

Chandan Jana, Narasimha Murthy, B.; Jayaraman, N., Yelamaggad, C., 2005, "Aggregation and mesomorphic properties of 'double-headed' carbohydrate amphiphiles", *Phase Transitions*, 78, 529-535.

Sugar-based amphiphiles, consisting of two sugar head groups and an alkylene chain within the molecules, are synthesized and their aggregation and mesomorphic properties evaluated. The hydrophilic sugar head groups, constituted with  $\beta$ -D-glucopyranoside units, and the lyophilic alkylene units are coupled to a glycerol backbone to afford the 'double-headed' sugar amphiphiles. Aggregation studies in aqueous solutions provided their critical micellar concentrations and the aggregation numbers. Mesophase characterizations by polarizing optical microscopy and differential scanning calorimetry are conducted.