Supplementary Materials

Synchrotron Characterization of Hexagonal and Cubic Lipidic Phases Loaded with Azolate/Phosphane Gold(I) Compounds: A New Approach to the Uploading of Gold(I)-Based Drugs

Paola Astolfi ¹, Michela Pisani ^{1,*}, Elisabetta Giorgini ², Barbara Rossi ³, Alessandro Damin ⁴, Francesco Vita ¹, Oriano Francescangeli ¹, Lorenzo Luciani ⁵ and Rossana Galassi ⁵

- ¹ Dipartimento SIMAU, Università Politecnica delle Marche, Via Brecce Bianche, I-60131 Ancona, Italy; p.astolfi@univpm.it (P.A.); f.vita@univpm.it (F.V.); o.francescangeli@univpm.it (O.F.)
- ² Dipartimento DiSVA, Università Politecnica delle Marche, Via Brecce Bianche, I-60131 Ancona, Italy; e.giorgini@univpm.it
- ³ Elettra-Sincrotrone Trieste S.C.p.A., S.S. 14-km 163.5, Basovizza, I-34149 Trieste, Italy; barbara.rossi@elettra.eu
- ⁴ Department of Chemistry, NIS Centre and INSTM Reference Centre University of Turin, Via G. Quarello 15, I-10135 Turin, Italy; alessandro.damin@unito.it
- ⁵ Scuola di Scienze e Tecnologie, Divisione Chimica, Università di Camerino, I-62032 Via Sant'Agostino 1, Italy; rossana.galassi@unicam.it (R.G.); lorenzo.luciani@unicam.it (L.L.)
- * Correspondence: m.pisani@univpm.it; Tel.: +39-0712204263

NMR spectra

¹H and ³¹P NMR spectra on GMO/F127/C-I and C-II samples were recorded after addition of water to GMO/F127/gold compound chloroform solutions taken to dryness and sonication. C-I and C-II were added at 10% w/w with respect to GMO.

¹H NMR spectra of GMO/F127, C-I and C-II in CDCl₃ are shown in Figures S1, S2 and S3 whereas those of the corresponding complexes are shown in Figures S4 and S5. Addition of D₂O induces the broadening of the signals Figure S6 and S7.

³¹P NMR spectra of C-I and C-II in CDCl₃ are reported in Figures S8 and S9 and no variation in the chemical shift is observed when dissolved in CDCl₃ also in the presence of GMO/F127 (Figures S10 and S11).

³¹P NMR signal of GMO/F127/C-I and C-II (Figures S12 and S13) disappears when the spectra are recording in D₂O likely because C-I and C-II compounds are not in solution but entrapped within the dispersed hexagonal phase.



Figure S1. ¹H NMR of GMO/F127 in CDCl₃.



Figure S2. ¹H NMR of C-I in CDCl₃.



Figure S3. ¹H NMR of C-II in CDCl₃.



Figure S4. 1H NMR of GMO/F127/C-I in CDCl3



Figure S6. ¹H NMR of GMO/F127/C-I in D₂O







Figure S9. ³¹P NMR of C-II in CDCl₃.













