

RESEARCH ON ELECTROPHORETIC DEPOSITION IN HINDSIGHT AND FORESIGHT

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Key Words: Models, mechanisms, ceramic laminates, bioceramics, cutting tools.

Since the 1990's my research group has published widely in the field of electrophoretic deposition with focus on the modeling of the process for coatings as well as for freestanding objects. The highlights of this research will be reviewed and the lessons learned, in particular with respect to operative mechanisms during EPD. In passing, some of the practical realizations will be illustrated such as ceramic laminates, which show (pseudo-)ductile behavior, functionally graded cutting tools, bioceramic implants with tailored nanostructure as well as functional ceramics with enhanced properties. Recent literature will be summarized as well, in order to formulate a vision for further research in the field.