

[PD1-49] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]

Highly Enantioselective Synthesis of α -Alkyl-alanines via the Catalytic Phase-Transfer Alkylation of 2-Naphthyl aldimine tert-butyl ester by using O(9)-Allyl-N(1)-2'3'4'-trifluorobenzylhydrocinchoni

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Systematic investigations to develop an efficient enantioselective synthetic method for α -alkyl-alanine by the catalytic phase-transfer alkylation were performed. The alkylation of 2-naphthyl aldimine tert-butyl ester, 1E with RbOH and O(9)-allyl-N-2'3'4'-trifluorobenzylhydrocinchonidinium bromide, 6, at 25 °C showed the highest enantioselectivities, up to 96% ee.

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A Study on the development of analytical method for polymeric drugs (I)

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It was difficult that we analysed the polymeric drugs for the physico-chemical properties. Sodium hyaluronate is a linear polysaccharide composed of repeating disaccharides of sodium glucuronate and N-acetyl glucosamine found throughout the tissues of the body with high concentrations in the vitreous humor, synovial fluid and umbilical cord. It has a role in regulating the interaction between adjoining tissues. Sodium hyaluronate can also act as a viscoelastic space filler. The analytical method for it had a complex process and poor repeatability. So the method to measure sodium hyaluronate has been developed by capillary electrophoresis. Sodium hyaluronate was analysed with the borate buffer (pH 8.7) at 20kV applied voltage, UV wavelength at 195nm, uncoated silica capillary column of 60cm x 50 μ m and pneumatic injection. This method was validated with a good repeatability, precision, limit of detection and limit of quantification.

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HANTZSCH DIHYDROPYRIDINE: AN EFFECTIVE AND CONVENIENT REGIOSELECTIVE REDUCING AGENT FOR 5-BENZYLIDENE-2,4-THIAZOLIDINEDIONE DERIVATIVES

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An effective and convenient regioselective reduction of 5-benzylidene 2,4-thiazolidinedione derivatives to the corresponding 5-benzyl 2,4-thiazolidinedione derivatives has been accomplished using 3,5-dicarboethoxy-2,6-dimethyl-1,4-dihydropyridine (Hantzsch dihydropyridine ester : HEH) with silica gel as an acid catalyst in a good yield.