



Topical Research Meeting on Physics in Food Manufacturing

(P6) Lyotropic liquid crystalline phases for the formulation of future functional foods

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The especial features and advanced characteristics of Lyotropic Liquid Crystalline (LLC) phases as potent nano materials for encapsulation and the development of novel delivery systems for nutraceuticals and other bioactive compounds are reviewed. Exemplary, a focus is set on the health benefits of flavonoids and their current restrictions in bioavailability. Accordingly, our visions for application of LLC phases in the engineering of enhanced flavonoid-based food supplements and correlated challenges to overcome are highlighted.