

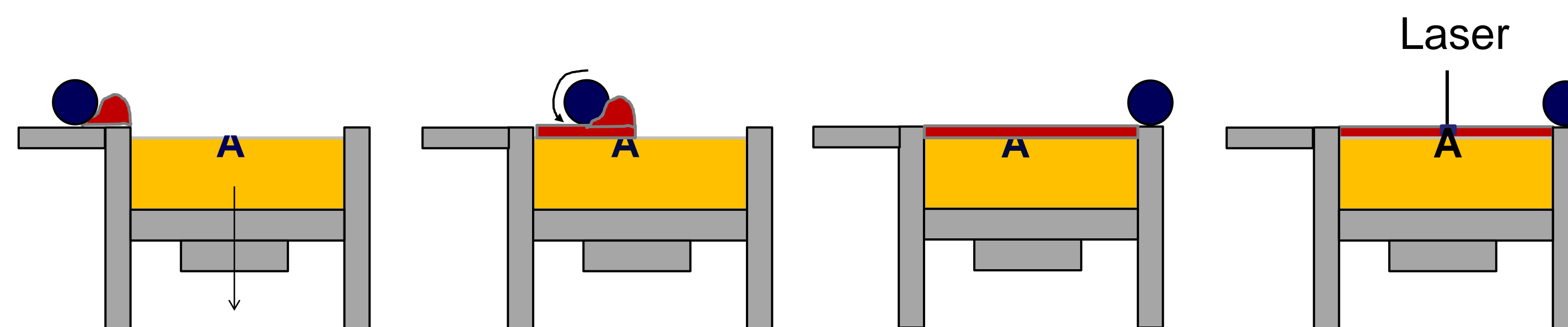
# Bachelor and master theses:

## Particle systems for additive manufacturing: production, functionalization and feedstock characterization

Particle Processing Group, Institute for Interfaces and Particle Technology (IPT)

### Motivation

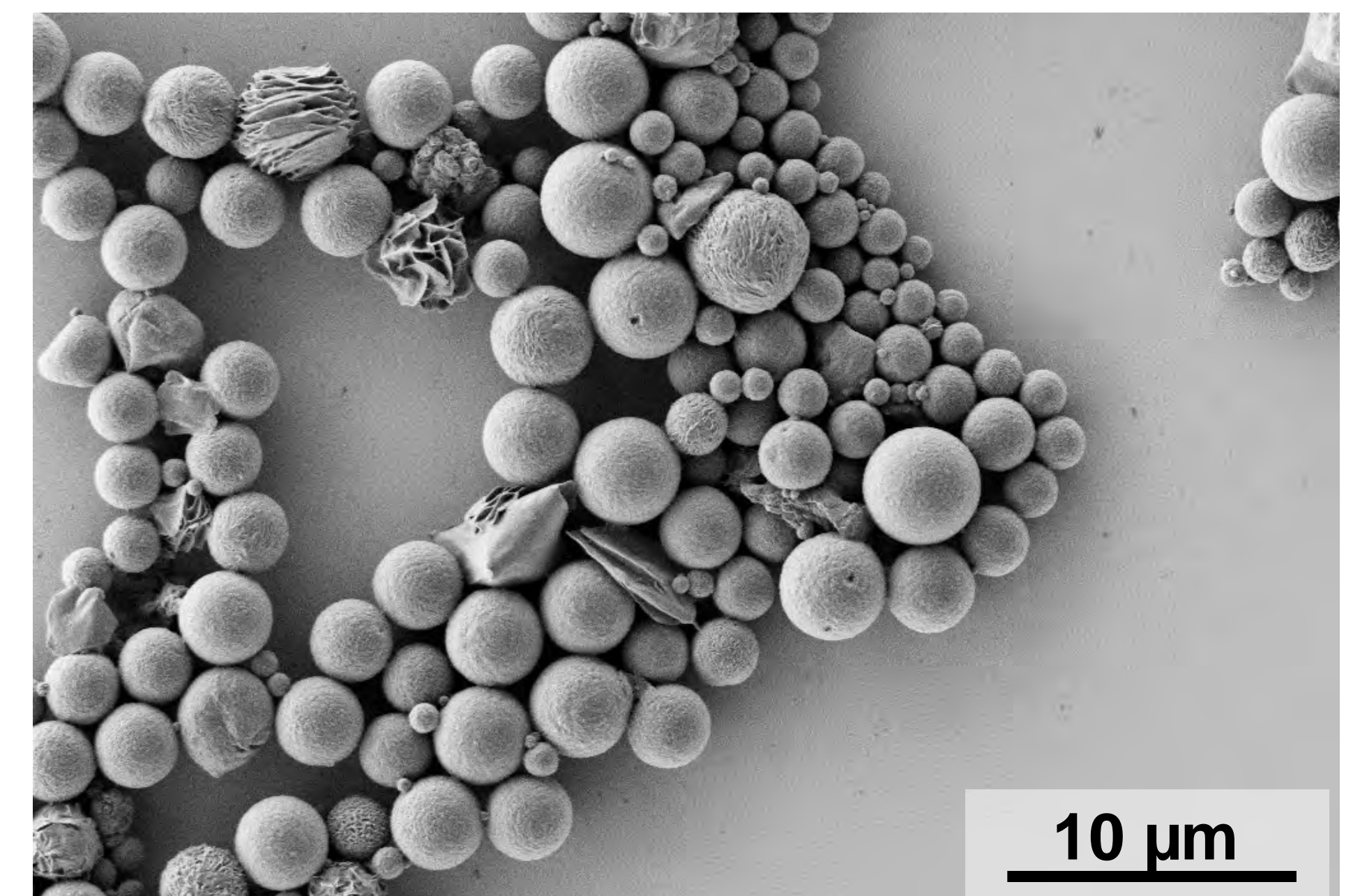
Additive manufacturing, which is also referred to as the “manufacturing technology of the future”, can be used to produce complex components made of e.g. plastic or metal without the need for tools or molds. In the case of powder bed fusion processes, the parts are built up layer by layer from a polymer or metal powder, whereby the contour of the object is selectively melted in the powder bed using a beam source (laser / electron beam).



### Aufgabe und Profil

The Particle Processing Group of the Institute of Interfaces and Particle Technology conducts basic scientific research into issues relating to the development and characterization of materials for additive manufacturing. In addition to the production and functionalization of novel powder feedstocks (polymers / metals) via liquid or gas phase processes, our research focuses on the characterization of particle properties and their correlation with the behavior in the additive manufacturing process and the resulting component properties.

We offer you the opportunity to work on varied and innovative topics in a future-oriented field of research with an application and industry focus. We expect independent and precise work and the willingness to familiarize yourself with complex issues.



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### Zusammenfassung

- Research into innovative and future-oriented technologies
- Exciting and varied topics with an interdisciplinary character
- Independent work with the opportunity to realize your own ideas

### Kontakt

Please send inquiries to

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