

SUPPLEMENTARY MATERIAL TO
**Synthesis, characterization and biological activity of new Ni(II),
Pd(II) and Cr(III) complex compounds with chlorhexidine**

MĂDĂLINA MIHALACHE¹, TICUȚA NEGREANU-PÎRJOL², FLOREA DUMITRAȘCU³,
CONSTANTIN DRĂGHICI³ and MIRELA CĂLINESCU^{1*}

¹Faculty of Chemistry, University of Bucharest, Dumbrașă Roșie 23, Bucharest 020462,
Romania, ²Faculty of Pharmacy, Ovidius University, Aleea Universității 1, Constanța 900470,
Romania and ³Center of Organic Chemistry “C.D. Nenitzescu”, Romanian Academy, 202B
Spl. Independenței, Bucharest 060023, Romania

J. Serb. Chem. Soc. 83 (3) (2018) 271–284

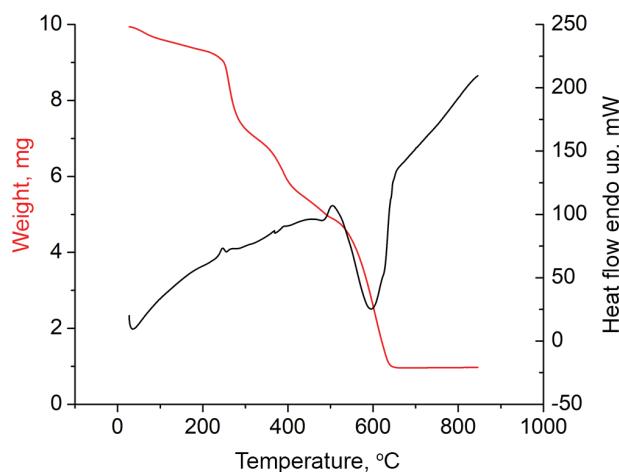


Fig. S-1. TG and DTA curves for $[\text{Ni}(\text{CHX})]\text{Cl}_2 \cdot 2\text{H}_2\text{O}$ (1).

*Corresponding author. E-mail: mirela_calinescu@hotmail.com;
mirela.calinescu@chimie.unibuc.ro

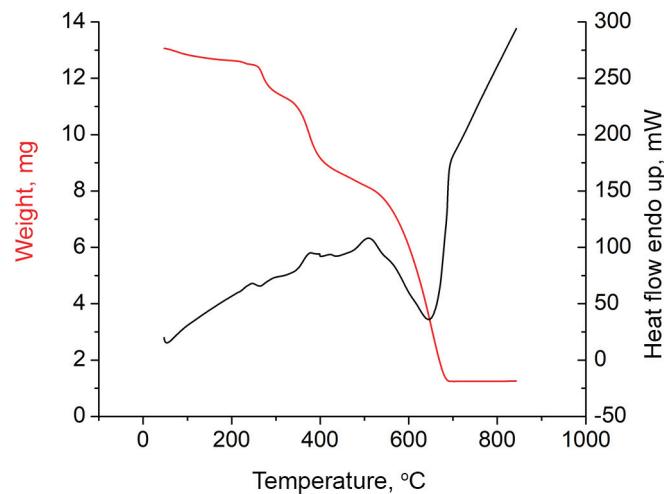


Fig. S-2. TG and DTA curves for $[\text{Ni}(\text{CHX})]\text{Br}_2 \cdot 2\text{H}_2\text{O}$ (**2**).

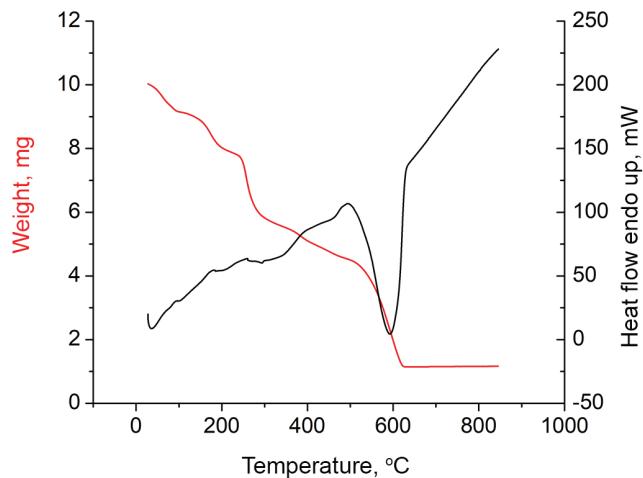


Fig. S-3. TG and DTA curves for $[\text{Ni}(\text{CHX})](\text{CH}_3\text{COO})_2 \cdot \text{C}_2\text{H}_5\text{OH}$ (**3**).

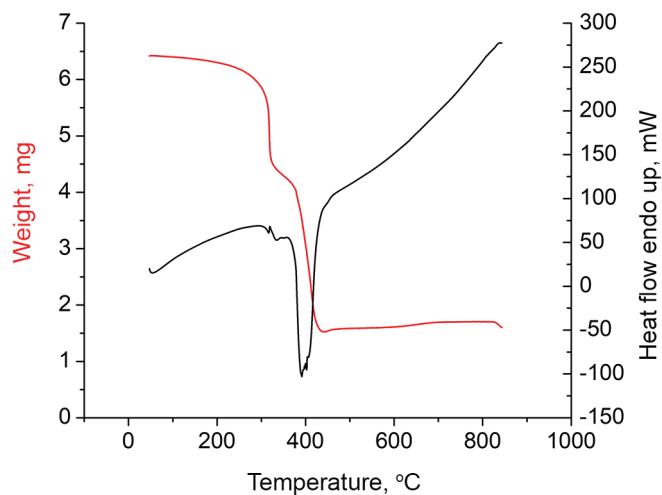


Fig. S-4. TG and DTA curves for $[\text{Pd}(\text{CHX})][\text{PdCl}_4] \cdot 2\text{H}_2\text{O}$ (**4**).

