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Static And Dynamic Studies In Nonyloxycyanobiphenyl (90cb) Confined To Anopore Membranes¹ SERGIO DIEZ BERART, Kent State university, MIGUEL ANGEL PEREZ JUBINDO, DAVID O. LOPEZ, M. ROSARIO DE LA FUENTE, JOSEP SALUD — We analyze and compare the static and dynamic properties of alkoxycyanobiphenyl (90CB). This compound exhibits an I-N-SmA phase sequence. After confining into Anopore structures several phenomena can be seen: Both phase transitions change in their nature, C_p peaks becoming lower, broader and shifted down in temperatures. A possible first-to-second order transition could be determined for the N-SmA. There developes a surface induced nematic layer that becomes larger when temperature decreases. Molecular dynamics out from the nematic layer is quite similar to that of the bulk.

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