

## Supplementary Information

### Investigation and Mathematical Correction of the Matrix Complexity Effect on Platinum Group Metals Using Inductively Coupled Plasma Optical Emission Spectrometry Determination

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#### List of additional Table and Figures

1 Table

9 Figures

**Table S1** The codes of the CRMs used in the experiment.

**Figure S1** Spectral display of the Pd determination in solution B.

**Figure S2** Spectral display of the Pt determination in solution B.

**Figure S3** Spectral display of the Rh determination in solution B.

**Figure S4** Spectral display of the Pd determination at different Fe concentrations.

**Figure S5** Spectral display of the Pt determination at different Fe concentrations.

**Figure S6** Spectral display of the Rh determination at different Fe concentrations.

**Figure S7** Spectral display of the Pd determination in solutions C and D.

**Figure S8** Spectral display of the Pt determination in solutions C and D.

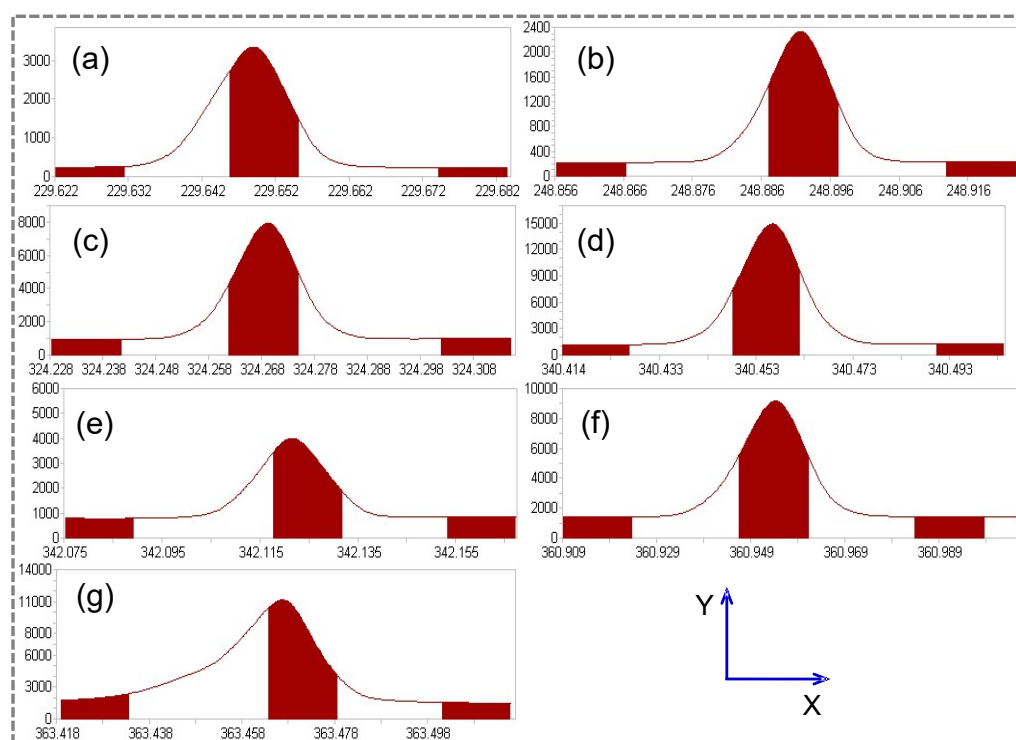
**Figure S9** Spectral display of the Rh determination in solutions C and D.

**Note:**

1. In the emission lines of Pd, a, b, c, d, e, f, and g correspond to 229.651, 248.892, 324.270, 340.458, 342.124, 360.955, and 363.470 nm, respectively.
2. In the emission lines of Pt, a, b, c, d, e, f, g, h, and i correspond to 203.646, 204.937, 214.423, 217.467, 224.552, 262.803, 264.689, 265.945, and 299.797 nm, respectively.
3. In the emission lines of Rh, a, b, c, d, e, f, g, and h correspond to 233.477, 249.077, 252.053, 339.682, 343.489, 365.799, 369.236, and 395.886 nm, respectively.
4. The illustration showed the mass ratio of matrix element to PMGs concentration.
5. The X-axis of all spectra is wavelength (nm), and the Y-axis is relative intensity (arb. units).

