Investigation of the Reaction between Sodium Hydroxide and *syn*- and *anti*-Isomers of 5-Substituted 2-(4-Chlorobutyryl)-aminobenzophenones Oximes

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Abstract—By the reaction of *syn*-isomers of 5-substituted 2-(4-chlorobutyryl)aminobenzophenones oximes with NaOH *syn*-isomers of 5-substituted 2-(2-oxopyrrolidin-1-yl)benzophenones oximes were obtained. Similarly the *anti*-isomers of 5-substituted 2-(4-chlorobutyryl)aminobenzophenones oximes treated with NaOH underwent cyclization into *anti*-isomers of 5-substituted 2-(2-oxopyrrolidin-1-yl)benzophenones oximes. Crystal and molecular structures were investigated of the *syn*-isomer of 5-methyl-2-(2-oxopyrrolidin-1-yl)benzophenone oxime, the *anti*-isomer of 5-bromo-2-(2-oxopyrrolidin-1-yl)benzophenone oxime, and the *syn*-isomer of 5-methyl-2-(4-chlorobutyryl)aminobenzo-phenone oxime. The fragmentation features under the electron impact of *syn*- and *anti*-isomers of 5-substituted 2-(2-oxopyrrolidin-1-yl)benzophenones oximes are discussed.

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