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## **[702] Surfactant linker groups modulate micelle structure**

Surfactants are heavily utilised in many of the products that we use day-to-day, particularly in personal care products such as liquid soaps and shampoos. Surfactant structure is typically thought of as a tail- and head group but a linker group should also be considered. We have shown recently with contrast variation small-angle neutron scattering that not only does ionic strength of the bulk solution affect the electrical double layer of the ionic surfactant headgroups, but ionic strength also dehydrates the linker region, resulting in morphological changes in the micelles. This additional means of control enables fine-tuning of micelle structure, as well as informing the design of new sustainable surfactant molecules.

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