TH216 Seasonal variation of alkylphenols and bisphenol A in waters and clams from a Spanish-Portuguese river estuar. S. González, Univeristy of a Coruña / Analytical Chemistry; I. Turnes-Carou, University of A Coruña / Analytical Chemistry Department; V. Besada, Instituto Español de Oceanografía Vigo; S. Muniategui-Lorenzo, P. López-Mahía, D. Prada-Rodríguez, University of A Coruña / Analytical Chemistry Department. Alkylphenols (APs) are the degradation products of the non-ionic surfactants APs polyethoxylates, used as plasticizers and also in the manufacture of textiles, paper and agricultural chemical products. Meanwhile, bisphenol A (BPA) is employed as a monomer for the production of epoxy resins, polycarbonates and lacquer coatings for food cans. These compounds are well-known endocrine disrupting compounds (EDCs) and consequently, their study is mandatory to ensure the preservation of the environment and to protect human health. Different researches showed their ubiquity around the world. However, few of them are based in the analysis of these EDCs in different matrices belonging to the same area. Taking into account two compartments (i.e. water and biota), information about the distribution and accumulation of the target analytes in the environment would be obtained. To evaluate the fate of these EDCs in the international Miño river estuary (NW Iberian Peninsula), more than 20 sampling points were selected, collecting both waters (surface, transitional and coastal) and clams (Corbicula fluminea) in two campaigns: May and November of 2012. Different green extraction techniques (simple, no-labour and no-time consuming, free solvent and low cost) were employed for the analysis of APs and BPA [1][2]. For the quantitation and identification of the target compounds, LC-MS/MS and MRM acquisition mode were chosen because of its sensitivity and selectivity. An important decrease in the total concentration of target EDCs was shown in water with seasonal change, from 0.888 $?g L^{-1}$ (May) to 0.05 $?g L^{-1}$ (November). However, the EQS established by legislation for APs were not surpassed in any case. Regarding clams total concentrations, no significant differences were observed (1388 ng g⁻¹ dw in May and 1228 ng g⁻¹ dw in November). Finally, bioaccumulation factors were also estimated and Nonylphenol seemed to be a bioaccumulative compound; BPA and 4-tert-octylphenol did not show this behaviour. Acknowledgements. This work has been financed by Xunta de Galicia (GRC2013-047) and MINECO (CTM2013-48194-C3-2-R) cofinanced by ERDF. N. Salgueiro-González thanks Xunta de Galicia and Campus do Mar for Ph.D. grant and staff of Chemical Pollution Laboratory-IEO Vigo for their assistance [1] N. Salgueiro-González et al., J. Chromatogr. A 1223 (2012) 1 [2] N. Salgueiro-González et al. J. Chromatogr. A 1270 (2012) 80