

### A study on the 3d printability of chlorella-based Pickering emulsions

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Complex fluids including colloidal dispersions and Pickering emulsions, with suitable rheological properties, can be useful platforms for advanced printing processes including 3D printing. With increasing demands for eco-friendly printing materials, we investigated the 3D printability of complex fluids containing green algae (chlorella) grains provided by nature. It was found that the Pickering emulsions with the dispersed oil phase exhibited much better printability than the simple aqueous chlorella dispersion. In this poster, we present the results of a systematic study on the rheological properties of chlorella-stabilized Pickering emulsions as 3D printing inks.