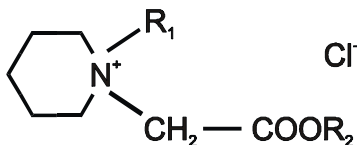


MICELLIZATION STUDIES OF N-ALKOXYCARBONYLMETHYL N-ALKYL-PIPERIDINIUM CHLORIDES BY ISOTHERMAL TITRATION CALORIMETRY

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The general structure of the compounds studied [Woźniak, E. *et al.* **Z. Naturforsch.** 59c (2004) 782] is as follows:



The compounds can be divided into two homologous series. The compounds in the first series have a methyl group as substituent R₁ and the following groups as R₂: C₈H₁₇, C₁₀H₂₁, C₁₂H₂₅; whereas the compounds of second series have the same R₂ (C₂H₅) and different R₁ (C₂H₅, C₈H₁₇, C₁₂H₂₅). All the compounds show an antimicrobial activity [Woźniak, E. *et al.* **Z. Naturforsch.** 59c (2004) 782-786]. The activity revealed clearly molar volume dependence. In this paper the micellization process of the mentioned above compounds was studied by means of isothermal titration calorimetry. The critical micelle concentration and enthalpy of micellizations were calculated. Some preliminary conclusions can be drawn. CH₂-COOC₂H₅ group of the compounds of the second series affects cmc and enthalpy of micellization in a similar way as a lengthening of the substituent R₂ in the case of compounds of the first series.