

# **Alternative battery chemistries – developments and challenges**

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The presentation will discuss current motivation and results of recent work on Li-free systems for electrochemical storage. While Na ion batteries are regarded as a “drop-in” technology and first comparably mature systems have already reached cell level, new ways to enabling Mg-, Ca-, and Al-batteries are under investigation at the moment. Results from inorganic and organic electrode materials will be shown and challenges will be outlined that must be overcome to eventually enable powerful, sustainable and safe systems based on post-Li technology.