

Supporting Information

Low Energy Electron Induced Decomposition of Gas Phase Trimethyl (Methylcyclopentadienyl) Platinum(IV) -a precursor for Focused Electron Beam Induced Deposition (FEBID)

Sarah Engmann^a, Michal Stano^b, Štefan Matejčík^{*b}, and Oddur Ingólfsson^{*a}

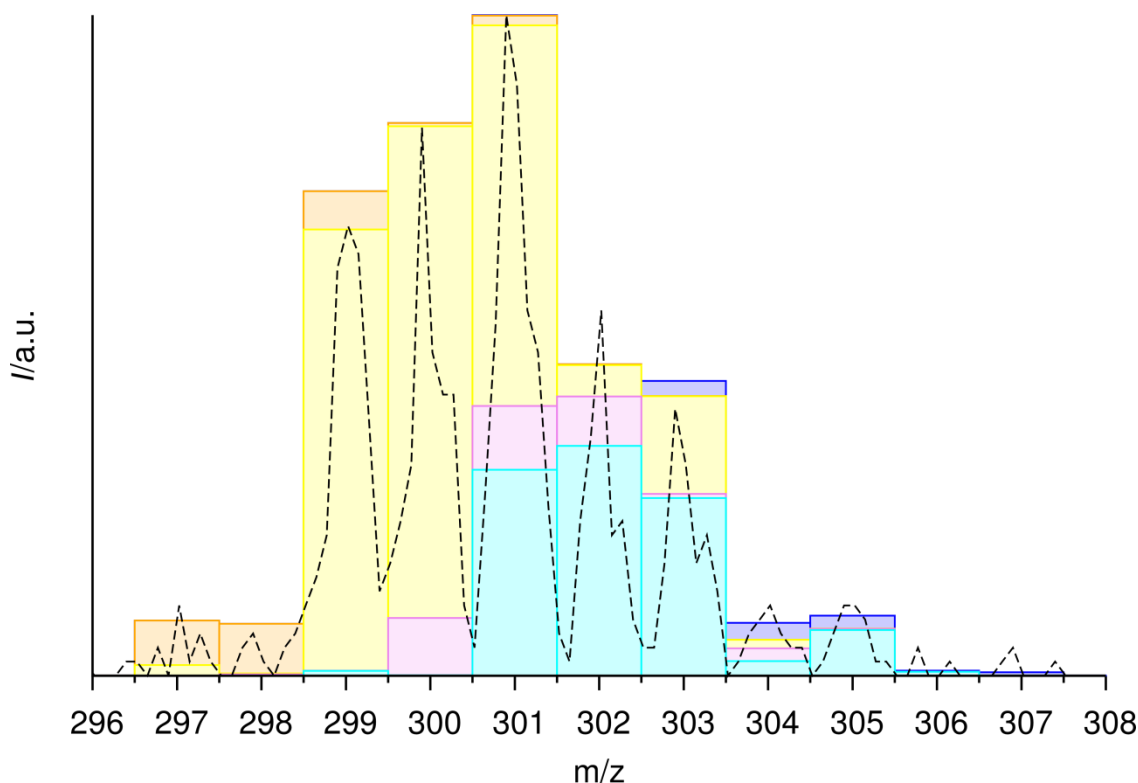


Fig. S1 Example of deconvoluted mass peaks due to overlapping Pt isotope contributions with different numbers of hydrogen atoms; C_8H_9Pt (m/z 300, 58%, yellow), $C_8H_{11}Pt$ (m/z main peak 302, 27%, cyan), $C_8H_{10}Pt$ (m/z 301, 7%, purple), C_8H_7Pt (m/z 298, 6%, orange) and $C_8H_{13}Pt$ (m/z 304, 2% blue). For clarity the experimental mass spectrum is displayed as dashed line (not to scale). The error is estimated as the difference between the relative area of the integrated experimental peaks and the simulated peaks, and is for the more intense peaks less than 10%. Mass peaks with lower intensity are subject to a lower signal/noise ratio and thus relative errors are somewhat larger for those. As the contribution to the fitted total signal is proportional to the peak intensity, the error contributions from the low intensity peaks weigh less than the contributions from the main peaks and the overall accuracy of this procedure is estimated to be about $\pm 5\%$.

Table S1 Overview of contributing fragments to observed mass peaks due to overlapping Pt isotope contributions with different numbers of hydrogen.

Peak group	Contributing fragments	m/z	Contribution/%
301	C ₈ H ₁₃ Pt	304	2
	C ₈ H ₁₁ Pt	302	27
	C ₈ H ₁₀ Pt	301	7
	C ₈ H ₉ Pt	300	58
	C ₈ H ₇ Pt	298	6
288	C ₇ H ₁₀ Pt	289	30
	C ₇ H ₉ Pt	288	50
	C ₇ H ₇ Pt	286	10
	C ₇ H ₆ Pt	285	6
	C ₇ H ₅ Pt	284	4
272	C ₆ H ₇ Pt	274	8
	C ₆ H ₆ Pt	273	40
	C ₆ H ₅ Pt	272	31
	C ₆ H ₄ Pt	271	15
	C ₆ H ₃ Pt	270	6
245	C ₄ H ₄ Pt	247	13
	C ₄ H ₃ Pt	246	47
	C ₄ H ₂ Pt	245	25
	C ₄ HPt	244	15
233	C ₃ H ₆ Pt	237	3
	C ₃ H ₅ Pt	236	3
	C ₃ H ₃ Pt	234	39
	C ₃ H ₂ Pt	233	33
	C ₃ HPt	232	22
221	C ₂ H ₅ Pt	224	24
	C ₂ H ₃ Pt	222	46
	C ₂ H ₂ Pt	221	25
	C ₂ HPt	220	5
209	CH ₃ Pt	210	17
	CH ₂ Pt	209	44
	CHPt	208	31
	CPt	207	8