## INTERACTION OF POLIAMIDOAMINES (PAMAM) DENDRIMERS WITH METAL IONS AND ITS PRACTICAL APPLICATION

## Summary

Dendrimers are hyper branched and three-dimensional polymers. They possess many interesting biological, photophysical and chemical properties. It is shown that dendrimers can be used as fluorescence sensors in analytical tests to detect different metal ions (also lanthanide) and can be considered as modern and very sensitive bioindicators. These polymers could be also applied as chelators of metal ions of potential application in environmental protection. Metallodendrimers (metal-containing dendrimers) could be used in modern biomedical sciences, for example in radiotherapy or clinical imaging. The interaction of PAMAM dendrimers with metal ions may underlie the development of modern analytical or diagnostic techniques and high efficiency environmental protection technologies.