

ENano – Nanoanalytics for Energy Technology

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This poster presents the scope of the "Nanoanalytics for Energy Technology"-Group from Dresden. The "Nanoanalytics for Energy Technology"-Group (ENano) is an research group of ten young scientists that bundles eight research projects which are related to advanced nanoanalytical methods. The projects utilize different physical and chemical nano analytical methods which synergetically cover the multi-disciplinary analysis of the investigated material systems. These new methods will enable the efficient development and research in the field of energy technology. The methods target on the analysis of electrochemical processes at the nanoscale and utilize electron and x-ray tomography, electron holography, microcapillary cells, scanning force microscopy and tunnelling microscopy. During the development the nanoanalytic methods are applied to specific problems, including solar cells, thermochemical energy storage, alkaline hydrolysis, energy efficient actuators and lithium ion batteries.