

EUROMAT 2019 / Raw Materials

SYMPOSIUM: 5

Title: Pt-group-metal (PGM) Reduction and Development of PGM Free Catalysts for Energy Applications		
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Abstract		
<p>Platinum group metal-free (PGM-free) metal-nitrogen-carbon catalysts have emerged as a promising alternative to their costly platinum (Pt)-based counterparts in polymer electrolyte fuel cells (PEFCs) but still face major challenges, including (i) the identification of the most relevant catalytic site for the oxygen reduction reaction (ORR) and (ii) demonstration of competitive PEFC performance under automotive-application conditions in the hydrogen (H₂)-air fuel cell. This symposium will focus on the applied and fundamental aspects of developing PGM-free catalysts and will highlight new catalyst synthesis methods and chemistries and the concomitant performance gains achieved for PGM-free catalysts. Topics of interest will include (a) synthesis, (b) characterization, and (c) modeling of PGM-catalyst systems.</p>		