

**X-RAY STRUCTURAL AND GAS PHASE STUDIES
OF SILVER(I) PERFLUORINATED CARBOXYLATES COMPLEXES
WITH 2,2'-BIPYRIDYL AS POTENTIAL PRECURSORS FOR CHEMICAL VAPOR
DEPOSITION (CVD)**

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SUPPLEMENTARTARY INFORMATION

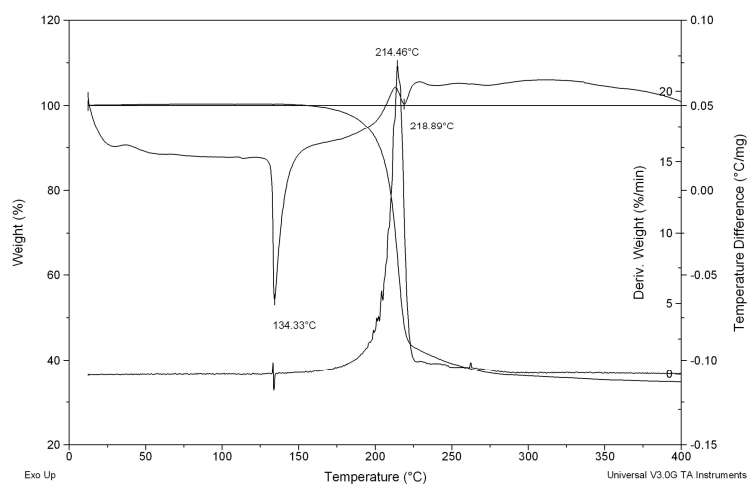


Fig. 1. TG, DTG and DTA plots for [Ag(CF₃COO)(bpy)] (**1**) (5°/min., N₂).

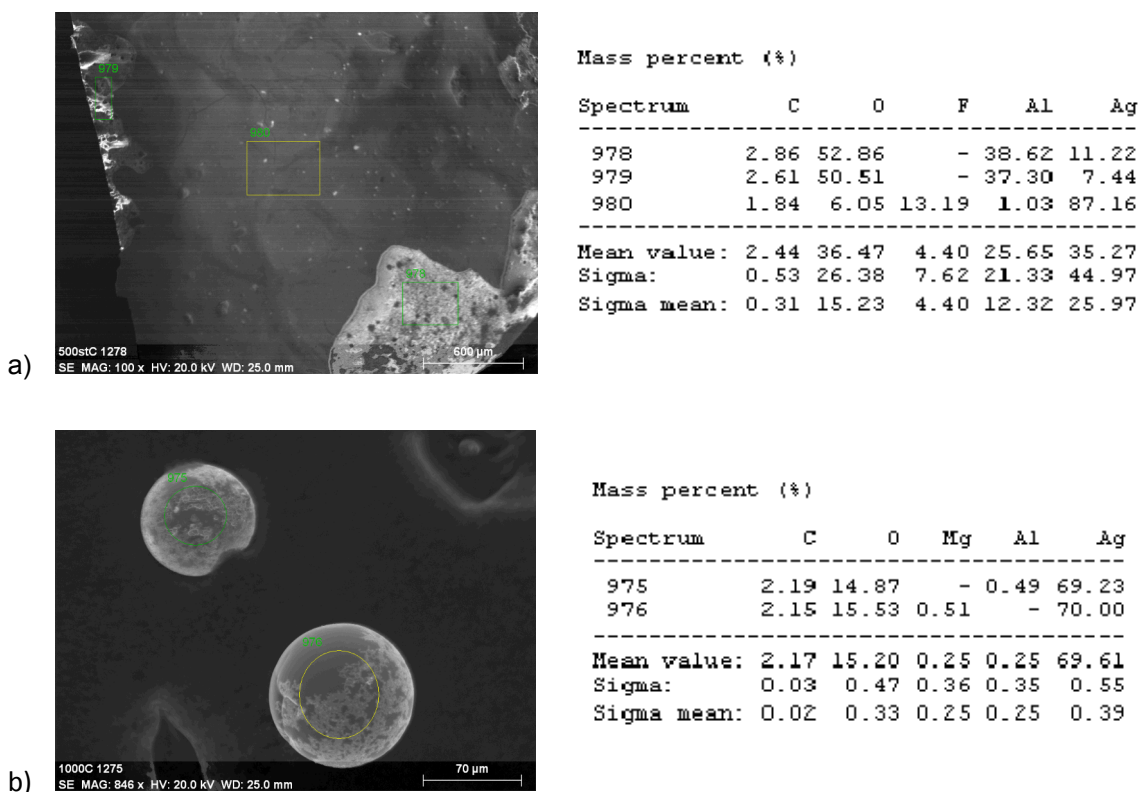


Fig. 2. SEM micrographs and EDX spectra of the decomposition product of $[Ag(CF_3COO)(bpy)]$ (**1**) on crucible surfaces. ($5^\circ/\text{min.}$, N_2): a) under heating to 500°C , b) under heating to 1000°C .

