

comparisons" and, in comparison, by Huber's elimination rule based on median absolute deviation (MAD). As a conclusion, FAPAS protocol was influenced by the existence of outliers in data set, for outliers may move mean value toward them and inflate standard deviation resulting in obscure z-scores, while Huber's elimination rule pointed out all of the outlying test results.

[PD4-14] [10/18/2002 (Fri) 13:30 - 16:30 / Hall C]

Chiral discrimination studies of (+)-(18-crown-6)-2,3,11,12-tetracarboxylic acid by NMR spectroscopy

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The chiral stationary phase derived from (+)-(18-crown-6)-2,3,11,12-tetracarboxylic acid (18-C-6-TA) as a chiral selector has been employed for resolution of several α -amino acids in HPLC. In a quest for the origin of chiral recognition of α -amino acids in the presence of 18-C-6-TA as a chiral selector, these interactions responsible for the differential affinities shown toward enantiomers were investigated by NMR spectroscopy. In this study, we have performed detailed NMR studies for each enantiomer of alanine or alanine methyl ester with 18-C-6-TA to investigate the chiral recognition mechanism of these diastereomeric complexes.

[PD4-15] [10/18/2002 (Fri) 13:30 - 16:30 / Hall C]

Chiral Separation of Aromatic Acids by Capillary Electrophoresis Using HP β -Cyclodextrin as the Chiral Selector

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Capillary electrophoretic direct chiral separation method is described for the determination of the absolute configuration of chiral aromatic acids. The enantiomeric separation was achieved by capillary electrophoresis using HP β -cyclodextrin (CD) as the chiral selector. The effect of CD concentration was investigated to optimize the chiral separation and resolution. When applied to microbial culture fluid, the present method allowed positive identification of chiral aromatic acids and their chirality as well.

[PD4-16] [10/18/2002 (Fri) 13:30 - 16:30 / Hall C]

Dissolution Test for Indomethacin by the Portable Near-Infrared(NIR) System

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Near-infrared (NIR) system was used to determine rapidly and simply indomethacin in buffer solution for a dissolution test for tablets and capsules. Indomethacin standards were prepared ranging from 10 to 50ppm using mixture of phosphate buffer(pH 7.2) and water(1:4). The near infrared(NIR) transmittance spectra of indomethacin standard solutions were collected by using a quartz cell in 1mm and 2mm pathlength. Partial least-square regression(PLSR) was explored to develop calibration models over the spectral range 1100-1700nm. The model using 1mm quartz cell was better than that using 2mm quartz cell. The PLSR models developed gave standard errors of prediction(SEP) of 0.858(ppm). In order to validate the developed calibration model, routine analysis were performed using another standard solutions. The NIR routine analyses showed good correlation with actual values. Standard Error of Prediction(SEP) is 1.614(ppm) for 7 indomethacin samples in routine analysis and its error was permeable in the regulation of Korean Pharmacopoeia(VII). These results show the potential use of the real time monitoring for indomethacin during a dissolution test.