ELECTROPHORETIC DEPOSITION FOR NATIONAL SECURITY APPLICATIONS

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Key Words: flexible electronics, analytical standards, additive manufacturing

Electrophoretic deposition (EPD)'s origins and largest successes have been as an industrial process that enables large area coatings of complex products. While the adoption of EPD has been driven by industrial economies of scale, there are opportunities for EPD to produce low volume, high added value products. In this presentation, I will discuss Lawrence Livermore National Laboratory's efforts to frame EPD as an agile, additive manufacturing process for high added value parts for national security applications. Specifically, I will highlight both computational modeling and experimental efforts to produce diverse items including high performance armor, flexible electronics, and analytical standards for the geophysics community.
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This work was performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Laboratory under Contract DE-AC52-07NA27344. LLNL-ABS-805872.