**Table S1** The codes of the CRMs used in the experiment

CRM		Code
PGMs	Pd	GSBG 62038-90
	Pt	GSBG 62067-90
	Rh	GSBG 62037-90
	Fe	GSBG 62020-90
	P	GSBG 62009-90
	Mn	GSBG 62019-90
	Al	GSBG 62006-90
Matrix	Ni	GSBG 62022-90
	Ti	GSBG 62014-90
	Ca	GSBG 62012-90
	V	GSBG 62016-90
	Cr	GSBG 62017-90
	Mg	GSBG 62005-90
	Cu	GSBG 62024-90



**Figure S1.** Spectral display of the Pd determination in solution B.

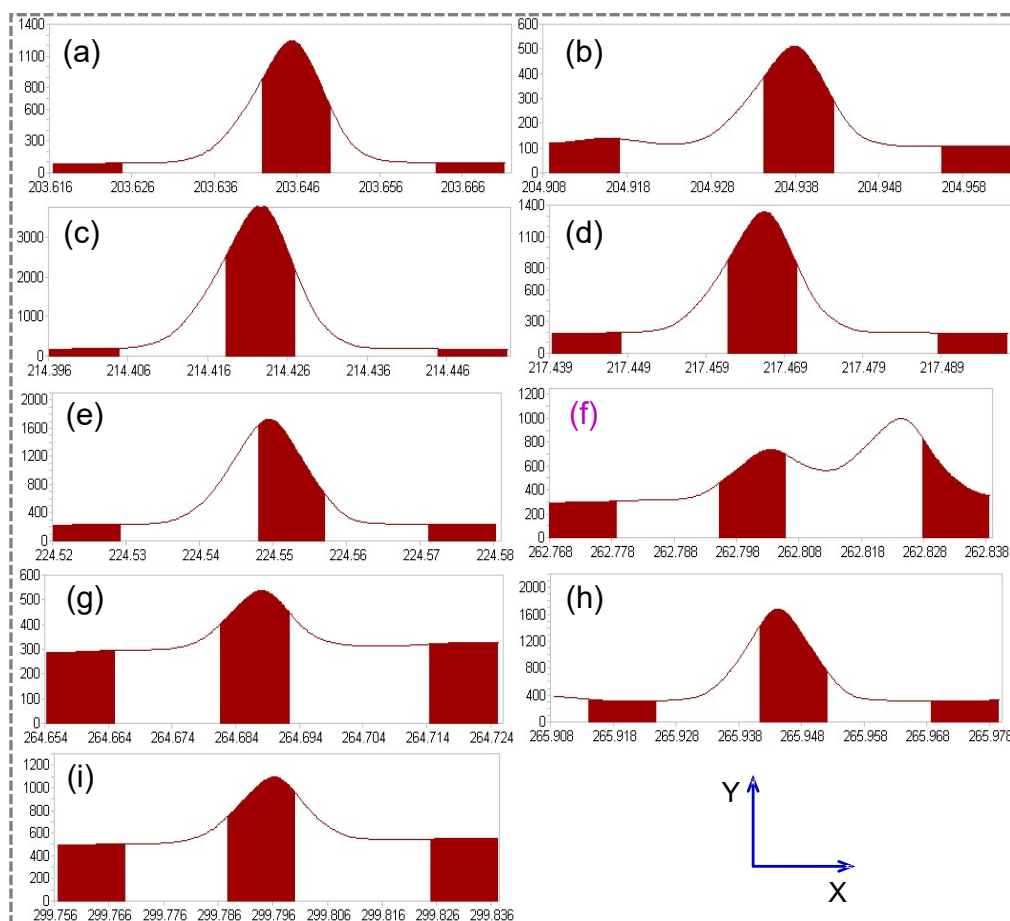


Figure S2. Spectral display of the Pt determination in solution B.

