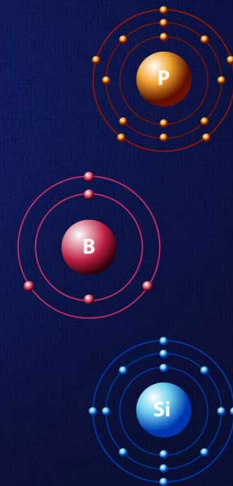


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Playing a bit with silicon and much with phosphorus for the synthesis of dendrimers. Properties and uses.

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Dendrimers are macromolecules constituted of branching units arranged radially around a central core, which have many different properties, in particular for catalysis, materials and biology [1]. We generally synthesize dendrimers having a uniform internal structure, constituted of phosphorus at each branching points. However, we can also synthesize dendritic compounds incorporating silicon, together with phosphorus in some parts of their structure [2], in particular for uses as hybrid materials and materials for trapping CO₂ [3], and for studying antibacterial properties [4], interaction with serum proteins, and anti-inflammatory properties [5]. 3 examples of dendrimers constituted of both silicon and phosphorus are displayed in the Figure.

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