## ADVANCING AUTOMOTIVE INNOVATION WITH MATERIALS MODELING

## Jonathan E. Mueller<sup>1</sup>

<sup>1</sup> Volkswagen AG, Berliner Ring 2, 38436 Wolfsburg, Germany jonathan.edward.mueller@volkswagen.de, www.volkswagenag.com

Key Words: Materials Modelling, Materials Design, Industrial Research & Development.

Materials modelling software holds great promise for industrial research and development efforts in the face of diverse materials challenges. Bringing a new materials-based product to the market requires various stages of materials research and engineering. Materials modelling software should be designed to address the unique challenges faced at each stage of a product's development. Approaches to overcoming these challenges are not to be primarily evaluated based on their formal correctness, but on their ability to successfully advance the development of new technologies made possible by novel materials.