Dynamic and structural properties of oxyethylated isononylphenols

Victor P. Arkhipov, Svetlana A. Bogdanova, Zamil Sh. Idiyatullin,
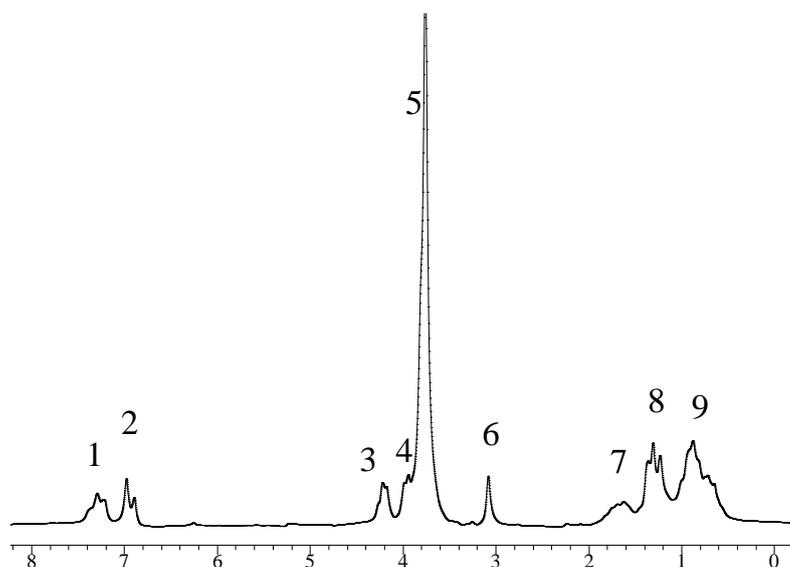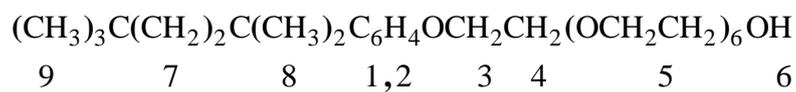**Ivan V. Lunev and Andrei V. Filippov**

$$(CH_3)_3C(CH_2)_2C(CH_3)_2C_6H_4OCH_2CH_2(OCH_2CH_2)_6OH$$

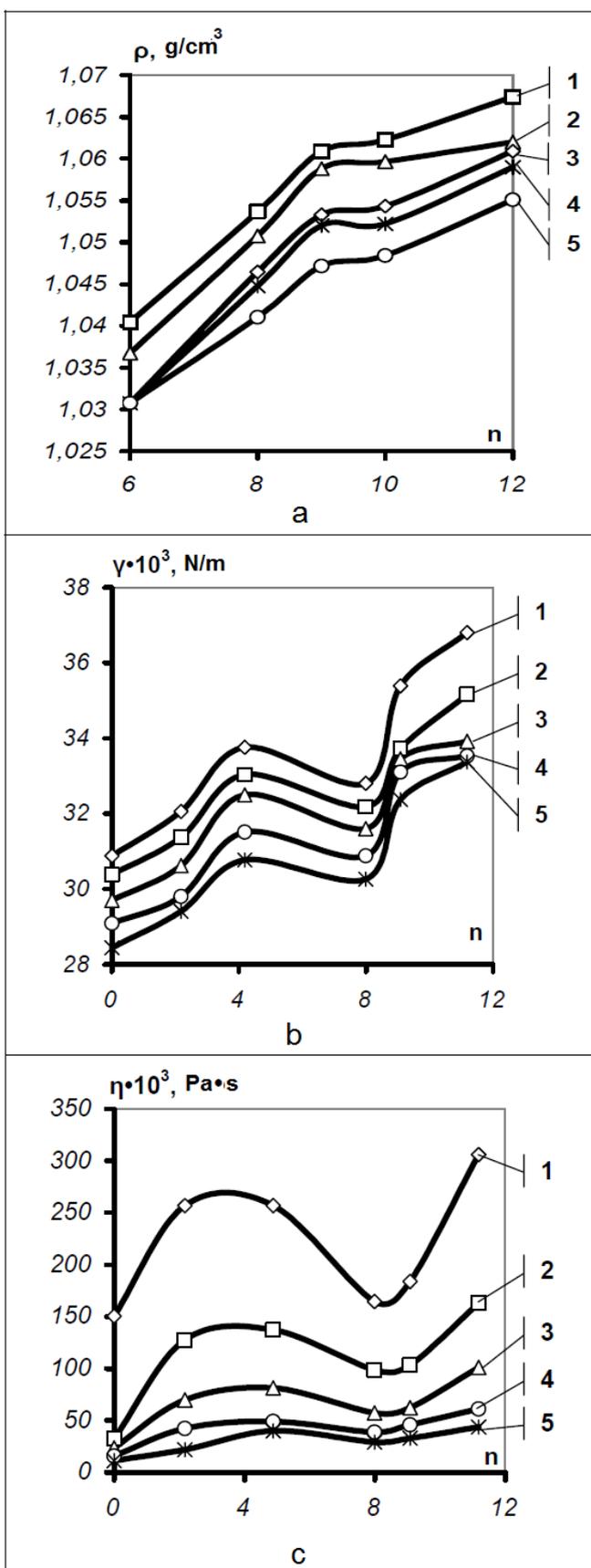**Figure S1** Spectrum ^{1}H NMR of neonol AF9-6 in a solution of CDCl$_3$.

