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0 Publications AMPERE

0.1 Year 1

1. On the 11th of August 2021 Martin Herdges from Neotech presented the AMPERE project on the “Mechatronics Integrated devices” days.
<https://www.3d-mid.de/en/events/mid-days/>
- 2.

The screenshot shows a web page from the Fraunhofer IZM blog. The header includes the REALIZM logo and navigation links for CAREER, PUBLICATIONS, and CONTACT. The main content area features a large image of a human head with a microimplant and the title "Ultrasound for microimplants – enabling personalized medicine with wireless charging" dated May 25, 2021. The article text discusses the treatment of chronic autoimmune diseases using neuromodulation and the development of microimplants. A sidebar on the right contains contact information for Georg Weigelt, Public Relations, at Fraunhofer IZM. Social media sharing buttons for LinkedIn and Facebook are visible at the bottom left of the article content.

May 2021 Fraunhofer issues a [press release](#) and a [blog article](#) on their activities with respect to implantable devices in Moore4Medical [Doc_169]



1 Press Releases AMPERE

1.1 Year 1

1. The Eindhoven University of Technology was the first to Tweet on the kick-off of the AMPERE project the 3rd of March 2021
<https://twitter.com/RemmersGroup/status/1367236295777517572>
2. On the 4th of June 2021 partner Neotech issued a press release about their participation in the AMPERE project. [Doc_170]



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Neotech AMT

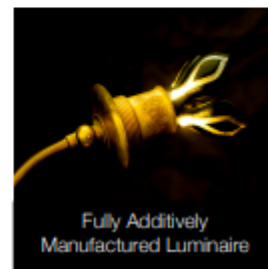
Advanced Manufacturing Technologies for 3D Printed Electronics

PRESS RELEASE

Broad consortium to develop scalable 4D manufacturing processes for mechatronics

NUREMBERG, Germany – June 6th 2021.

Neotech AMT GmbH of Nuremberg, Germany announces the launching of the EU Penta Project "AMPERE" which will develop reliable and scalable hybrid Additive Manufacturing methods for producing multi-functional mechatronic systems. The project started on April 1st 2021 and will run until 31. March 2024. A consortium of 10 leading Research and Industrial partners from Germany and the Netherlands will develop and combine essential AM technologies required for the robust and scalable manufacture of smart 4D mechatronic products. The project will accommodate the manufacture of both small series, mass customised products whilst scaling through to high production volumes (>10.000 parts). The developed technologies will utilise Smart Processes to produce novel products containing a combination of integrated mechanical, electrical and optical functionalities. Three innovative product cases will demonstrate the hybrid manufacturing approach and move beyond the State-of-the-Art: LED luminaires, Signal/Power Electronics and Medical Devices.



Fully Additively
Manufactured Luminaire

"The AMPERE project is a hugely exiting and ambitious project in the field of AM and will generate substantial business benefits," reports Dr. Martin Hedges, Managing Director of Neotech. "The project will enable unique product designs, that for the first time combine mechanical, electrical and optical functionalities produced at the industrial scale. Furthermore, the flexible nature of the developed production systems will allow faster response to changes in the market and open up new application areas for this emerging technology."

About Neotech ATM

Neotech AMT GmbH is a leading company developing manufacturing technologies for 3D Printed Electronics. Since 2009 the company has pioneered developments in this emerging market and offers production level solutions. The patented 45X system was the first 3DPE system ever used in the high volume, industrial manufacture of cell phones. Many other applications for automotive and industrial customers are under development, including 3D circuits, antenna, sensors and heater patterns.

For further information, please contact:

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On the 4th of June 2021 partner Neotech issued a press release about their participation in the AMPERE project. [Doc_170]



2 Workshops AMPERE

2.1 Year 1

1. The 30th of March 2021 there was a joint meeting with HP (US) from the Ampere project (Neotech, TNO, set up by Signify) on 3D printing of electronics. In the meeting it was agreed to discuss more details when results from the Ampere project become available and transferable to HP.
2. 26th of April 2021 an Intern student from TU/e has started at Holst Centre to work on modelling of heat uptake of LEDs in 3D printed structures. In this perspective there is a meeting set up with Signify to discuss properties that can be expected. Lifetime LEDs, heat uptake due to power, LED selection and cooling. The student will work from till the 26th of July.