

PROGRAM

NOVEMBER 30, 2017

- 9:45 **Opening**
(Dr. Michael Schneider, Fraunhofer IKTS, Dresden, Germany)
- 10:00 **Fundamental processes at the ECM-interface**
(Manuel M. Lohrengel, Heinrich Heine University Dusseldorf, Germany)
- 10:30 **Development of interfaces for material data integration in models of electrochemical machining processes**
(Sascha Loebel, TU Chemnitz, Germany)
- 11:00 **Clarification of gap phenomena in precise electrochemical machining by implementing a "virtual sensor"**
(Lukas Heidemanns, RWTH Aachen University, Germany)
- 11:30 **Coffee break and exhibition**
- 12:00 **Application of soft computing methods for modelling and optimization in electrochemical machining process**
(Ali Mehrvar, University of Shahreza, Isfahan, Iran) – via Skype
- 12:30 **Simulation-based tool development for the electrochemical machining of jet engine vanes**
(Alexander Ernst, Saarland University, Saarbrücken, Germany)
- 13:00 **How pre-processes affect the effectivity of temporary corrosion protection**
(Frank Faßbender, Excor Korrosionsforschung GmbH Dresden, Germany)
- 13:30 **Lunch break and exhibition**
- 14:30 **Reduplication of precise internal geometries by pulsed electrochemical machining**
(Gunnar Meichsner, Fraunhofer IWU, Chemnitz, Germany)
- 15:00 **Novel all wet electrochemical cannula manufacturing process**
(Bernd-Uwe Sander, RENA Technologies GmbH, Freiburg, Germany)
- 15:30 **Localization of the anodic dissolution of Inconel 718 by using an electroplated nickel film in counter-rotating electrochemical machining**
(Dengyong Wang, Nanjing University of Aeronautics and Astronautics, China)
- 16:00 **Interfacial processes in electrolytic plasma polishing**
(Nicolas Laugel, University of Manchester, UK)
- 16:30 **Surface modification using plasma electrolytic polishing**
(Henning Zeidler, Technical University Bergakademie Freiberg, Germany)

- 17:00 **Coffee break and exhibition**
- 17:15 **Fraunhofer IKTS lab tour**
- 19:30 **Dinner at Carolaschlösschen, Dresden**
(Joint walk through Great Garden or individual arrival)

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- 9:45 **ECM – product analysis and side reactions**
(Manuel M. Lohrengel, Heinrich Heine University Dusseldorf, Germany)
- 10:15 **An electrochemical approach to determine the oxygen production during ECM**
(Nils Junker, TU Dresden, Germany)
- 10:45 **Analysis of the removal geometry in electrochemical straight turning with continuous electrolytic free jet**
(André Martin, Chemnitz University of Technology, Germany)
- 11:15 **Coffee break and exhibition**
- 11:45 **COOLPULSE™ – the breakthrough for additive manufactured parts**
(Robert Binder, EXTRUDE HONE, Holzgünz, Germany)
- 12:15 **Evaluation of on-machine gap measurement strategies in jet-electrochemical machining**
(Matin Yahyavi Zanjani, Chemnitz University of Technology, Germany)
- 12:45 **Electrochemical studies of the ECM on chromium**
(Lenka Simunkova, Fraunhofer IKTS, Dresden, Germany)
- 13:15 **Lunch break and farewell**