ELECTRONIC SUPPLEMENTARY INFORMATION (ESI) FOR JOURNAL OF ANALYTICAL ATOMIC SPECTROMETRY

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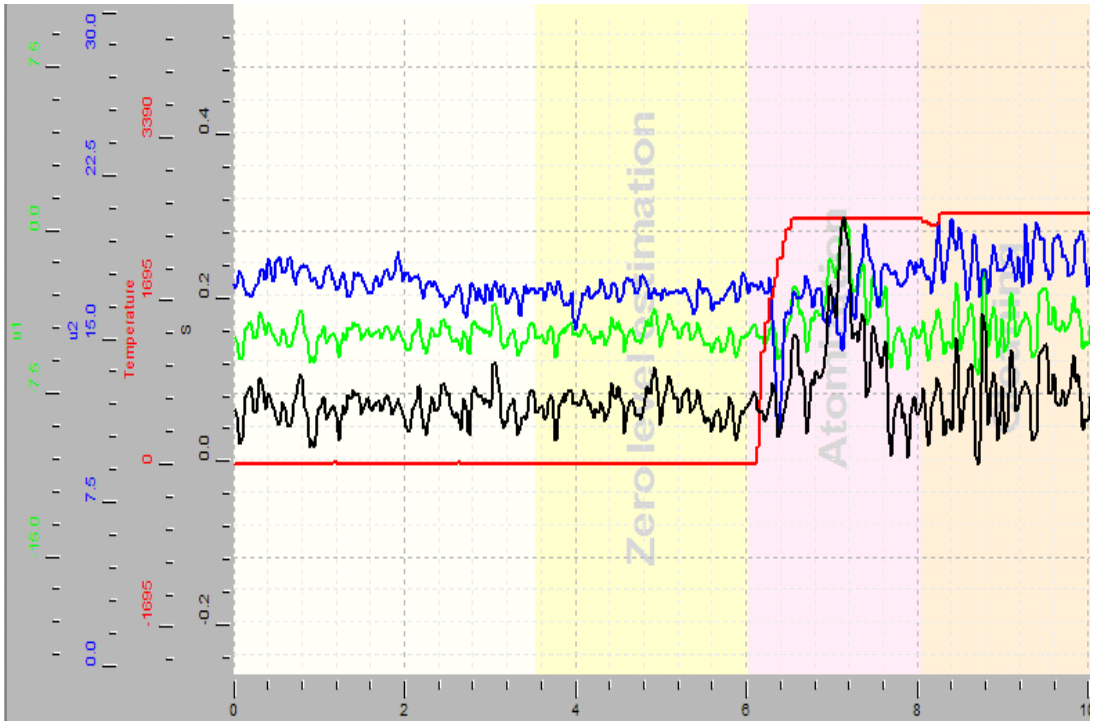
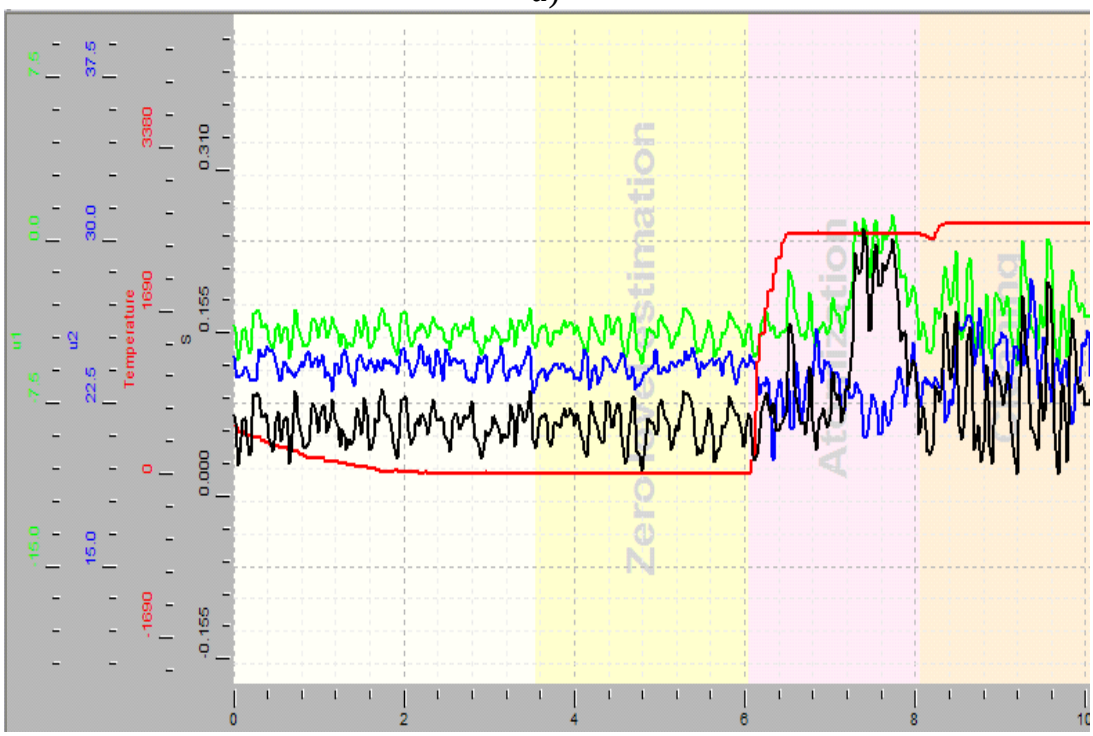
Biological monitoring of arsenic pollution based on whole blood arsenic atomic absorption assessment with *in situ* hydride trapping

