

Abstract Submitted
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Food Materials - a natural playground for soft matter physics

ADAM BURBIDGE, Nestec SA — Traditional food science has its origins in chemistry, and has therefore tended to focus on trying to link molecular formulation and functional performance. Nevertheless, foods are almost always complex hierarchically structured materials of biological origin, far from thermodynamic equilibrium. These kinds of systems provide a challenge of relating structure to function, which is a natural playground for many ideas and concepts of soft matter physics. In this talk I will briefly outline the incredibly rich structural complexity of food products and highlight some areas which appear to be amenable to physically based reasoning. Despite some notable contributions, food materials physics is a field very much in its infancy, and I will highlight some outstanding (in both senses of the word) problems!

Adam Burbidge
Nestec SA

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