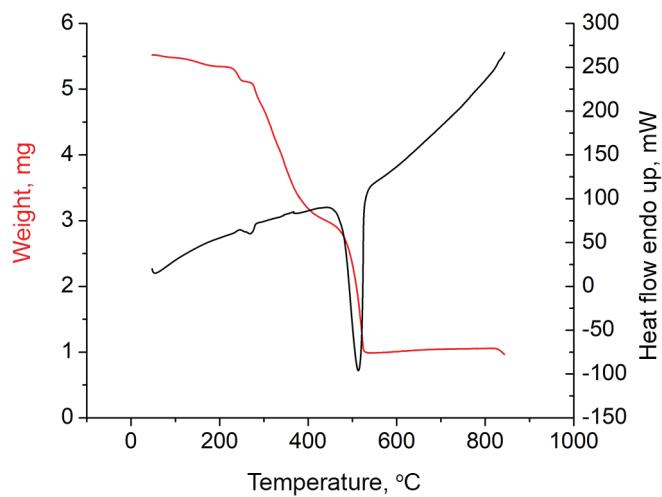


Fig. S-5. TG and DTA curves for $[\text{Pd}(\text{CHX})](\text{CH}_3\text{COO})_2$ (**5**)

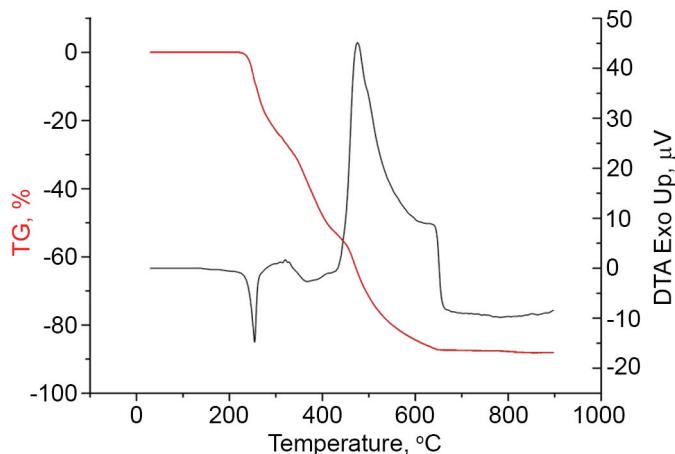


Fig. S-6. TG and DTA curves for $[\text{Cr}(\text{CHX})\text{Cl}_2](\text{CH}_3\text{COO})$ (**6**).

NMR DATA

Chlorhexidine diacetate monohydrate. $^1\text{H-NMR}$ (300 MHz, DMSO- d_6 , δ / ppm): 1.25 (4H, *bs*, 2CH₂), 1.45 (4H, *bs*, 2CH₂), 1.71 (6H, *s*, 2CH₃COO), 3.03 (4H, *bs*, 2NCH₂), 7.26, 7.43 (8H, 2*d*, *J* = 8.5 Hz, Ar-H), 7.45–7.80, 8.20–8.60 (*bs*, NH); $^{13}\text{C-NMR}$ (75 MHz, DMSO- d_6 , δ / ppm): 24.7 (2CH₃), 25.9 (2CH₂), 28.8 (2CH₂), 40.5 (2CH₂N), 122.1, 125.8, 128.8, 139.9 (4C, Ar-C), 155.1, 159.6 (C=NH), 175.9 (COO).

[Ni(CHX)]Br₂·2H₂O (**2**). $^1\text{H-NMR}$ (300 MHz, DMSO- d_6 , δ / ppm): 1.27 (4H, *bs*, 2CH₂), 1.40 (4H, *bs*, 2CH₂), 3.06 (4H, *bs*, 2NCH₂), 7.29–7.36 (8H, *m*, Ar-H), 7.70, 8.80 (2*bs*, NH); $^{13}\text{C-NMR}$ (75 MHz, DMSO- d_6 , δ / ppm): 26.0 (2CH₂), 28.7 (2CH₂), 39.5 (2CH₂N), 122.0, 128.4, 128.9, 137.5 (4C, Ar-C), 153.3, 154.8, 160.2 (C=NH).

[Pd(CHX)]/[PdCl₄]·2H₂O (**4**). $^1\text{H-NMR}$ (300 MHz, DMSO- d_6 , δ / ppm): 1.30 (4H, *bs*, 2CH₂), 1.46 (4H, *bs*, 2CH₂), 3.11 (4H, *bs*, 2NCH₂), 7.35 (8H, *bs*, Ar-H), 9.56 (1*bs*, NH); $^{13}\text{C-NMR}$ (75 MHz, DMSO- d_6 , δ / ppm): 25.8 (2CH₂), 28.1 (2CH₂), 41.6 (2CH₂N), 122.2, 125.3, 128.5, 129.9, 135.4 (4C, Ar-C), 148.5, 150.0, 160.6 (C=NH).