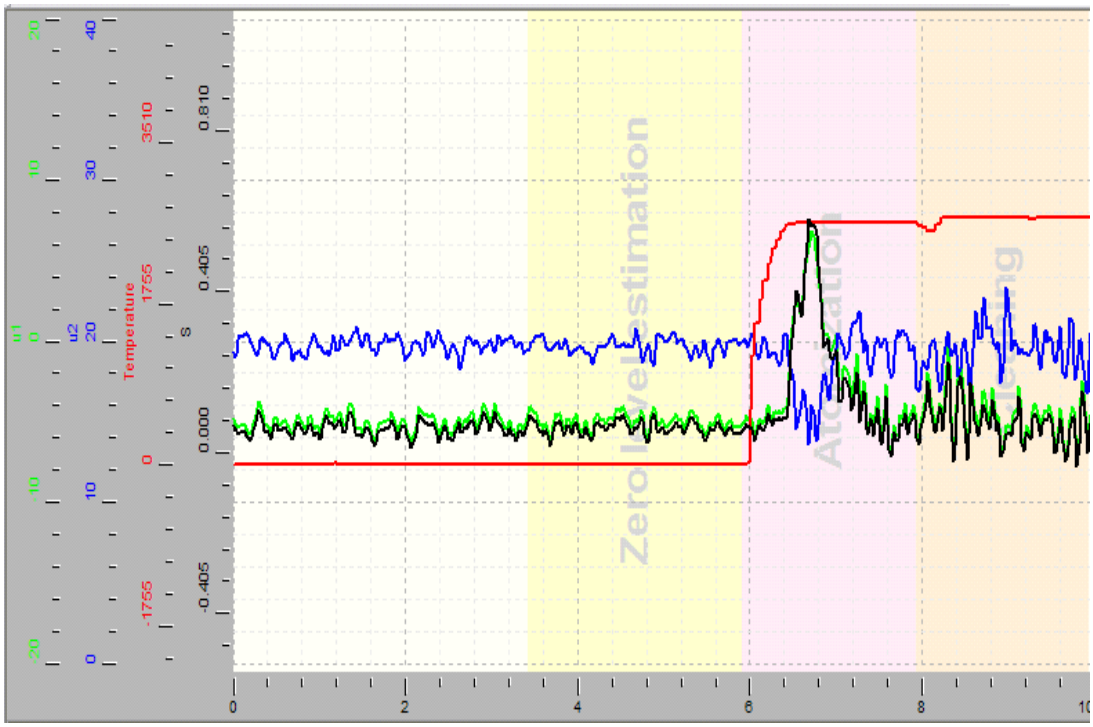
Absorbance profiles for different surface coatings



