

# Phase Diagram, Caesium-133 NMR Spectra and Electrical Conductivity of the Binary System Caesium and Zinc Butyrates

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Phase equilibria of non-mesogenic caesium- and zinc-butyrate mixtures were studied by differential thermal analysis and hot stage polarization microscopy. Smectic liquid crystals were found in some composition range. Their appearance is explained by the latent mesomorphism of caesium butyrate.  $^{133}\text{Cs}$  NMR spectra and the specific electrical conductivity of the molten mixtures at  $155^\circ\text{C}$  were employed to investigate the peculiarities of ionic association and interaction in the melts.

*Key words:* Phase Diagram; Mesophase; Metal Alkanoate.