

EUROMAT 2019 / Raw Materials

SYMPOSIUM: 6

Title: Sustainable and Resource-efficient Production via Additive Manufacturing		
Organizer	Institution	Contact email
Olaf Andersen	Fraunhofer Institute for Manufacturing Technology and Advanced Materials (IFAM) Fraunhofer	Olaf.Andersen@ifam-dd.fraunhofer.de
Behrang Poorganji	General Electric Additive	Behrang.Poorganji@ge.com
Aurélien Pierre Philippe Perron	Lawrence Livermore National Laboratory	perron1@llnl.gov
Abstract		
<p>Additive Manufacturing (AM) is generally considered to provide a resource efficient means for making polymer, metal and ceramic parts. This holds especially for parts that require extensive machining or materials that need critical elements that cannot be supplied in large quantities. On the other hand, taking into account the whole process chain starting from raw materials and reaching all the way to final machining, surface and heat treatment, the sustainability and resource efficiency might also be inferior to conventional large-scale manufacturing. This symposium therefore aims for best-practice examples of a resource-efficient production via AM, life cycle assessment of AM products as well as analyses of the prerequisites that foster resource-efficient production via AM.</p>		