

Supporting Information

Self-Assembly and Multifaceted Bioactivity of a Silver(I)-Quinolate Coordination Polymer

Sabina W. Jaros [†], Agnieszka Krogul-Sobczak [‡], Barbara Bażanów [#], Magdalena Florek [#],
Dominik Poradowski [§], Dmytro S. Nesterov [⊥], Urszula Śliwińska-Hill ^{||}, Alexander M. Kirillov ^{⊥,^,*}
and Piotr Smoleński ^{†,*}

[†] Faculty of Chemistry, University of Wrocław, F. Joliot-Curie 14, 50-383 Wrocław, Poland.

[‡] Faculty of Chemistry, University of Warsaw, Pasteura 1, 02-093 Warsaw, Poland.

[#] Department of Pathology, Wrocław University of Environmental and Life Sciences, Norwida 31, 50-375 Wrocław, Poland.

[§] Department of Biostructure and Animal Physiology, Wrocław University of Environmental and Life Sciences, Koźuchowska 1, 51-631 Wrocław, Poland.

[⊥] Centro de Química Estrutural and Departamento de Engenharia Química, Instituto Superior Técnico Universidade de Lisboa, Av. Rovisco Pais, 1049-001 Lisbon, Portugal.

^{||} Department of Analytical Chemistry, Faculty of Pharmacy, Wrocław Medical University, Borowska 211 A, 50-566 Wrocław, Poland.

[^] Research Institute of Chemistry, Peoples' Friendship University of Russia (RUDN University), 6 Miklukho-Maklaya st., 117198 Moscow, Russia.

Table of Contents

Figure S1. PXRD patterns of compound 1	3
Figure S2. IR spectrum of 1	4
Figure S3. ¹ H NMR spectrum of 1 (D ₂ O).....	4
Figure S4. ³¹ P{ ¹ H} NMR spectrum of 1 (D ₂ O).....	4
Figure S5. ¹ H NMR spectrum of 1 (D ₂ O, after one week).....	5
Figure S6. ³¹ P{ ¹ H} NMR spectrum of 1 (D ₂ O, after one week).....	5
Figure S7. ³¹ P{ ¹ H} NMR spectrum of 1 (DMSO- <i>d</i> ₆ , after one day).....	5
Figure S8. ESI-MS(+) spectrum of 1	6
Figure S9. ESI-MS(-) spectrum of 1	6
Figure S10. Oxygen uptake plot for autoxidation of micelar system without any additive.....	6
Figure S11. Oxygen uptake plot for autoxidation of micelar system in the presence of 1	7
Figure S12. Oxygen uptake plot for autoxidation of micelar system in the presence of PTA.....	7
Figure S13. Oxygen uptake plot for autoxidation of micelar system in the presence of H ₂ quin.....	8
Figure S14. CD spectra of the HSA- 1 systems.....	8
Table S1. Binding and thermodynamic parameters of the interaction of HSA with 1	9

