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Surface modifications by plasma produced nanoparticles¹ JO-HANNES BERNDT, PASCAL BRAULT, GREMI UMR 7344 CNRS & Universite d'Orleans — Low temperature plasmas with their distinct non equilibrium character are a versatile tool for the production and subsequent deposition of nanoparticles. This contribution will focus on two aspects: on strategies to control the formation of nanoparticles in reactive low temperature plasmas and on the production and functionalization of nanoparticle- deposits. The importance of such nanoparticle-deposits will be discussed on the basis of two examples: the production of surfaces with switchable wetting properties and the decoration of surfaces with nanoparticles for fuel cell applications.

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Johannes Berndt GREMI UMR 7344 CNRS & Universite d'Orleans

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