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, Saarbrucken, 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)

DECEMBER 1, 2017

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 COOLPULSETM – 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
(Matín 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