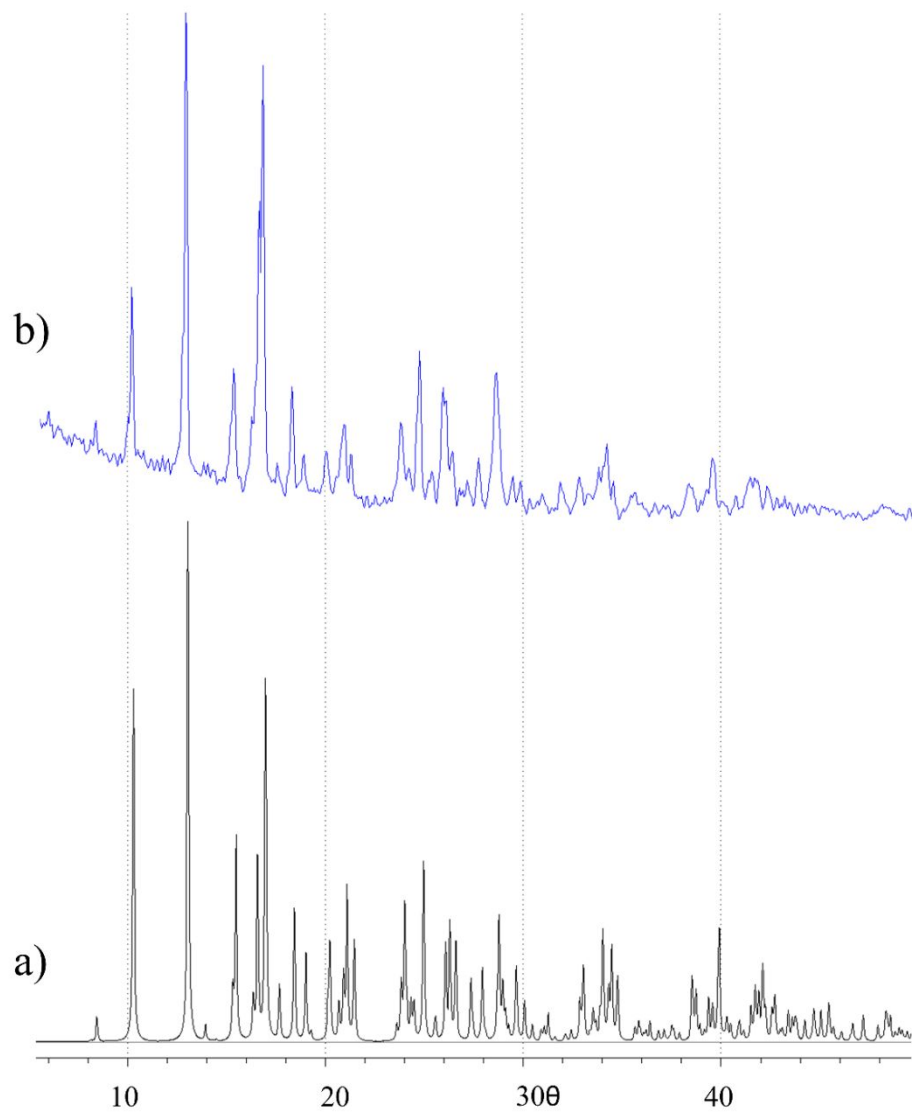


Figure S1. PXRD patterns of compound **1**: (a) calculated from the single crystal structure, (b) bulk microcrystalline product.

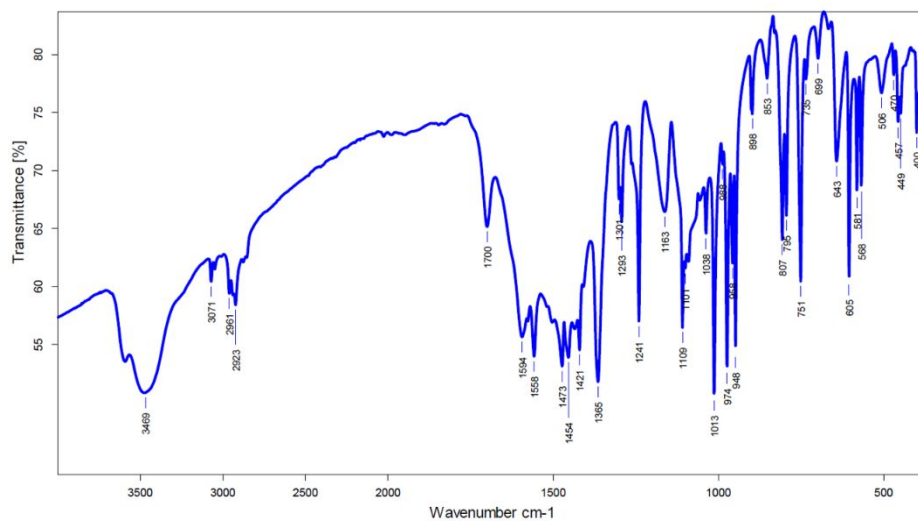


Figure S2. IR spectrum of **1**.

