

Modelling as a Tool for Sustainable Research in Transport Phenomena

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Abstract- Modelling and experiments are two essential partners to achieve sustainable research. With the advent of more powerful computers and the tremendous advances in our understanding of science and engineering, models are playing an increasing role in the development and design of new processes and equipment. In addition, attempting to model phenomena observed through experiments leads to a deeper understanding of these underlying phenomena and influences greatly future experiments to be performed. This presentation will survey a lifetime of laboratory and industrial research projects where models mostly based on transport phenomena were (or should have been) an essential part in achieving success.