

PRESS RELEASE

Surfunction opens a new location: Dresden becomes a competence center for the development and production of the next generation of xDLIP optics

Saarbrücken, July 15, 2022. Surfunction GmbH, a leading system provider for contactless surface functionalization using new laser processes, is pushing ahead with the industrialization of its technology. In this context, Surfunction Tec GmbH has now been spun off as a subsidiary of the Technical University of Dresden. The focus will be on the production of the next generation of optics and process development.

The researchers and co-founders of Surfunction, Prof. Dr. Frank Mücklich and Prof. Dr. Andrés Lasagni are award-winning inventors of the Direct Laser Interference Patterning (DLIP) technology platform. Saarland University and the Technical University of Dresden have been working together very successfully for many years. This special cooperation paved the way for the growth of Surfunction at the new location in Dresden.

"With our subsidiary Surfunction Tec in Dresden, we particularly want to advance our technological expertise and the next xDLIP generation (extended Direct Laser Interference Patterning - Gen II). This generation of optics, which is now available, represents a breakthrough in optical functionality and compactness and will enable high-performance applications, for example in the fields of safety technology and hygiene. In the future, production is to take place at our new location in Dresden according to industrial standards," says Dr. Dominik Britz, Managing Director Surfunction GmbH.

"The aim is to realize the further industrialization of xDLIP at high speed in industrial sectors such as automotive, medical technology or mechanical engineering. The know-how developed at the TU Dresden complements our competencies to an ideal extent and at the same time opens up an additional spectrum of industrial use scenarios based on the model of nature. The special capabilities and the industrial possibilities now available were also confirmed at the



Hanover Fair in May and the Surface Technology Stuttgart in June, combined with strong demand. We are planning further growth steps in the near future," says Ralf Zastrau, shareholder of Surfunction GmbH.

Surfunction on Twitter: <http://twitter.com/Surfunction>

Surfunction on LinkedIn: <https://www.linkedin.com/company/Surfunction-gmbh/>

Surfunction on Instagram: <https://www.instagram.com/surfunctiongmbh/>

If you have any questions, please contact:

Nadja Schorr
SurFunction GmbH
Tel. +49/(0)681-30270540
info@surfunction.com

SurFunction GmbH
Campus A1.1
D-66123 Saarbrücken
www.surfunction.com

SurFunction GmbH (www.surfunction.com):

Surfunction is a leading system provider for contactless surface modification. The company, based in Saarbrücken (Saarland), uses various laser-based processes based on award-winning and patented interference technologies (xDLIP). This makes it possible to create cost-effective, cross-scale surface structures in record time, which are modeled from living nature. Surfaces can thus be equipped with new properties (e.g. non-stick, antibacterial, energy-efficient, low-friction, highly electrically conductive or tamper-proof). True to the claim "Nature knows best", Surfunction opens up new innovation potential and provides companies from numerous industries with significant competitive advantages. Surfunction provides customers with complete systems as well as highly functional surfaces. Surfunction wants to improve the products or processes of its customers and conserve resources. Surfunction cooperates closely with leading research institutions worldwide, has first-class references as well as comprehensive competency - based on years of experience and development. Surfunction is a spin-off from the Steinbeis Research Center Material Engineering Center Saarland (MECS) at Saarland University and the Technical University of Dresden.

Background: xDLIP

Surface structures on almost any component have a significant impact on their performance. The research that has been carried out for decades has proven the almost infinite variety of possibilities. If particularly successful surfaces of nature are analyzed in this context, it can be determined that almost all effective structures (e.g. creation of non-stick properties of the lotus plant or color effects on butterfly wings) depend on complex geometries in tiny orders of magnitude. So far there has been no technology that enables industrial use economically and at relevant process speeds.

The researchers and co-founders of Surfunction, Prof. Dr.-Ing. Frank Mücklich and Prof. Dr.-Ing. Andrés Lasagni, have been working on a solution to this problem for more than twenty years and are the inventors of "Direct Laser Interference Patterning". Due to its simple functional principle, this technology holds the key to creating artificial surfaces inspired by nature. For example, by splitting and superimposing laser beams, structures of the relevant order of magnitude can be generated through "interference". The phenomenon is symbolically comparable to the interaction of colliding water waves. If a crest of the first wave meets a crest of the overlapping second wave, the resulting wave reinforces the other. By using this principle professionally and supplementing it with accompanying technologies, successful industrial use can now be achieved. This new cross-sectional technology is summarized under the term xDLIP (Extended Direct Laser Interference Patterning).