

**PENENTUAN PENETRASI AIR DAN HIDROKARBON DARI KRISTAL CAIR
LAMELAR DALAM SISTEM GARAM NITRAT, SIKLOHEKSANE
DAN LAURIL ALKOHOL POLI ETER**

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ABSTRACT

Water and hydrocarbon penetrations of the lamellar liquid crystal in nitrate salts (calcium and aluminium nitrates), cyclohexane, and lauryl alcohol polyether (LA₄) system have been investigated. Liquid crystal phase which characterized using optical polarizing microscope and small-angle X-ray diffraction, showed a significantly the water and the hydrocarbon penetrations of aluminium nitrate and calcium nitrate solutions.

Keywords: *Lamellar liquid crystal, Optical polarizing microscope, Water and hydrocarbon penetration, Nitrate salts (calcium and aluminium nitrates), Lauryl alcohol polyether (LA₄), Small-angle X-ray diffraction.*

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