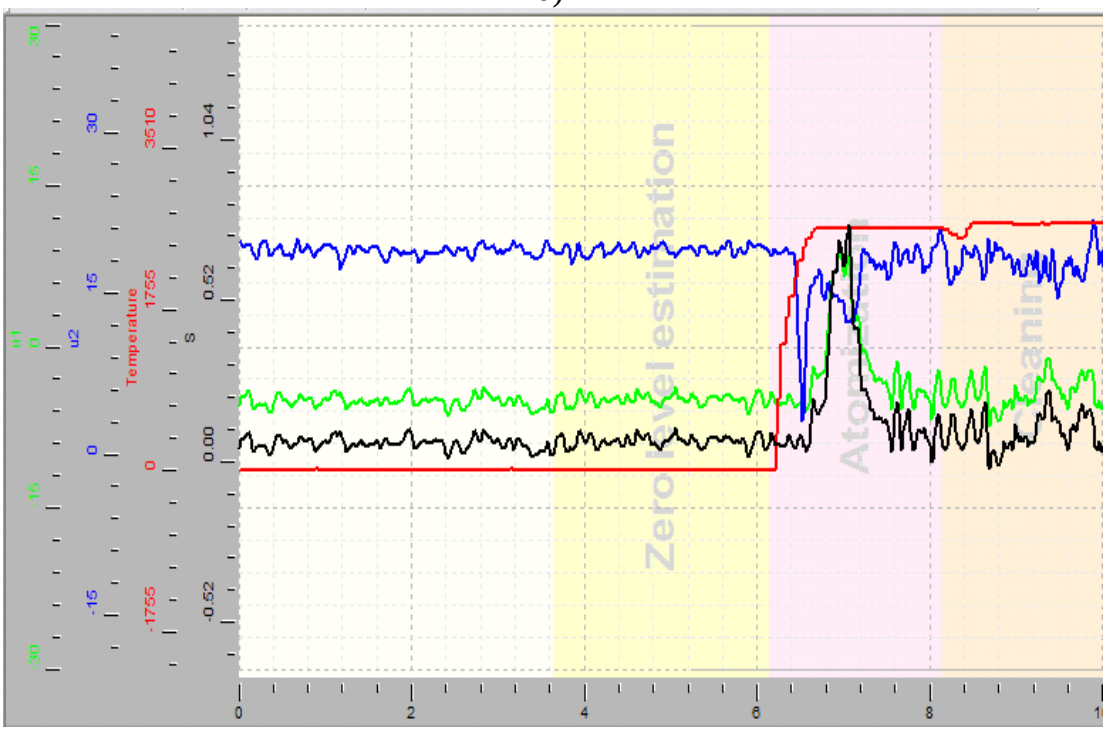
a)



b)

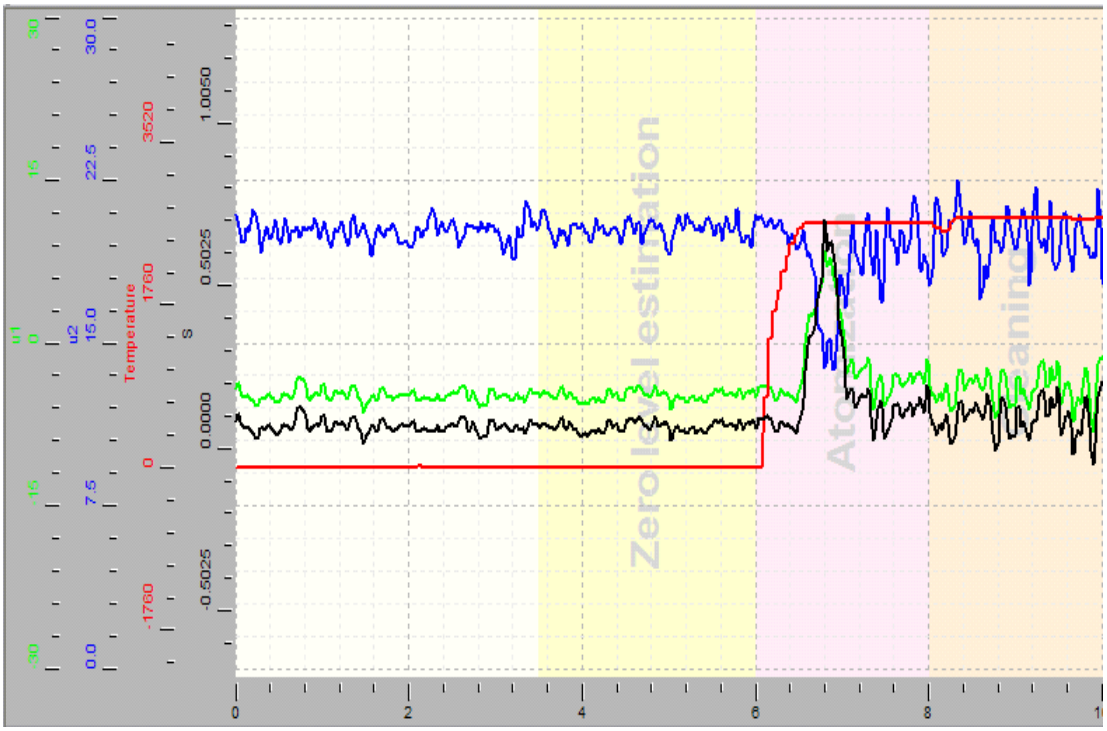


c)

