

# Characterization of cobalt based TPP-bipy coordination polymer

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Metalloporphyrin systems are one of the cornerstones on which the existence of life is based, as major biochemical, enzymatic and photochemical functions depend on the special properties of the tetrapyrrolic macrocycle [1]. The possibility of introducing porphyrin units into MOFs (metal-organic frameworks) increases the variety of new materials based on these macrocycles. During the last years, cobalt porphyrins are well-known to be prominent catalysts for oxygen reduction reactions (ORR) [2] and in order to obtain materials which provide new properties our research group is working with different combinations of metalloporphyrins and organic ligands [3].

The work herein presented aims to the characterization of [CoTPP(bipy)]·[CoTPP]<sub>0.22</sub>·TPP<sub>0.78</sub> (TPP= *meso*-tetraphenylporphyrin and bipy = 4,4'-bipyridine) compound in order to know the thermal, electronic and catalytic properties of these new porphyrin-based coordination polymer.

## References

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