Figure S2 Dependences of density (a), surface tension (b) and viscosity (c) of neonols as a function of the number of oxyethylene groups, n, at temperatures 1 - T = 25 ^{0}C; 2 - T = 35 ^{0}C; 3 - T = 45 ^{0}C; 4 - T = 55 ^{0}C; 5 - T = 65 ^{0}C. Reproduced from [8] with kind permission of authors.
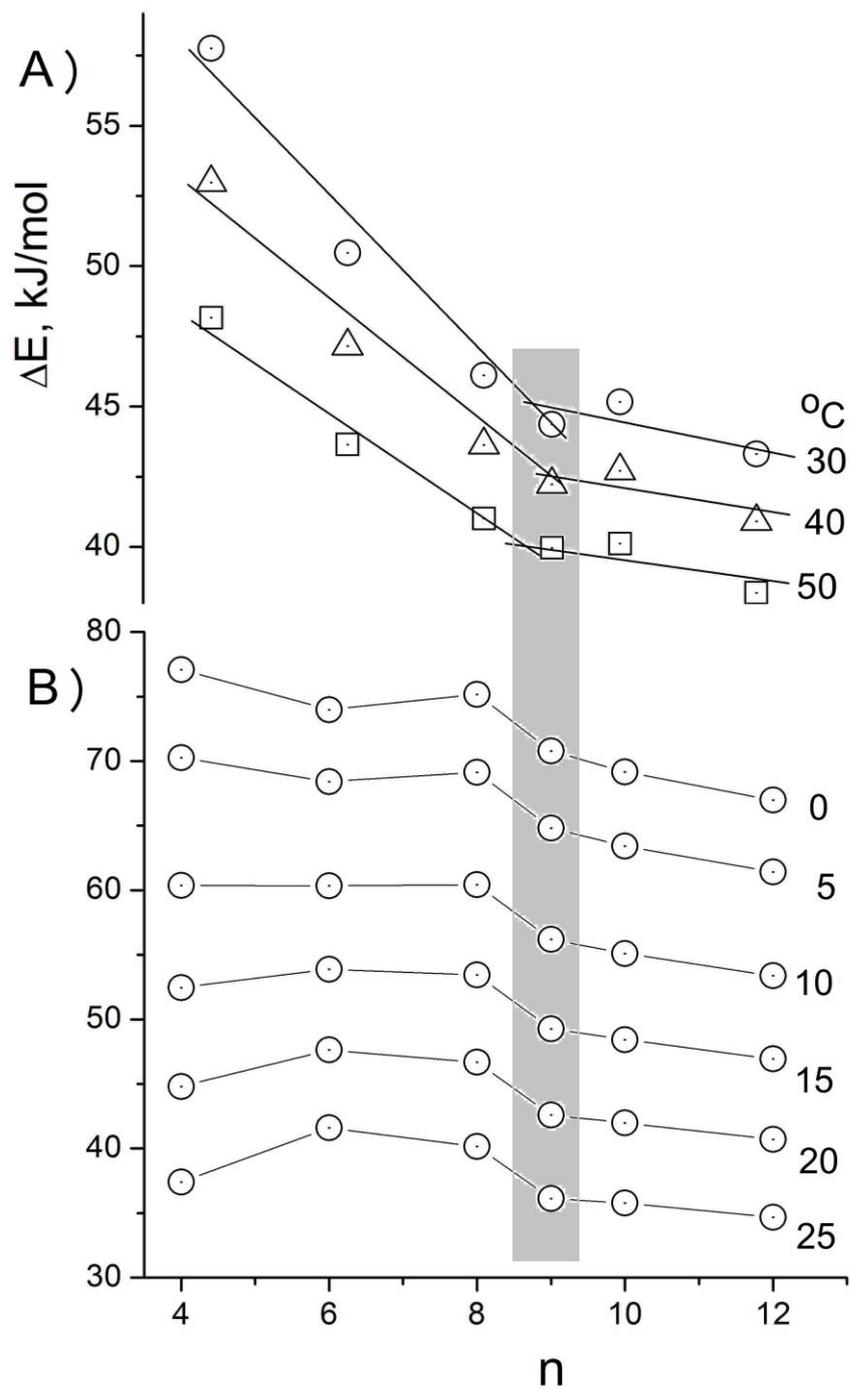