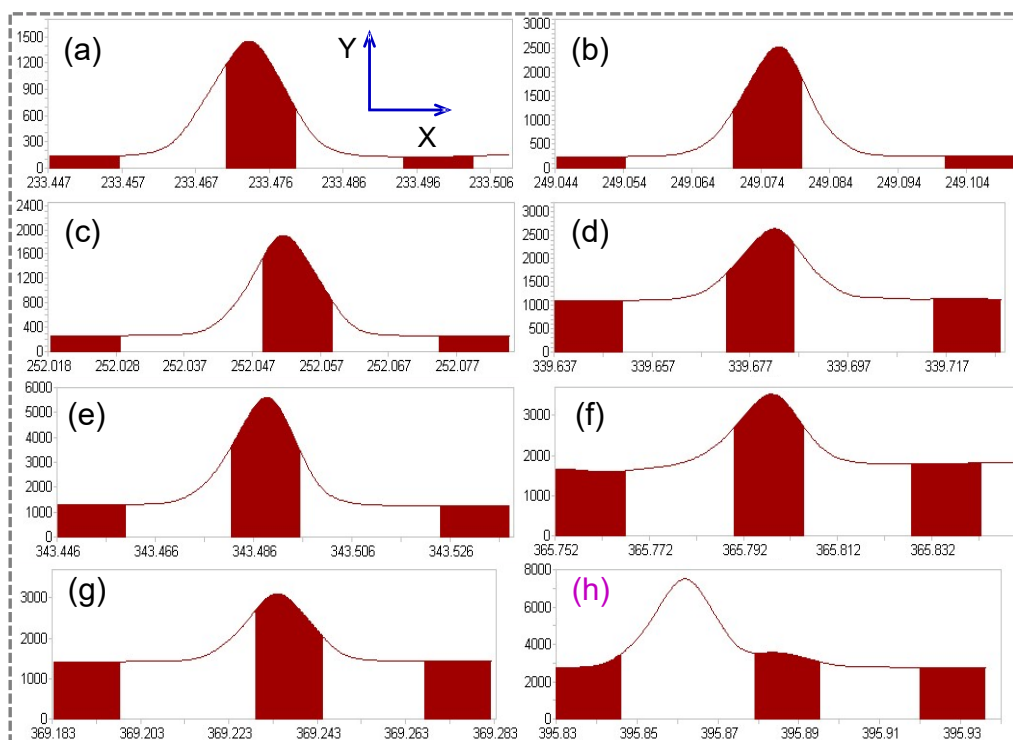
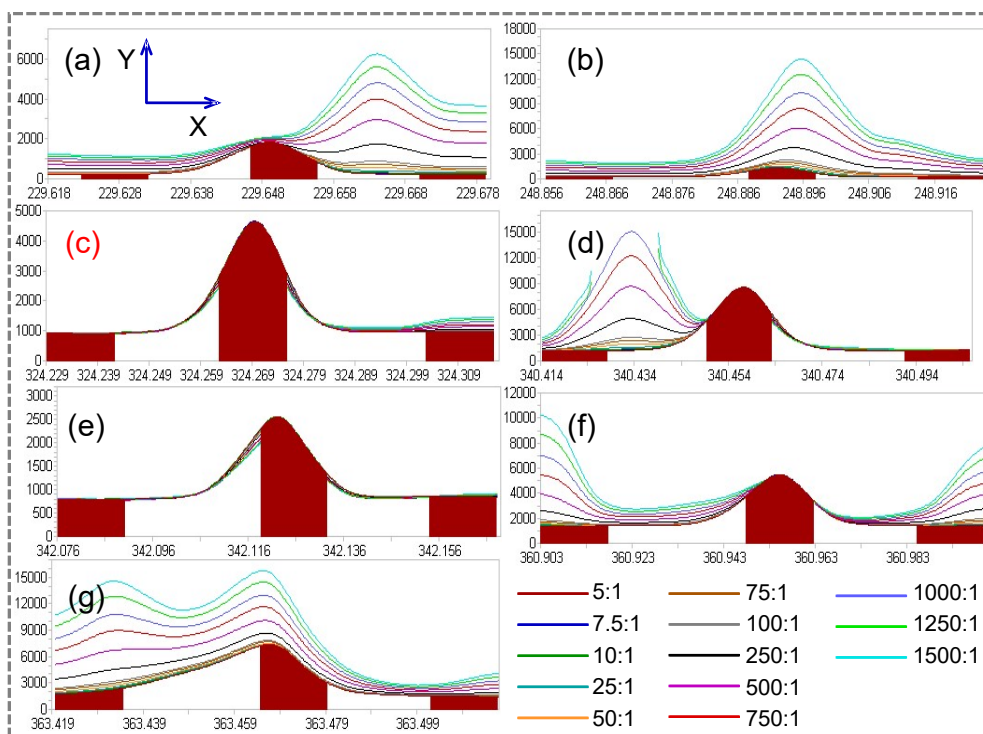