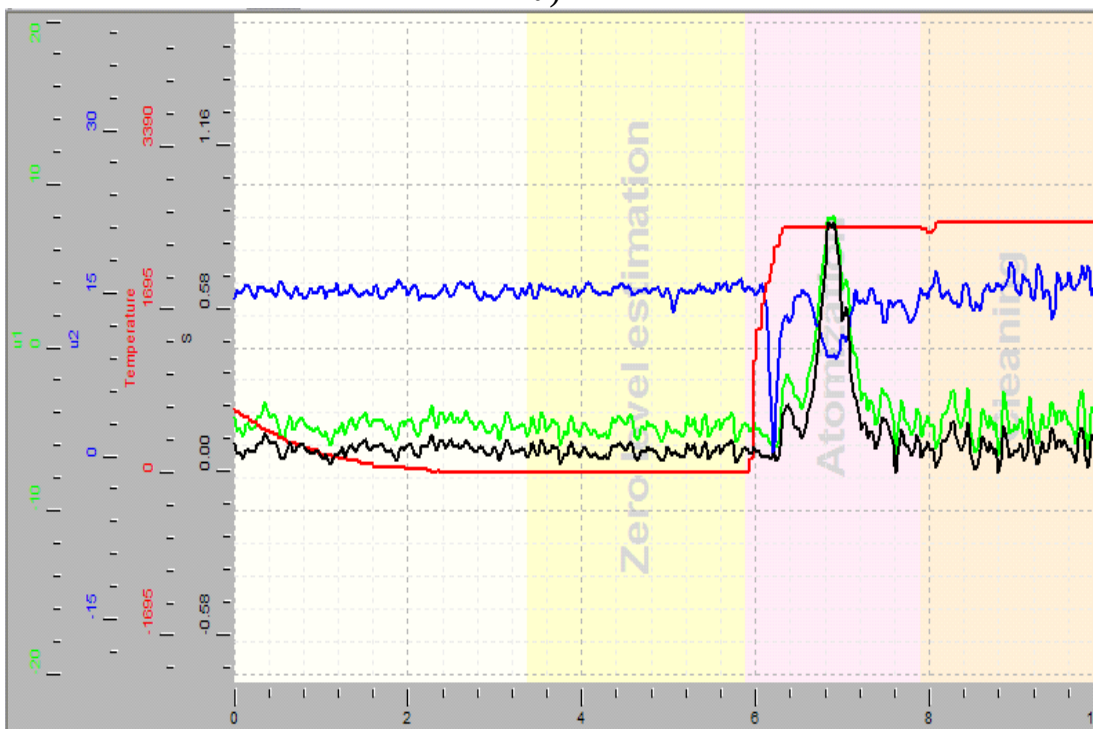


d)

Fig. 1 Absorbance profiles for individual modifiers for 1000 pg arsenic after *in situ* trapping of AsH_3. Analytical signals were measured under optimized conditions of both arsenic reduction and absorbance registration. The data are presented as native print-screens from atomic absorption instrument software. Modifiers: *a*) unmodified furnace; *b*) Na_2WO_4 (W); *c*) $Pd(NO_3)_2$ (Pd); *d*) H_2PtCl_6 (Pt). Designations (all in relative units): black – corrected absorbance (analytical signal); blue – registered intensity of absorbance line 193.7 nm; red – temperature; green – selective absorbance (for more details on analytical signals in Zeeman modulation polarization spectrometry see S.E. Sholupov and A.A. Ganeyev, *Spectrochim. Acta B*, 1995, **50**, 1227-1236)



a)



b)

Fig. 2 Absorbance profiles for double layer modifiers for 1000 pg arsenic after *in situ* trapping of AsH_3. Analytical signals were measured under optimized conditions of both arsenic reduction and absorbance registration. The data are presented as native print-screens from atomic absorption instrument software. Modifiers: *a*) Na_2WO_4 – $Pd(NO_3)_2$ (W-Pd); *b*) Na_2WO_4 – H_2PtCl_6 (W-Pt). Designations are the same as in Fig. 1