Figure S3 Energies of activation: A) for diffusion and B) for the dielectric relaxation time of neonol molecules AF9-4, AF9-6, AF9-8, AF9-9, AF9-10, and AF9-12 as a function of the number of oxyethylene groups, n, at indicated temperatures.
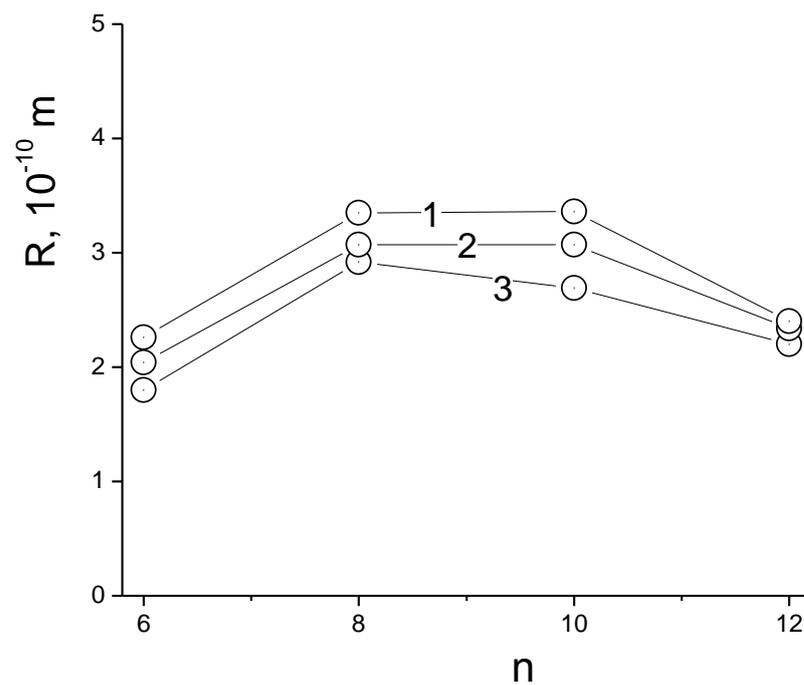
Figure S4 Hydrodynamic radii of neonol molecules at temperatures: 1 - 35, 2 – 55, 3 – 65 °C. n is the number of oxyethylene groups in the molecule.