

Chemists are from Mars, Physicists are from Venus – science between disciplines

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Interdisciplinary collaborations have the potential to illuminate societal challenges from multiple angles, thus giving a broader perspective on the challenge than any one discipline would. This may allow for the exploration of solutions that are of wider scope than those presented by any single discipline. However, even collaborations between closely related fields such as chemistry and physics or even different disciplines within chemistry, may not be simple due to differences in jargon and perspective. For such collaborations to be successful, it is necessary to develop a common language or set of terms, which allows the parties to communicate needs, demands and results.

In this presentation, I will describe the collaborative work between my work as a synthetic polymer chemist and polymer scientists specializing in rheology at Danish Polymer Centre. In particular, I will focus on the challenges that have appeared during the collaboration and how they have been overcome.

Specifically, the on-going work in design, synthesis and analysis of part-deuterated polystyrene polymers that are used in rheological and scattering studies is described. The advantages and disadvantages of various synthetic approaches are discussed with the intended end-use of the polymer in mind.