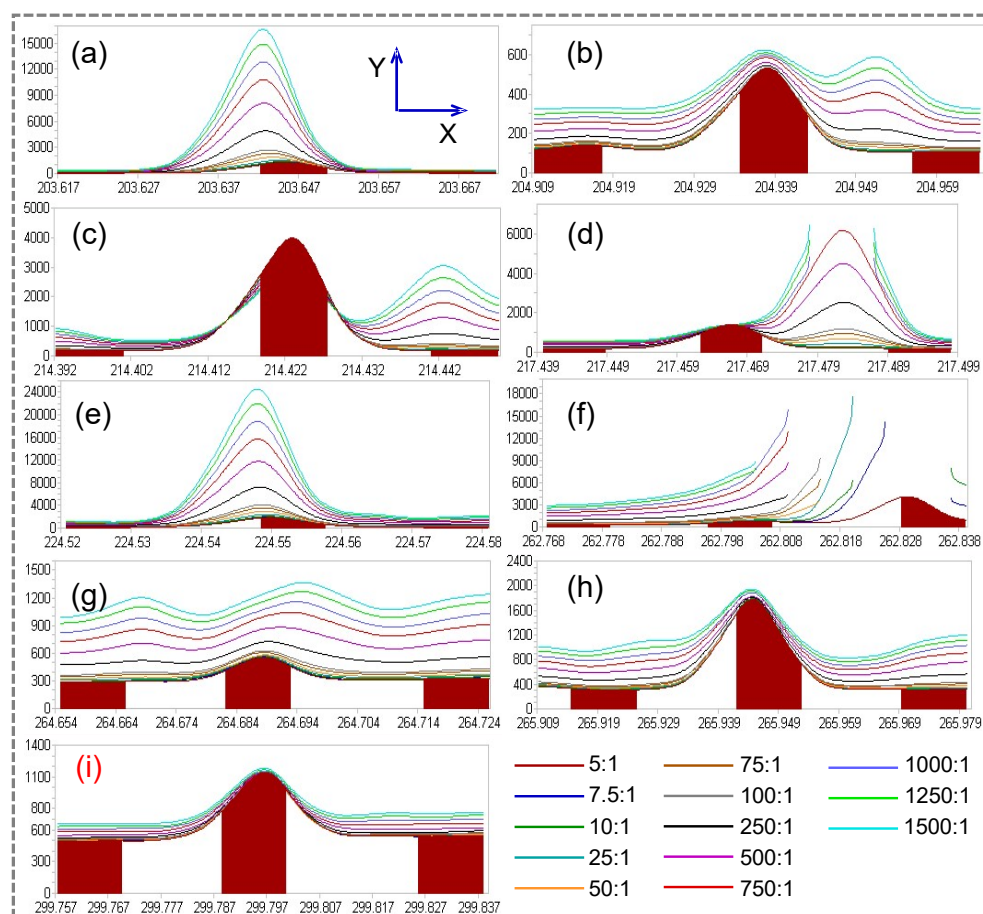