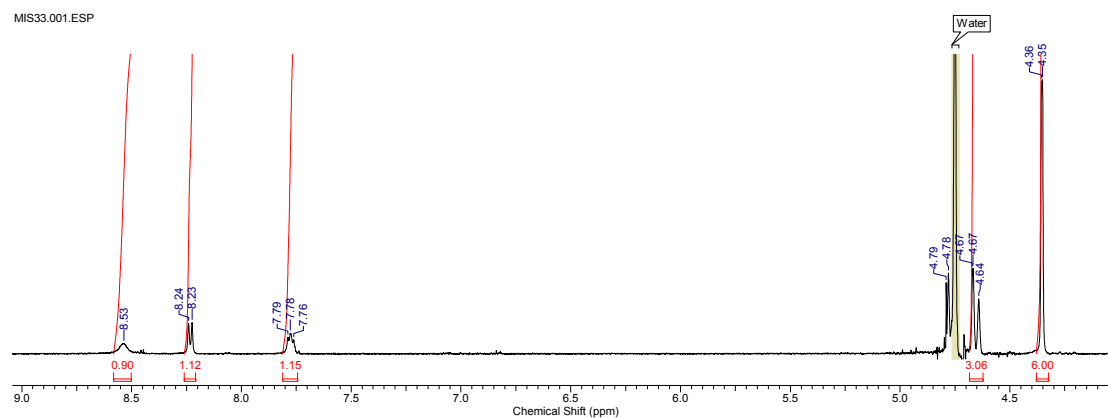


Figure S3. ¹H NMR spectrum of **1** (D₂O, r.t., Bruker 500 AMX).

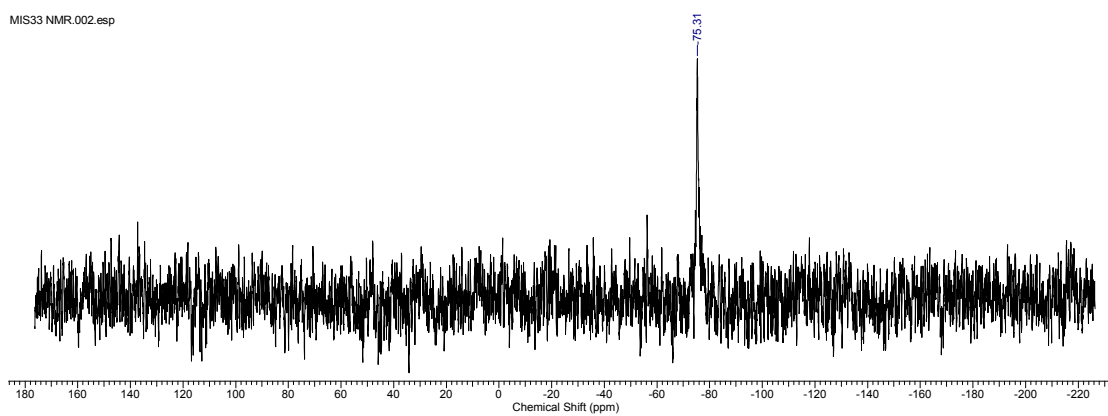


Figure S4. ³¹P{¹H} NMR spectrum of **1** (D₂O, r.t., Bruker 500 AMX).

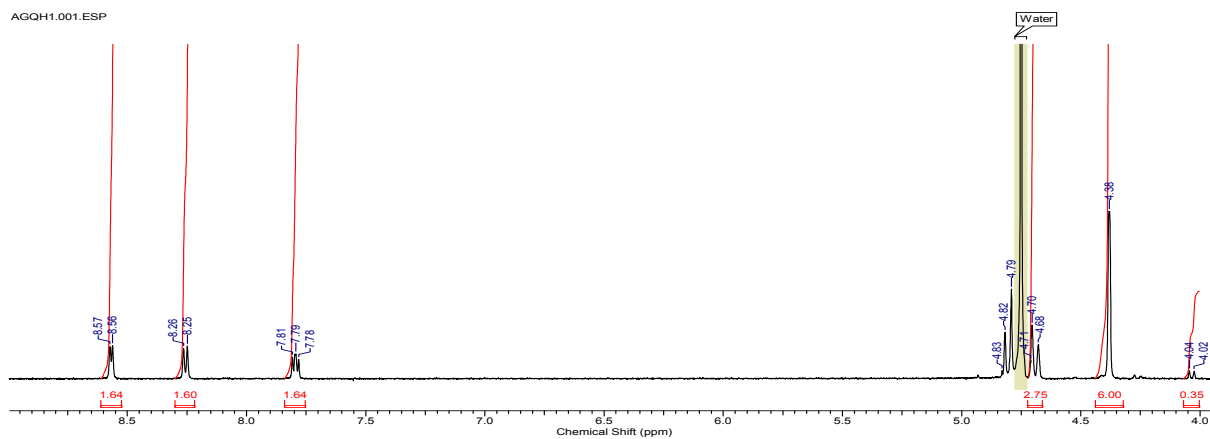


Figure S5. ^1H NMR spectrum of **1** (D_2O , r.t., Bruker 600 AMX, after one week).

