Supplementary material

High-performance liquid chromatography with resonance Rayleigh scattering detection for determining four tetracycline antibiotics

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Running title:

HPLC-RRS for determining four tetracycline antibiotics

List of nonstandard abbreviations:

resonance Rayleigh scattering (RRS), tetracycline (TC), oxytetracycline (OTC), chlortetracycline (CTC), doxycycline (DOTC), Titan yellow (TY), Britton–Robinson buffer solution (BR).

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Fig. 1 The RRS spectra: (1) TC, (2) OTC, (3) CTC, (4) DOTC, (5) TY, (6) Cu(II), (7) TY-Cu(II), (8) TY-Cu(II)-TC, (9) TY-Cu(II)-OTC, (10) TY-Cu(II)-CTC, (11) TY-Cu(II)-DOTC.

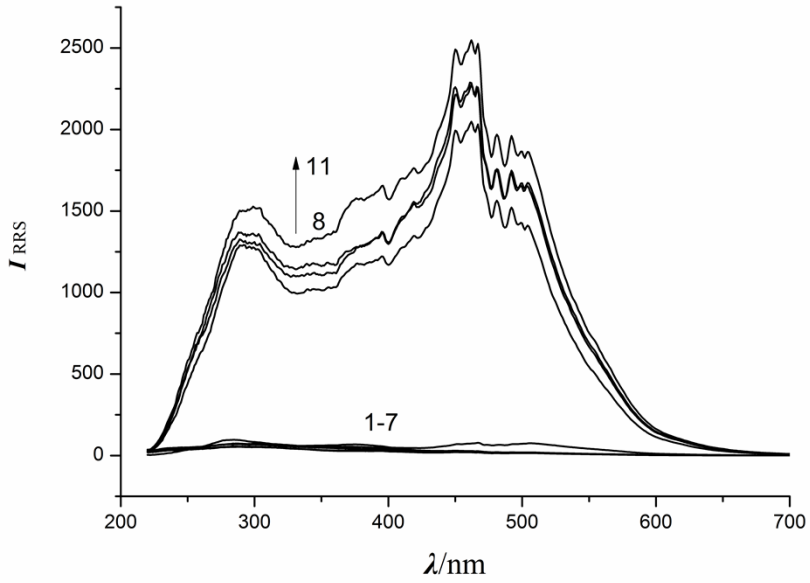

Fig. 2 Effect of the mobile phase flow rate on the signal intensity in HPLC-RRS.

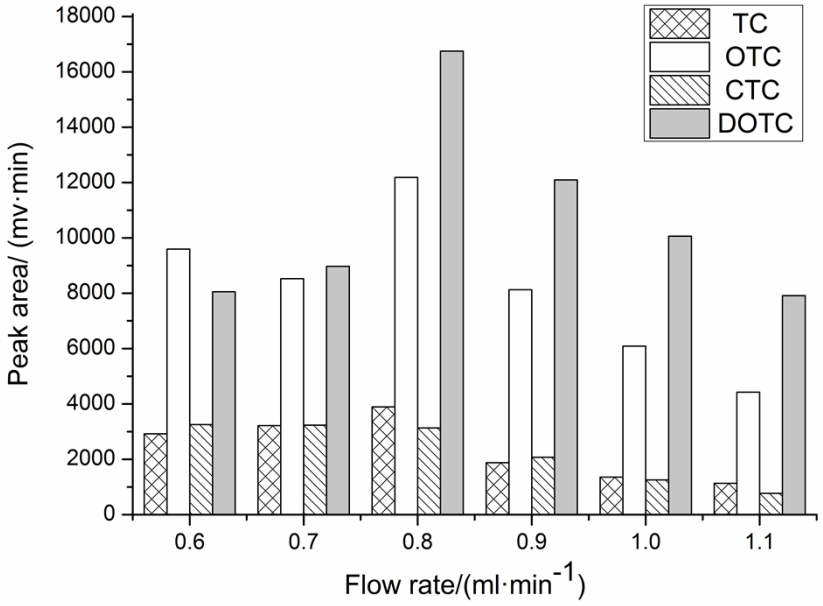

Fig. 3 The influence of pH of the BR on the signal intensity.

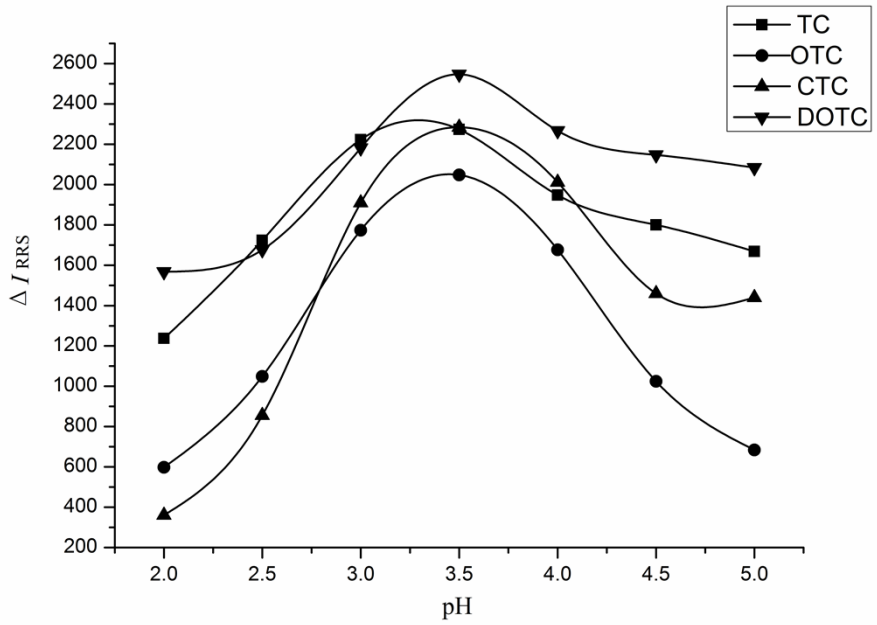

Fig. 4 A: The reaction equation for the formation of chelate cation $[Cu \cdot TC]^{+}$; B: The structure of $[Cu \cdot TC]_2TY$.