Figure S3. Spectral display of the Rh determination in solution B.



**Figure S4.** Spectral display of the Pd determination at different Fe concentrations.



**Figure S5.** Spectral display of the Pt determination at different Fe concentrations.

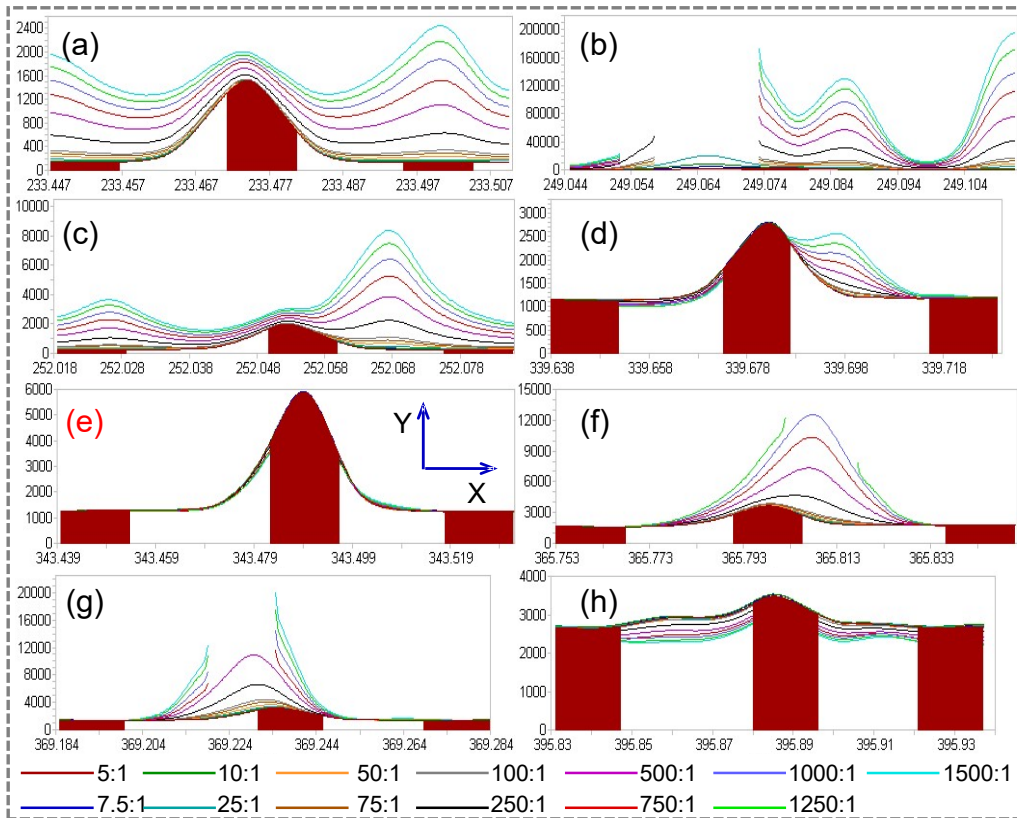


Figure S6. Spectral display of the Rh determination at different Fe concentrations.

