Supplementary Information

Calix[6]arene-picolinamide extractants for radioactive waste treatment: effect of modification of the basicity of the pyridine N atom on the extraction efficiency and An/Ln separation

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Table SI-1. Conformational Parameters ϕ and χ (°) of the calix[6]arene derivative **5** in the **5**·2DMSO complex (the *Symbolic Representation* of the molecular conformation is C_i ++,-+,-+), and dihedral angles δ(°) between the reference plane **R** (the weighted least squares plane through the CH_2 bridging groups) and the planes of the aromatic rings (**A**,**B**,**C**,**A'**,**B'**,**C'**) in the host according to standard rules for calixarenes.

	Conformational Parameters (°)		Dihedral Angles (°)	
	ϕ	χ		δ
A-B	91.6 (3)	89.8(4)	**A-R**	71.0(6)
B-C	-33.6(5)	101.0(5)	**B-R**	283.8(8)
C-A'	-94.7(5)	22.3(7)	**C-R**	217.7(8)
A'-B'	-91.6(6)	-89.8(4)	**A'-R**	289.0(6)
B'-C'	33.6(5)	-101.0(5)	**B'-R**	76.2(8)
C'-A	94.7(5)	-22.3(7)	**C'-R**	142.3(8)

Figure SI-1. Distribution coefficients for Eu(III) (D_{Eu}) *vs*. acid concentration of the aqueous phase in the extraction to a mixture of NPHE/DCE = 70:30 v/v solutions of ligands **1-5** ($1 \cdot 10^{-3}$ mol·L^{-1}) and BrCosan ($2 \cdot 10^{-3}$ mol·L^{-1}).