

Master-Thesis – Inkjet Printed Electronics on Freeform Surfaces Team Functional Surfaces and Nanostructures

"Robot Inkjet" offers the possibility of digitally printing on curved surfaces over large areas and at high throughput without masks. Possible applications include curved glasses and optics, car parts, airplanes, shoes, consumer products, plastic veneers, textiles and more. In this master-thesis, the technological focus lays at the development of inkjet printed electronics on curved surfaces for the integration of sensors or other electronic elements in/or on complex-shaped components.

PROFACTOR is an applied research center located in Steyr. We conduct research in the field of industrial assistive systems and additive micro/nano manufacturing. Our team consists of around 100 employees from 15 different academic fields. We work across disciplines to find solutions for the manufacturing industry and set standards in robotics, machine vision, simulation, 3D printing, functional surfaces and nanostructures.

Your tasks

The goals of this master thesis are:

- to conduct a study with an inkjet printer on an industrial robot
- to prepare a demonstrator with integrated electronics
- to optimize process parameters
- to investigate assembly processes of printed sensors
- to characterize, test and validate printed samples

We are looking for

Motivated students with a hands-on mentality in the field of electrical engineering, physics, material science or similar studies.

We offer

- **7** the possibility to work in cutting edge R&D projects with renowned industrial partners
- オ flexible working hours
- the chance to be part of a young, interdisciplinary and cooperative team

Benefits



Start/Duration

Starting as soon as possible - Duration of 6 months (extendable depending on performance)

Our Mission

PROFACTOR's research improves the competiveness of European Industry. We are pioneers of the thinking production. We bring production back home.

We offer for a compensation for the master thesis.

We are looking forward to your application – please apply at <u>www.profactor.at</u> or send your application to <u>personal@profactor.at</u> Questions? Please contact: **DI. Boris Buchroithner PhD.**, <u>boris.buchroithner@profator.at</u>, +43 7252 885 353