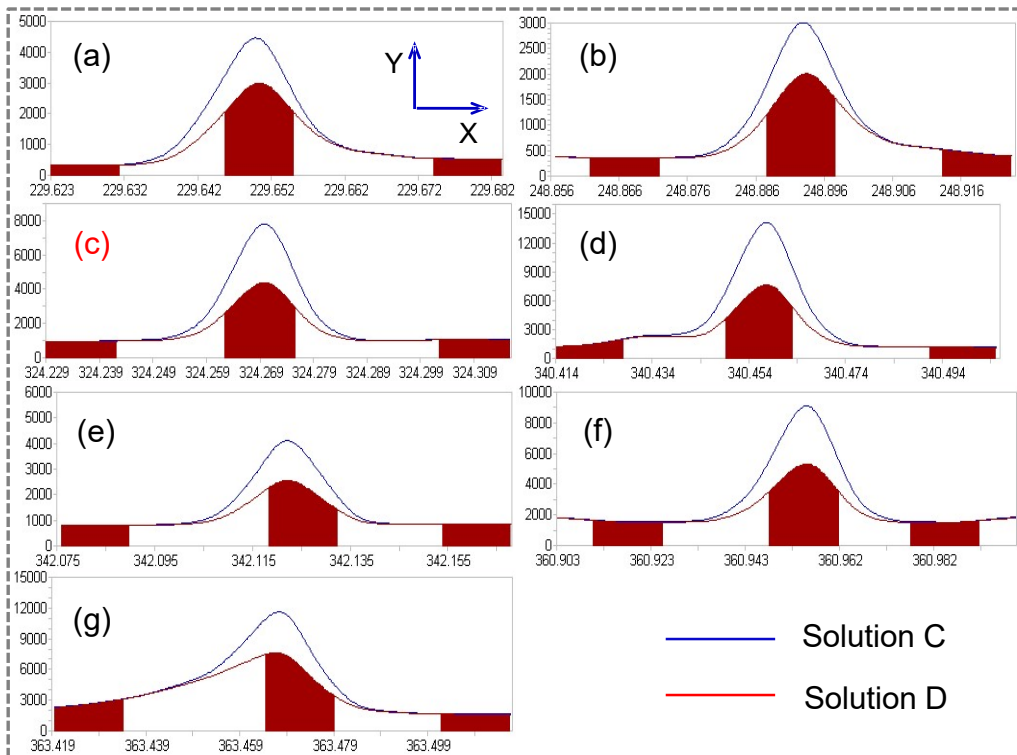
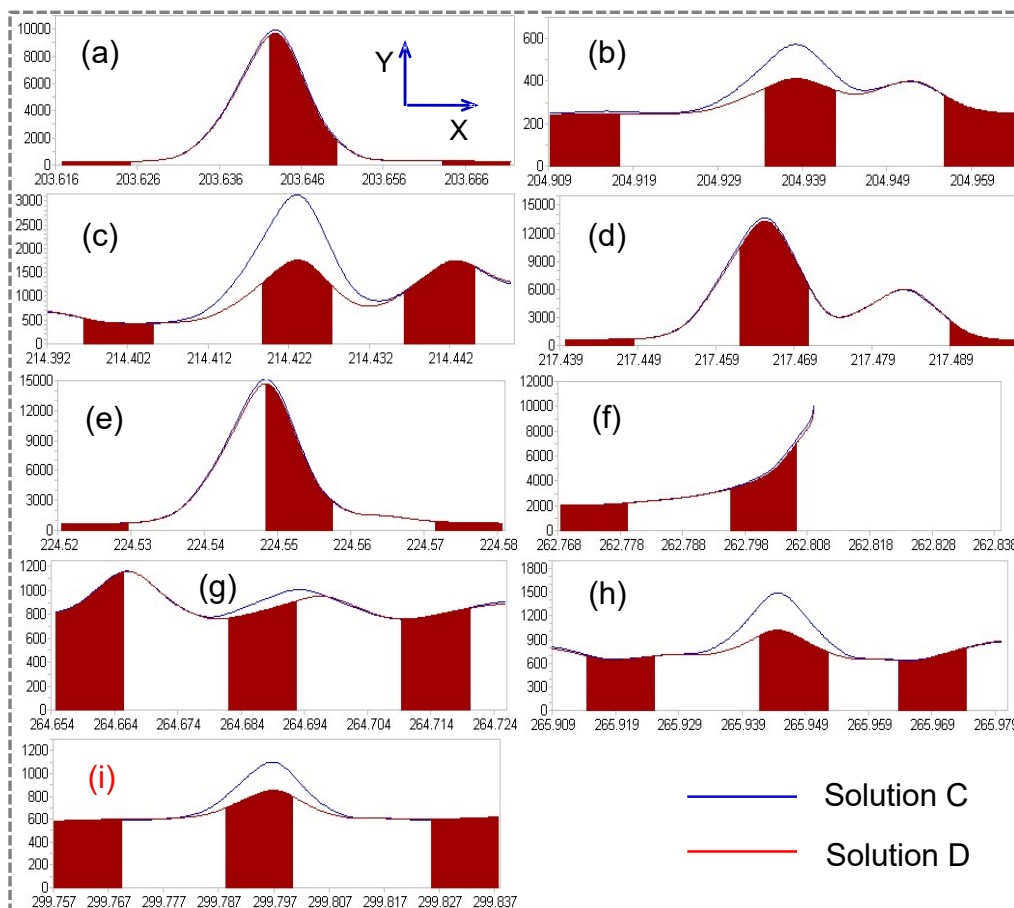
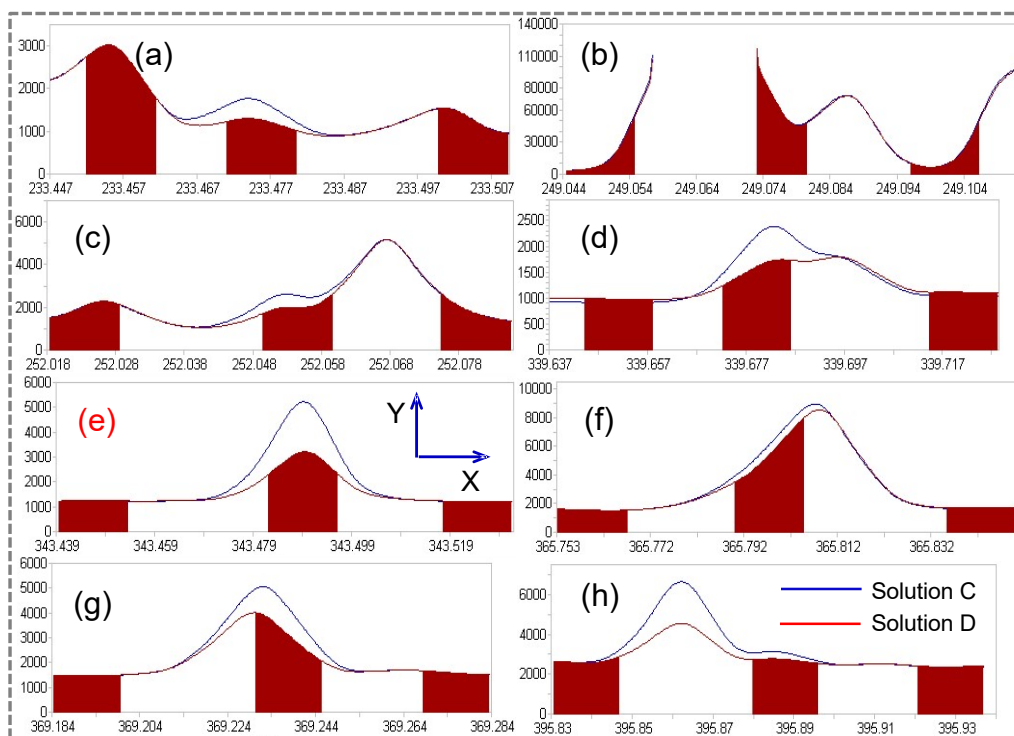


Figure S7. Spectral display of the Pd determination in solutions C and D.



**Figure S8.** Spectral display of the Pt determination in solutions C and D.



**Figure S9.** Spectral display of the Rh determination in solutions C and D.