRS with one of its State-of-the-art equipment - CeraPrinter F-Serie. The French Laboratory for Analysis and Architecture of Systems concentrates its efforts on major scientific orientations for emerging systems and services of the future. To anticipate the major challenges of applications, LAAS-CNRS is oriented on the main scientific axis, based on 4 disciplines in Computer Science, Robotics, Automatic Control & Micro and Nanosystems. CERADROP has provided such a prestigious and innovative Laboratory with its cutting-edge equipment for advanced R&D to address the most challenging R&D goals. The business model of CERADROP is based on design and manufacturing of advanced CeraPrinter Platforms for Printed Electronics and Smart 3D Printing. The high-end equipment provides the users with flexible solution to design and print complex functional multi-material devices. The offer is based on materials science strategy and modular-based scalable concept permitting the customers to select the most appropriate configuration for the tool. The choice is focused on advanced digital printing technologies in combination with the latest post-processing modules and characterization units. CERADROP is proud to be selected by LAAS-CNRS and highlight this mutual collaboration and struggle for significant results in emerging applications of Tomorrow.

- stated Nicolas BERNARDIN, Deputy Managing Director at CERADROP







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The CERADROP instrument is operating in the new MultiFab platform for the additive manufacturing of three-dimensional, high-resolution objects suitable for rapid prototyping, whose areas cover the, aerospace industries, aeronautics, electronics, optics or biomedical sectors. The objective of this platform is to set up a 3D printing additive manufacturing platform covering scales ranging from micrometer to macroscopic and in which multi-material can be implemented. This platform will be in very strong interaction with not only academic research, but also with the industrial sector; MultiFab is lean back to LAAS's large micro and nanotechnologies platform, a member of Renatech network.

We chose the CeraPrinter F-Serie because, to our knowledge, it is the only machine on the market that offers a varied combination of technologies:

- inkjet multi-nozzle and/or single and/or aerosol jet®

- integration up to three online annealing modules as UV LED, near infrared and photonic.

The equipment therefore gives the possibility of depositing various materials ranging from inks filled with nanoparticles to polymers or biological molecules. This is our field of application and our first achievements confirm that we have made the right choice. In addition, our inkjet experience with another manufacturer allowed us to say that the different software developed by CERADROP are the most advanced ones.

To conclude, CERADROP teams (commercial, technical and training) were very attentive to our needs. We are very confident for the future because of the strong professionalism of CERADROP company.

- noted Fabien Mesnilgrente and Véronique Conédéra from LAAS-CNRS



Fabien Mesnilgrente Process Engineer and Inkjet area's responsible



Véronique Conédéra Equipment Manager

Learn more about CERADROP Equipment range at 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 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 m²/min. Moreover, CERADROP is supported by the MGI Group network in 70 countries with 50 representatives. Achieving more than 80% 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.



The Laboratory of Analysis and Architecture of Systems (LAAS, <u>https://www.laas.fr/public/en</u>) is a <u>CNRS</u> research unit linked with the Institute for Engineering and Systems Sciences (<u>INSIS</u>) and the Institute of Information Sciences and their interactions (<u>INS2</u>). LAAS's <u>research activities</u> address complex systems of different kinds: integrated systems, embedded systems with real time and safety requirements, distributed systems, mobile systems, autonomous and robotics systems, micro and nano systems, biological systems. They fall in various application domains such as aeronautics and space, telecommunications, transports, production, services, security and defense, energy management, healthcare, environment and sustainable development. Research, innovation and transfer are tied. The lab has a history of strong relationships with industry and works in a large number of collaborative projects with international, national and regional industries of all size.

Micro and nano research activities are supported by LAAS-CNRS's micro and nanotechnologies platform (<u>https://www.laas.fr/public/en/micro-and-nanotechnologies-platform</u>) a member of Renatech (<u>https://www.renatech.org/en/</u>), French open platforms network. Thus all the equipment of the platform and hence the CERADROP-MGI printer are accessible to every user who has an interest in technologies development. (Contact: renatech@laas.fr)