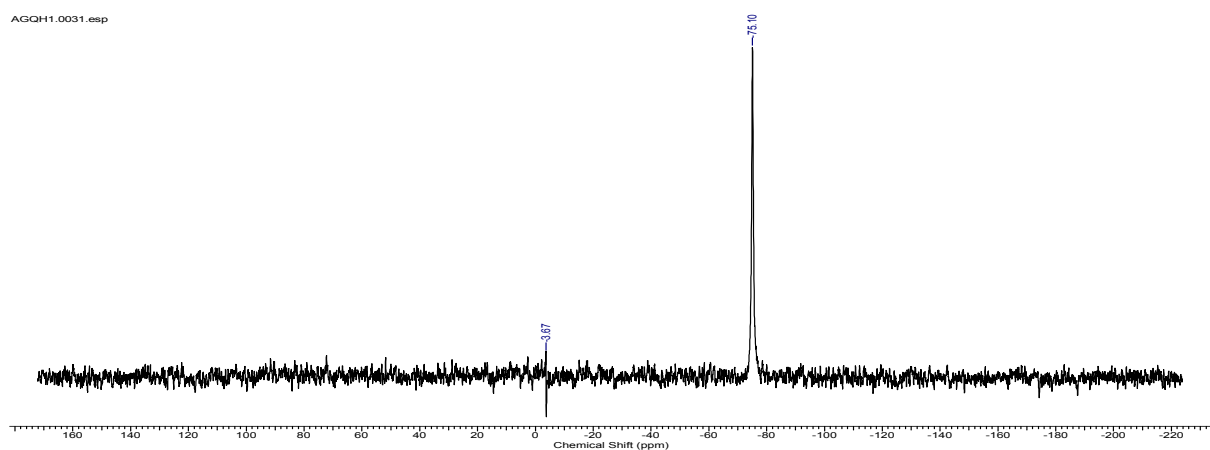


Figure S6. $^{31}\text{P}\{^1\text{H}\}$ NMR spectrum of **1** (D_2O , r.t., Bruker 600 AMX, after one week).

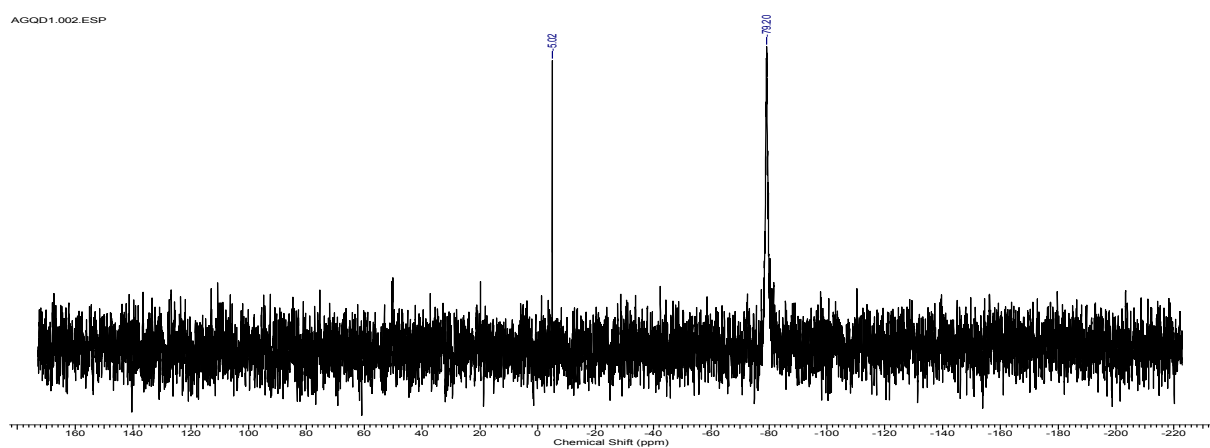


Figure S7. $^{31}\text{P}\{^1\text{H}\}$ NMR spectrum of **1** ($\text{DMSO-}d_6$, r.t., Bruker 600 AMX, after one day).

