

PUBLICATIONS THESIS DOCTORAL

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Publications

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*Review on automation using multisyringe flow injection analysis.*

Horstkotte, Elsholz & Cerdà. Journal of Flow Injection Analysis 22, 2005, 99-109 pp.

*At-line determination of formaldehyde in bioprocesses by sequential injection analysis.*

Horstkotte, Werner, Wiedemeier, Elsholz, Cerdà & Luttmann. Analytica Chimica Acta 559, 2006, 248-256 pp.

*Sequential injection analyzer for glycerol monitoring in yeast cultivation médium.*

Horstkotte, Werner, Kazemi, Cornelissen, Elsholz, Cerdà & Luttmann. Talanta 71(2), 2007, 941-947 pp.

*Development of a capillary electrophoresis system coupled to sequential injection analysis and characterization by the analysis of nitrophenols.* Horstkotte, Elsholz & Cerdà. International Journal of Environmental Analytical Chemistry 87(21), 2007, 797-811 pp.

*Multisyringe Flow Injection Analysis coupled to Capillary Electrophoresis (MSFIA-CE) as a novel analytical tool applied to the pre-concentration, separation and determination of nitrophenols.* Horstkotte, Elsholz, Cerdà, Talanta 76, 2008, 72-79 pp.

*Monitoring of sorbitol in Pichia pastoris cultivation applying sequential injection analysis.*

Horstkotte, Arnau, Valero, Elsholz, Cerdà, Biochemical Engineering J. 42, 2008, 77-83 pp.

### Thesis and inedited works

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- 11/2008      *Development of automated methods using syringe based flow analysis techniques and capillary electrophoresis for biotechnological process monitoring and environmental analysis. 240 pp. excl. annex*  
 Dissertation in Experimental Science and Technology (Chemistry)  
 University of the Balearic Islands, Palma de Mallorca, Spain
- 02/2006      *At-line bioreactor process monitoring of formaldehyde in yeast culture medium using a multisyringe flow injection analysis device. 147 pp.*  
 Memoria de Suficiencia Investigadora (Diploma of advances studies)  
 University of the Balearic Islands, Palma de Mallorca, Spain

### Participation at congresses with oral presentations

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- 09/2007      *Multisyringe Flow Injection for Fully Automation of Analyte Pre-concentration and Separation by Capillary Electrophoresis, Application for the Analysis of Nitrophenols in Water Samples.* Horstkotte, Elsholz, Cerdà  
 International Conference on Flow Injection Analysis, Berlin, Germany
- 04/2005      *Different Approaches for the At-line Determination of Formaldehyde in Bioprocesses by Flow Analysis.*  
 Horstkotte, Werner, Wiedemeier, Elsholz, Luttmann & Cerdà.  
 13th International Conference on Flow Injection Análisis, Las Vegas, USA

### Participation en congresses with poster presentations

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- 09/2004      *Determination of formaldehyde by use of Multi syringe flow injection analysis in recombinant protein process with Pichia pastoris.*  
 Horstkotte, Werner, Bartsch, Wiedemeier, Elsholz, Cerdà & Luttmann.  
 13th Euroanalysis, Salamanca, Spain
- 10/2005      *Intelligent glycerol analyzer for cultivation medium monitoring using sequential injection analysis technique and modified Hantzsch reaction.*  
 Horstkotte, Werner, Luttmann, Elsholz & Cerdà.  
 International Conference on Instrumental Methods of Analysis – IMA'05,  
 Heraklion, Crete, Greece
- 10/2005      *Smart system for sulfide monitoring in water, exploiting MSFIA coupled to gas-diffusion with flow-through optical fiber diffuse reflectance sensor and flow-cell spectrophotometry.* Ferrer, Horstkotte, Estela & Cerdà.  
 International Conference on Instrumental Methods of Analysis – IMA'05,  
 Heraklion, Crete, Greece

- 12/2005 *A versatile software tool for automated, smart and user-friendly applications for instrumental analytic methods and investigation purposes.*  
Horstkotte, Alpízar, Elsholz & Cerdà.  
11as Jornadas de análisis instrumental – JAIB 2006, Barcelona, Spain
- 12/2005 *User application for the determination of glycerol by coupled reaction of periodate and acetylacetone automated on a sequential injection analysis system.*  
Horstkotte, Cerdà & Elsholz.  
11as Jornadas de análisis instrumental – JAIB 2006, Barcelona, Spain
- 09/2006 *Construction and characterisation of a hyphenated system of capillary electrophoresis system and sequential injection analysis.*  
Horstkotte, Elsholz & Cerdà.  
10th International Conference on Flow Analysis – ICFIA, Porto Portugal
- 10/2006 *Determination of sorbitol in yeast cultivation medium by means of sequential injection analysis.* Horstkotte, Elsholz & Cerdà.  
12th Symposium on sample handling for environmental and biological analysis, Zaragoza, Spain
- 10/2007 *Monitoring using sequential injection analysis and AutoAnalysis software: Application for sorbitol in a yeast cultivation*  
Horstkotte, Jiménez, Valero, Elsholz, Cerdà  
XIV Reunión nacional de la sociedad española de química analítica, Pollensa, Spain
- 10/2007 *Multisyringe Flow Injection for Fully Automation of Analyte Pre-concentration and Separation by Capillary Electrophoresis, Application for the Analysis of Nitrophenols in Water Samples.* Horstkotte, Elsholz, Cerdà  
IX International symposium on analytical methodology in the environmental field (IX ISAMEF), Pollensa, Spain