ETH zürich

Simplifying industrial dispersions

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1 Introduction

The goal of this work is threefold: First, design and characterize model system with new design handles, exploiting shape & roughness; Second, develop advanced characterization methods; Third, compare to selected simplified industrial systems

2 Roughness as a design parameter in gels

• Key result : designed and characterized effect of roughness on a thermo-reversible gel with enhanced toughness





3. Applications



4 Microstructure evolution



SOFTMAT



Monitoring dynamics and structure in gels under shear



5 One example of a SID : Carbopol



Conclusions and further work:

Detailed microstructural studies, on to micromechnaics Techniques operational, now onto more industrial systems.

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