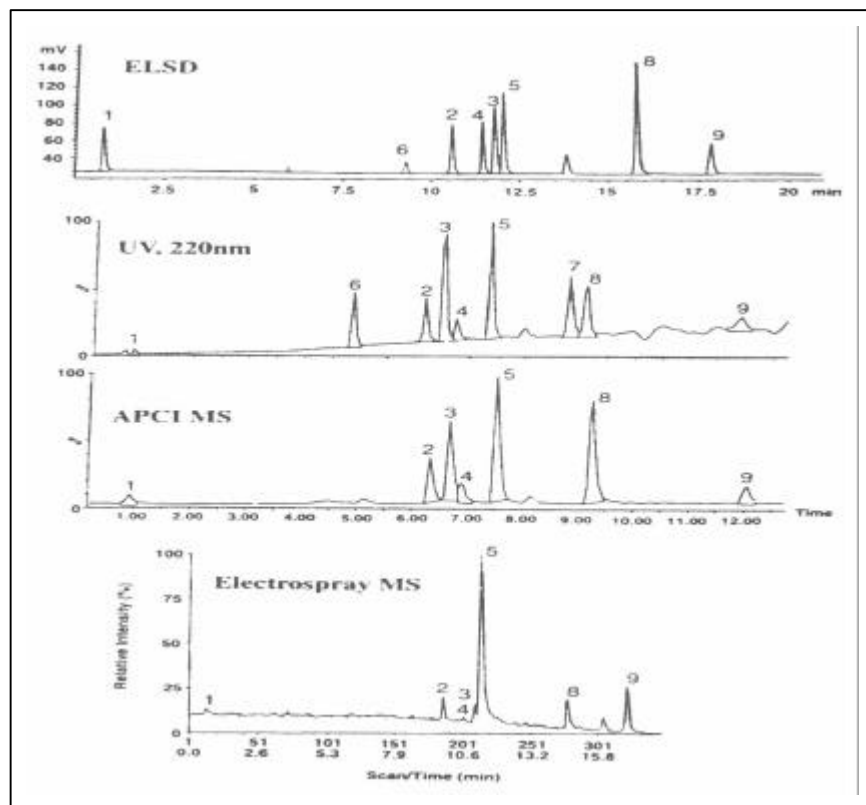


# DDL 31 Applications

N° 2

## Determination of Pharmaceutical Compounds for Combinatorial Chemistry : Comparison Between UV, MS and ELSD Detections



When operating with a mixture of unknown compounds, as in combinatorial chemistry, because of a constant response factor, ELSD gives, in terms of relative mass a better estimation than the UV and MS detection. In addition ELSD allows as an universal detector the determination of all species. In the figure, we compare the ELSD response with the UV and MS response for nine compounds. For MS, the response factors are between 0.1 and 3, for UV between 0.04 and 2.5 and for DDL between 0.8 and 2. Thus it is possible to use an internal standard for the quantification with the DDL (with average error of about 20%).

### Chromatographic conditions :

*Column :* Hypersil BDS C18(50x2.1mm 3µm)

*Flow Rate :* 0.2 ml/min

*Mobile Phase :* Linear elution gradient in 20 min

*Phase A:* H<sub>2</sub>O(0.1% TFA)/ACN (95/5)

*Phase B:* H<sub>2</sub>O(0.1% TFA)/ACN (5/95)

*Evaporation Temperature :* 45°C

Bih H. Hsu, Edward Orton, Sheng-Yuh Tang, Robert A. Carton - *Journal of Chromatography B*.725 (1999) 103-112

**EUROSEP Instruments**

Tel. : +33(0)1 34 22 95 22 - Fax : +33(0)1 34 22 95 32

E-Mail: eurosep@eurosep.com - Internet <http://www.eurosep.com>