REACTION CONTROL OF THE SYNTHESIS OF POLYQUINOLINES

Molar weight and molar weight distribution are essential parameters. To know and record them is vitally important for process analysis in polymer production as well as for characterization and assessment of the final products.

A typical example is the reaction monitoring of polycondensations, e.g. of polyquinoline synthesis. Polyquinolines are conjugated polymers which are used as materials for flexible light diodes. Over molar weight and their distribution important application properties like film forming ability and electroluminescence can be influenced.

The GPC elugrams reflect the gradual composition of polycondensates which can be observed in synthesis (Fig. 1).

Fig. 1 GPC elugram of a polyquinoline product; detection at 254 nm.