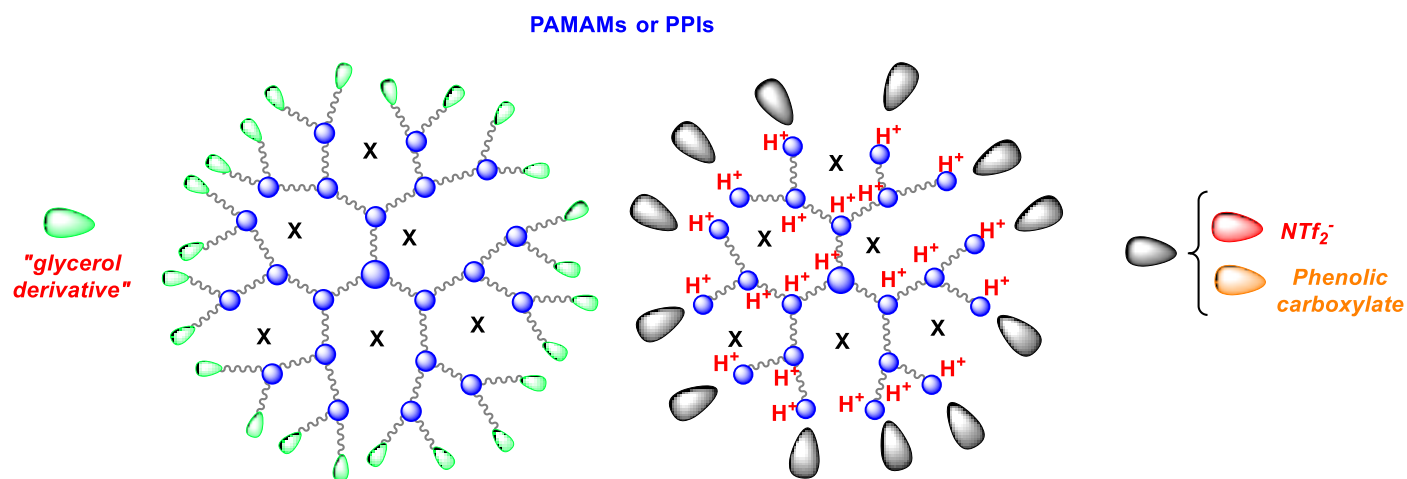


# Encapsulation of organic or inorganic compounds in original biobased dendrimers

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Since a few years, our team is interested in developing dendrimers using different biosourced derivatives (glycerol or derivatives and phenolic acids) whose valuation is a prime research topic within our region of France. Some glycerodendrimers or ionic antioxidant dendrimers have been easily obtained and fully characterized. The aim of this presentation is to describe the synthesis and the characterization of these new dendrimers. Their ability to encapsulate organic or inorganic compounds will be described and will prove their potential uses in various application domains.



**X : organic compounds / metallic salts, complexes or nanoparticles**

## References :

- \* S. Balieu, A. El Zein, R. De Sousa, F. Jérôme, A. Tatibouët, S. Gatard, Y. Pouilloux, P. Rollin, S. Bouquillon *Adv. Synth. Catal.* 2010, 352, 1826.
- \* S. Balieu, C. Cadiou, A. Martinez, J.-M. Nuzillard, J.-B. Oudart, F.-X. Maquart, F. Chuburu, S. Bouquillon *J. Biomed. Mater. Part A* 2013, 101A, 613.
- \* B. Menot, J. Stopinski, A. Martinez, J.B. Oudart, F.X. Maquart, S. Bouquillon *Tetrahedron* 2015, 71, 3439.
- \* S. Hayouni, A. Robert, C. Maes, A. Conreux, B. Marin, A. Mohamadou, S. Bouquillon. *New J. Chem.* 2018, 42, 18010.
- \* C. Maes, B. Menot, S. Hayouni, A. Martinez, M.-L. Fauconnier, S. Bouquillon. *ACS Omega* 2022, 12, 10277.
- \* K. Bacha, C. Chemotti, J.-C. Monboisse, A. Robert, A. L. Furlan, W. Smeralda, C. Damblon, J. Estager, S. Brassart-Pasco, J.P. Mbakidi, J. Pršić, S. Bouquillon, M. Deleu. *Molecules* 2022, 27, 8022.
- \* K. Bacha, J. Estager, S. Brassart-Pasco, C. Chemotti, A.E. Fernandes, J.P. Mbakidi, M. Deleu, S. Bouquillon. *Polymers* 2022, 14, 3513.