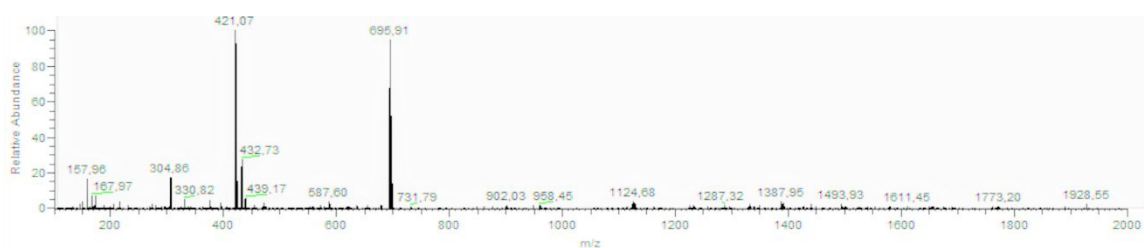


Figure S8. ESI-MS(+) spectrum of **1**.

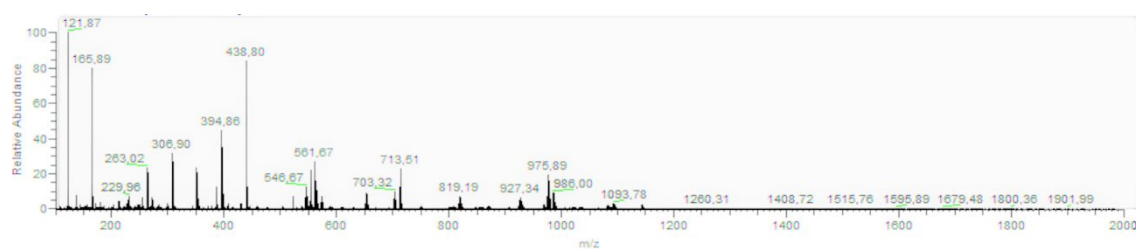


Figure S9. ESI-MS(-) spectrum of **1**.

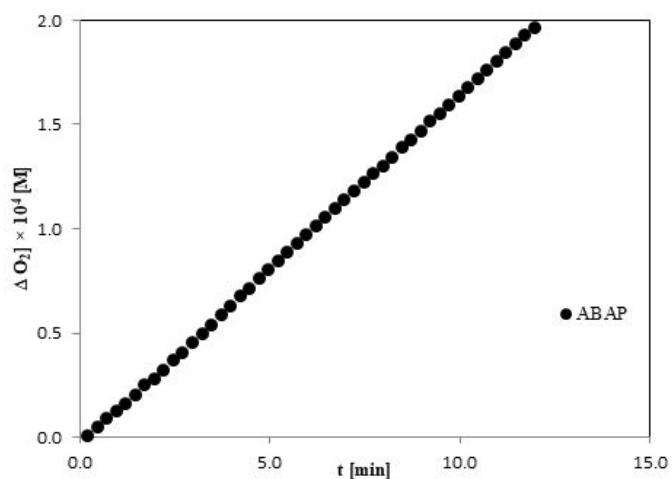


Figure S10. Oxygen uptake for autoxidation of micellar system initiated with ABAP at 37 °C, pH 7.0 Autoxidation without any additive. Final concentration: LinMe 2.74 mM, Triton X-100 8 mM).

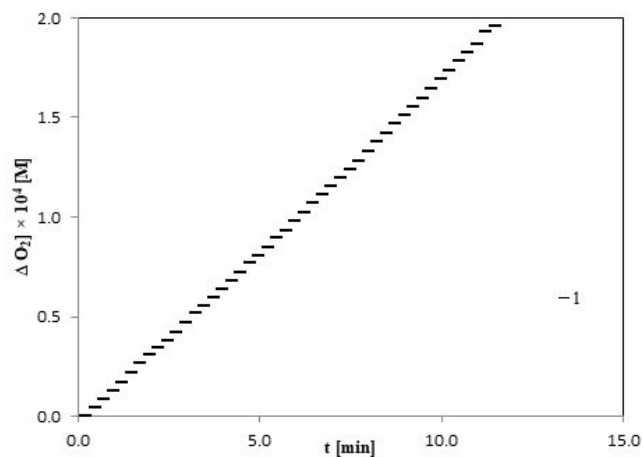


Figure S11. Oxygen uptake for autoxidation of micellar system initiated with ABAP at 37 °C, pH 7.0. Autoxidation in the presence of **1** (1 μM). Final concentration: LinMe 2.74 mM, Triton X-100 8 mM).

