## 1,6-DIMETHYL-4-HYDROXY-3-PYRIDINECARBOXYLIC ACID AND 4-HYDROXY-2-METHYL-3-PYRIDINECARBOXYLIC ACID AS NEW POSSIBLE CHELATING AGENTS FOR IRON AND ALUMINIUM

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## Supplementary material

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Figure S1: UV-vis spectra for Fe(III)/DQ2 solutions (**a**) (pH = 0.29, 0.48, 0.68, 0.80, 0.86, 0.95, 1.07, 1.14, 1.24 and 1.30) and for Al(III)/DQ2 solutions (**b**) (pH = 2.31, 2.48, 2.60, 2.80, 2.85, 2.88, 2.90, 3.02, 3.09, 3.19 and 3.34). Other details are reported in Table 1 and in the Experimental section.





Figure S2: <sup>1</sup>H NMR spectra of D<sub>2</sub>O solutions containing Al(III) ( $C_{Al(III)} = 1.1 \cdot 10^{-3}$  m) and DQ2 ( $C_{DQ2} = 3.8 \cdot 10^{-3}$  m) at pD = 2.4 (above), 3.8, 5.0, and 6.4 (below). "L", "\*", and "#", denote the signals of the free ligand, of AlLH, and of AlL<sub>2</sub>H<sub>2</sub> + AlL<sub>3</sub>H<sub>3</sub>, respectively. "i" are impurities of DQ2. The sensitivity of spectra in the aromatic zone was enhanced by a factor 5.