Tab. 1. ^{13}C , ^1H NMR spectra analysis for (**1**), (**2**) and (**3**) [ppm] (CD_3Cl_3).

	(1)	(2)	(3)
^1H	8.77 (A) 7.51 (B) 7.99 (C) 8.18 (D)	8.76 (A) 7.49 (B) 7.97 (C) 8.11 (D)	8.71 (A) 7.46 (B) 7.98 (C) 8.14 (D)
^{13}C	122.0 (5) 125.5 (4) 138.9 (3) 151.2 (2) 151.6 (1) 162.6 (δ COO,q) $\Delta_{\text{COO}} = 0.5$	121.9 (5) 125.7 (4) 138.9 (3) 151.3 (2) 151.5 (1) 162.6 (δ COO,t) $\Delta_{\text{COO}} = 3.4$	122.1 (5) 125.6 (4) 138.9 (3) 151.5 (2) - (1) 163.0 (δ COO,t) $\Delta_{\text{COO}} = 3.9$

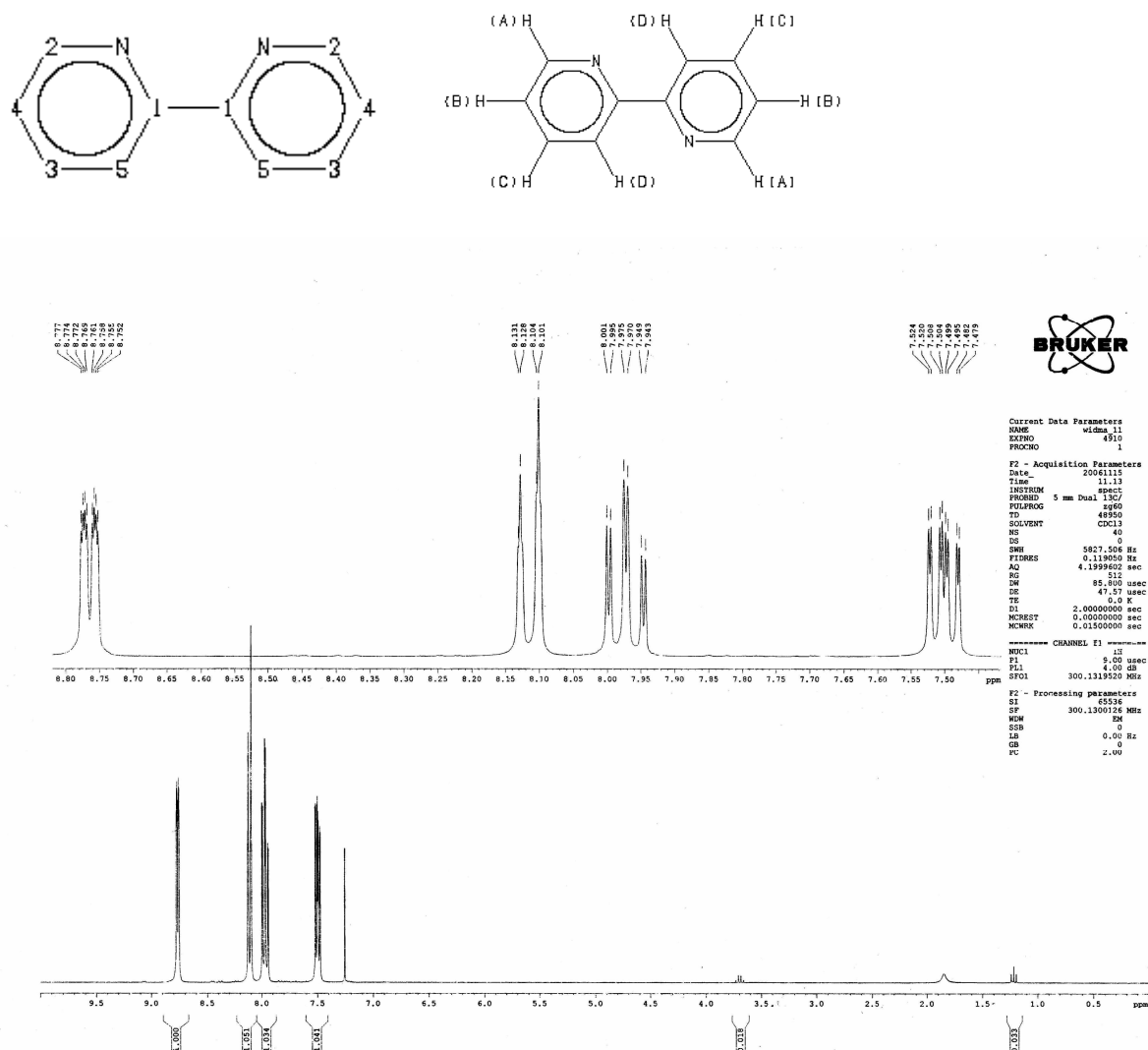


Fig. 3. ¹H NMR spectra of [Ag₂(C₂F₅COO)₂(bpy)] (**2**).

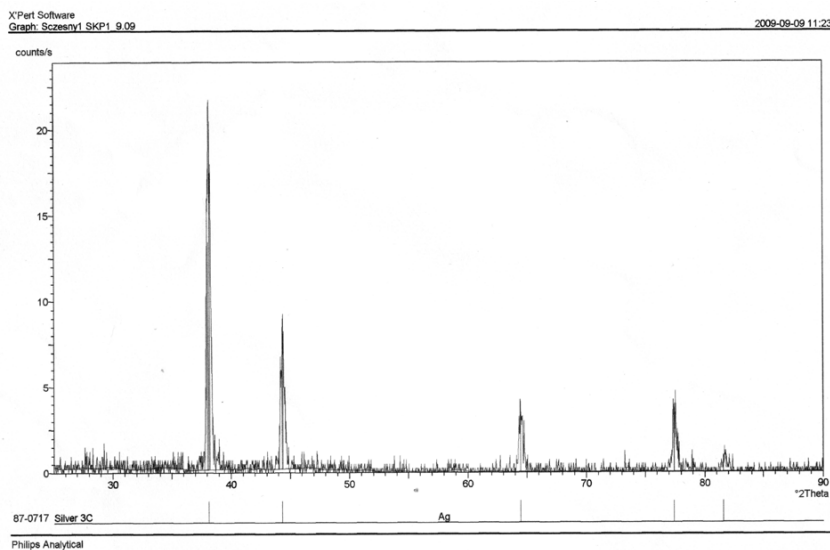


Fig. 4. XRD pattern of film obtained from [Ag₂(C₂F₅COO)₂(bpy)] (**2**) (thinner film).

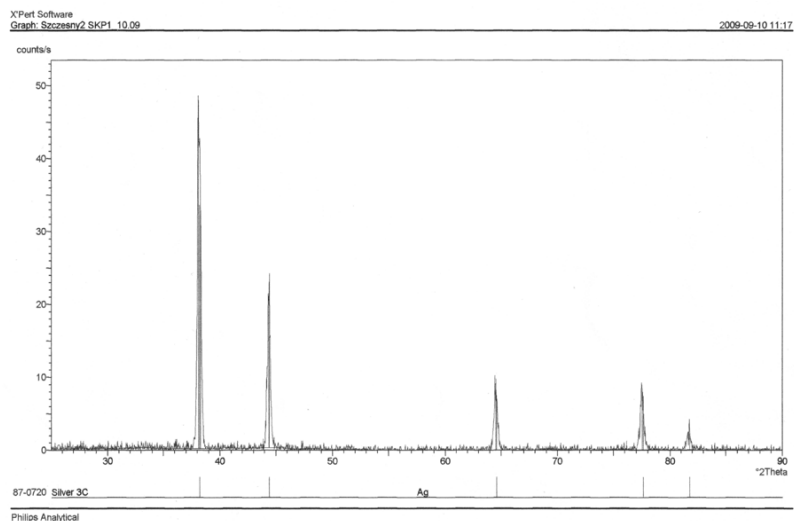


Fig. 5. XRD pattern of film obtained from $[\text{Ag}_2(\text{C}_2\text{F}_5\text{COO})_2(\text{bpy})]$ (**2**) (largest thickness).