## Supporting information belonging to the paper

"Synthesis and properties of dendrimers possessing the same fluorophore(s) located either peripherally or off-centre"
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General information. All manipulations were carried out with standard high-vacuum and dry-argon techniques. The solvents were freshly dried and distilled (THF and ether over sodium/benzophenone, pentane and $\mathrm{CH}_{2} \mathrm{Cl}_{2}$ over phosphorus pentoxide). References for NMR chemical shifts are $85 \% \mathrm{H}_{3} \mathrm{PO}_{4}$ for ${ }^{31} \mathrm{P}$ NMR and $\mathrm{SiMe}_{4}$ for ${ }^{1} \mathrm{H}$ and ${ }^{13} \mathrm{C}$ NMR (" t " means pseudo triplet). The attribution of ${ }^{1} \mathrm{H}$ and ${ }^{13} \mathrm{C}$ NMR signals has been done using $J_{\text {mod }}$, twodimensional HMBC and HMQC , broad band or $\mathrm{CW}{ }^{31} \mathrm{P}$ decoupling experiments when necessary. The numbering used for NMR is shown in Figure 6.

Absorption and fluorescence measurements were performed in solution at room temperature in distilled dichloromethane or spectrophotometric THF. Solvents are often trapped inside dendrimers; their total removal is possible, but precludes to dissolve again the dendrimers. Thus the amount of solvents is measured (generally by ${ }^{1} \mathrm{H}$ NMR) and taken into account for the measurement of $\varepsilon_{\text {max }}$.

| Compound 1 | ${ }^{1} \mathrm{H}$ |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |


さとロて「「
EbC!
$\angle 91 \angle!$
$6 \angle 8 \cdot 5$
ع668.2
802'こ

EG9I'G
GLLL. 9
8Е6L ${ }^{\prime} 9$
SOGI $\angle$
ยย8ะ' $\angle \square$
9เGe $\angle \square$
$0 \angle 9 E^{\circ} \angle$
60LE' $\angle 7$
TVLE $\angle 1$
モLBE $\angle \rightarrow$
ESBE L
E068. $\llcorner$
8 86E. $L$
- COb
$\checkmark \angle O 0^{\circ} \angle$
$\angle \mathrm{LSF} \mathrm{C}^{\circ} \mathrm{CO}^{-}$

$6190^{\circ} \angle-$
2 $\angle 90^{\circ} \angle$
$02 \angle \sigma^{\circ} \angle-$
$6 S \angle \sigma^{\circ} \angle-$
udd



Compound 2 $\quad{ }^{1} \mathrm{H}$


Compound 4-G $\underbrace{}_{0}$

Compound 4-G








Compound 4-G3

Compound 5-G


| Compound 6-G ${ }_{\mathbf{0}}$ | ${ }^{1} \mathrm{H}$ |  |
| :---: | :---: | :---: |
|  |  |  |
|  | acetone <br> $\mathrm{H}_{2} \mathrm{O}$ $\qquad$ $\qquad$ |  |


















Enlargement of part of the ${ }^{31} P$ NMR spectrum of compound 6-G2, corresponding to the $P(S)$ groups and showing the non symmetry


Crystal structure of compound $1^{\prime}$,
showing the packing and the interactions favouring the flattening


