1850 – 1914

ADOLF-MARTENS-FONDS e.V.

zur Förderung der Werkstoffwissenschaften, der Materialforschung und -prüfung,
der Sicherheitstechnik und der Analytischen Chemie

Einladung zur Festveranstaltung

anlässlich der Verleihung der Adolf-Martens-Preise 2018

Begrüßung: Prof. Dr. rer. nat. Ulrich Panne

Würdigung und Preisübergabe der ausgezeichneten Arbeiten aus dem Bereich
Analytische Chemie und Werkstoffwissenschaften, Materialforschung und -prüfung

Vortrag des Preisträgers
Dr.-Ing. Can Dincer
University of Freiburg, FIT & IMTEK Laboratory for Sensors

Electrochemical biosensors with integrated microfluidics for multiplex on-site testing
Early and precise diagnosis of diseases plays a crucial role for an effective personalized therapy. In most cases, however, the findings are only based on the detection of a single biomarker, which is usually insufficient. Moreover, simultaneous on-site analysis of many different biomarkers, including high-molecular-weight analytes, is nowadays highly desirable. This work deals with the investigation of a novel and simple concept which allows the cost-effective and compact implementation of electrochemical microfluidic biosensors for a fast, sensitive and simultaneous on-site analysis of up to eight different substances.

Vortrag des Preisträgers
Dr. rer. nat. Christian Greiner
Karlsruher Institut für Technologie, IAM

Sequence of Stages in the Microstructure Evolution in Copper under Mild Reciprocating Tribological Loading
Friction and wear are responsible for more than one fifth of the world's energy consumption. Tribological contacts therefore are a key component for reducing CO2 emissions. In order to do so, the fundamental relationship between the microstructure of a material and its tribological properties need to be understood. Through systematic model experiments and elaborate electron microscopy, the elementary materials science mechanisms responsible for microstructural changes during tribological loading of a metal surface were revealed as well as the role of defects for tribologically-induced oxidation clarified.

Mittwoch, 4. Dezember 2019, 11:00 Uhr
Bundesanstalt für Materialforschung und -prüfung (BAM)
Unter den Eichen 87, 12205 Berlin, Haus 5, Ludwig-Erhard-Saal

Anmeldung: Frau Silvia Schulz, Telefon: 030 8104-1009 - Vorsitzender: Prof. Dr. rer. nat. Ulrich Panne
Gäste sind willkommen, der Eintritt ist frei!