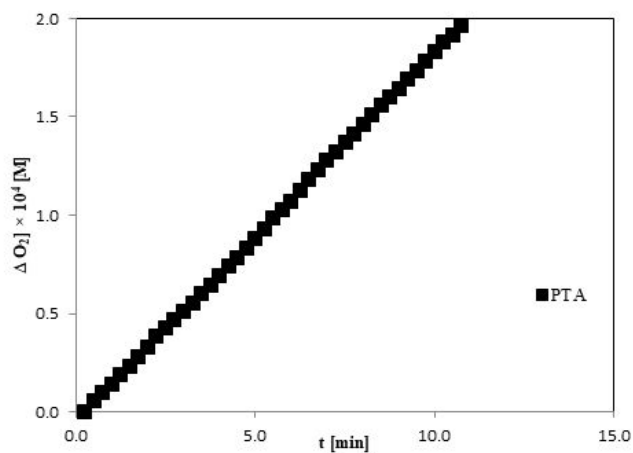


Figure S12. Oxygen uptake for autoxidation of micellar system initiated with ABAP at 37 °C, pH 7.0. Autoxidation in the presence of PTA (1 μM). Final concentration: LinMe 2.74 mM, Triton X-100 8 mM).

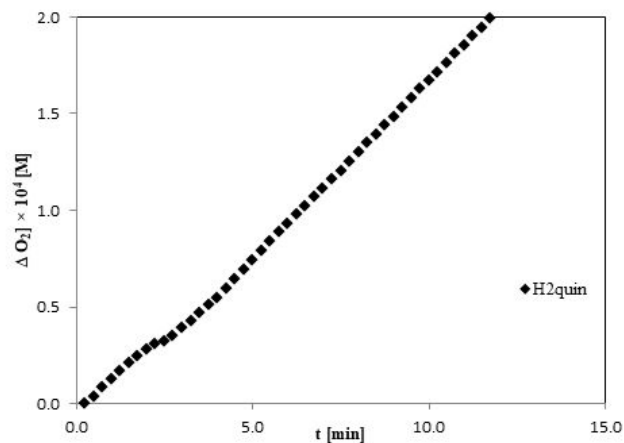


Figure S13. Oxygen uptake for autoxidation of micellar system initiated with ABAP at 37 °C, pH 7.0. Autoxidation in the presence of H₂quin (1 μM). Final concentration: LinMe 2.74 mM, Triton X-100 8 mM).

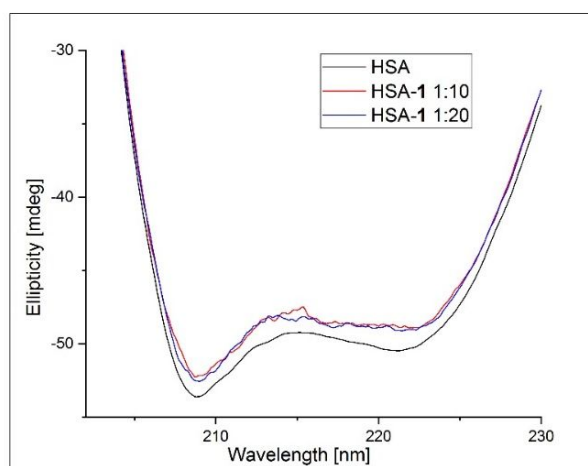


Figure S14. CD spectra of the HSA-1 systems. [HSA] = 4 μM, 310 K, 24 h.

Table S1. Binding and thermodynamic parameters of the interaction of HSA with **1**.

T [K]	K_{sv} [M^{-1}]	K_q [$M^{-1}s^{-1}$]	K_a [M^{-1}]	n	ΔH [kJ/mol]	ΔS [J/mol]	ΔG [kJ/mol]
298	3.14×10^3	3.14×10^{11}	1.19×10^4	1.08	-124.17	-338.44	-23.27
310	2.06×10^4	2.06×10^{12}	1.73×10^3	0.891			-19.20