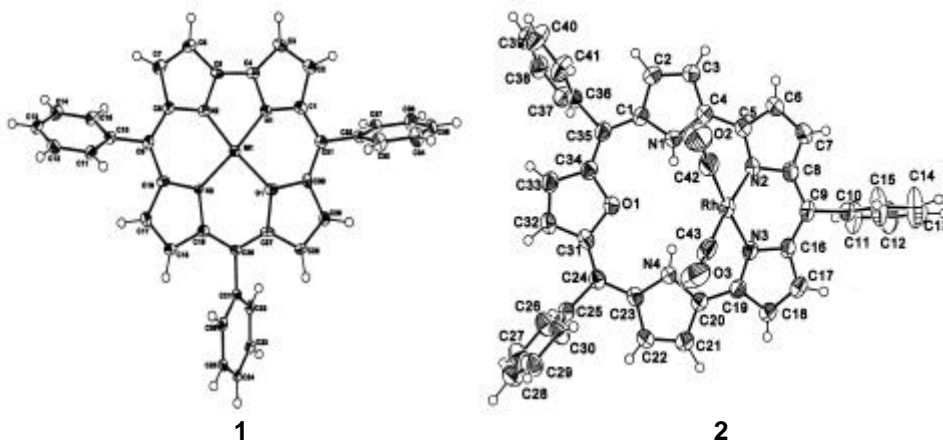


First examples of metal derivatives of modified corrole and expanded corrole

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In recent years, though the importance of expanded porphyrins has been highlighted, there are only a few reports on contracted porphyrins (corroles) and their expanded derivatives. This difficulty has been attributed to the non-availability of easy and efficient methodologies to synthesise them in gram quantities^{1,2}. Very recently, we were able to synthesise modified corroles as well as their expanded derivatives by a novel method involving α - α coupling reactions. In this presentation, the details of the synthetic methodology, spectral and structural data are discussed in terms of their electronic structure and coordination behaviour. Specifically, Ni(II) and Cu(II) bind oxa corrole(1) with the participation of all the heteroatoms while the Rh(I) complex binds only to one imino and one amino nitrogens. On the other hand, Rh(I) complex of expanded corrole(2) shows a square planar coordination with three heteroatoms still available for coordination.



References

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