
Abstract

A preliminary work involving method development for *normal* stationary phase (silica) permits the high-performance liquid chromatographic separation of aliphatic and polyaromatic hydrocarbon (PAHs) classes.

The Soxhlet extraction method was applied on the coal rock samples and normal phase (silica) short column clean-up separation from highly polymeric material in the coal extract.

Method developed on analytical and preparative normal phase silica HPLC columns were to fractionate coal rock extracts, isocratic elution of hexane: ethyl acetate (95:5, V:V) was found to be quite a good mobile phase. An alternative fractionation method, preparative thin layer chromatography (TLC), was also investigated to separate the various organic groups in the organic extract from coal rocks from Batu Arang, Selangor.