

## **PARTNER SEARCH: NMBP-05-2017 and NMBP-07-2017**

**ALPhANOV is looking for partners (laboratories, industrial partners) to draft a proposal for NMBP-05-2017 and NMBP-07-2017 calls. ALPhANOV does not expect to lead the consortium, but to participate as partner.**

ALPhANOV is a private, non-profit organization and is the Technology Center of the French "Route des Lasers" competitiveness cluster. It provides technical resources and expertise required to fulfil R&D challenges and innovative development in photonics, optics and lasers. Located in the Bordeaux area, ALPhANOV employs about 50 highly skilled researchers, engineers and technicians.

To serve the needs of industrial partners the Technological Center offers dedicated facilities and equipment for laser developments, implementation and characterization. It has strong expertise in laser micro-machining and process developments, optical design and prototyping of beam guidance, machine components, vision, high precision 5 axis systems, and customized laser components.

ALPhANOV has a broad experience and a large pool of equipment for micro and nano scale processing. For more than 7 years, the engineering of surfaces and the optimization of surface function by laser texturation is one of the strategic aims of ALPhANOV. The decoration of metallic surfaces as well as the hydrophobic or hydrophilic properties of industrial parts has been demonstrated on various applications. Based on this activity, ALPhANOV has engaged in several collaborative projects and was selected as a finalist for the prestigious prism award in 2015 for its work on bio-inspired surface functions.

In particular, ALPhANOV developed an expertise in laser processing and micro-machining. Such laser processes enable bio-inspired surface functions on many different types of materials, such as super-hydrophobic effect, blackening, coloring, hardening or antibacterial effects.

**Equipment:** Five laser processing workstations, 15 lasers dedicated to laser processing (from femtosecond to CW, from UV to IR), in particular high average power and high repetition rate femtosecond lasers. Characterization equipment including measuring optical microscopes, confocal interferometric, measuring microscope, bench-top SEM, contact angle measurement.

### **Previous European projects (non-exhaustive):**

- TRESCLEAN (H2020-ICT-2015, project n° 687613), High ThRoughput lasEr texturing of Self-CLEANing and antibacterial surfaces
- LASHARE (FP7-2013-NMP-ICT-FOF, project n° 609046): Laser equipment Assessment for High impAct innovation in the manufactuRing EU industry
- FEMTOPRINT (FP7-2010-NMP-ICT-FoF, project n° 260103): Femtosecond laser printer for glass microsystems with nanoscale features
- SFERA (FP7-SME-2007-1, project n° 222057): Sub-surface fast internal engraving and reading system for anticounterfeiting applications

Awards: PRISM Awards finalist in 2015: <http://spie.org/about-spie/press-room/pressreleases/prism-2015-finalists-11-26-2014>

### **Contact ALPhANOV – Arnaud ZOUBIR**

E-mail: [arnaud.zoubir@alphanov.com](mailto:arnaud.zoubir@alphanov.com)

Phone: +33 6 27 01 73 58