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Effects of Nonionic Surfactant Lauryl Alcohol Ethoxylated on *Stratum corneum* Alternative Model Biomembranes Evaluated by Biophysical Techniques

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SUMMARY. The influence of the nonionic surfactant lauryl alcohol ethoxylate with 12 moles ethylene oxide (LAE-12OE) was evaluated on the *Stratum corneum* model biomembrane (SCMM) of shed snake skin (*Bothrops jararaca* and *Spilotes pullatus*) through the biophysical techniques Fourier transform Raman spectroscopy (FT-Raman) and Fourier transform infrared photoacoustic spectroscopy (PAS-FTIR). The surfactant was used in aqueous solutions above and below the critical micelle concentration (cmc), 50.0 and 0.21 g/L, respectively. The SCMM samples were pre-treated for periods of 8 h (whole SCMM) and for 12 h (SCMM after tape stripping procedure). The LAE-12OE did not promote increase in the hydration of the *B. jararaca* and *S. pullatus* SCMM but exhibited some action as far as lipid extraction.

KEY WORDS: Biomembrane, *Bothrops jararaca,* FT-Raman, Lauryl alcohol ethoxylated, PAS-FTIR, *Spilotes pullatus*.

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