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## Assembly of Heterobimetallic Pt<sup>II</sup>-Au<sup>I</sup> Complexes with 1,1-Bis(diphenylphosphino)methane Ligand: Luminescence Properties

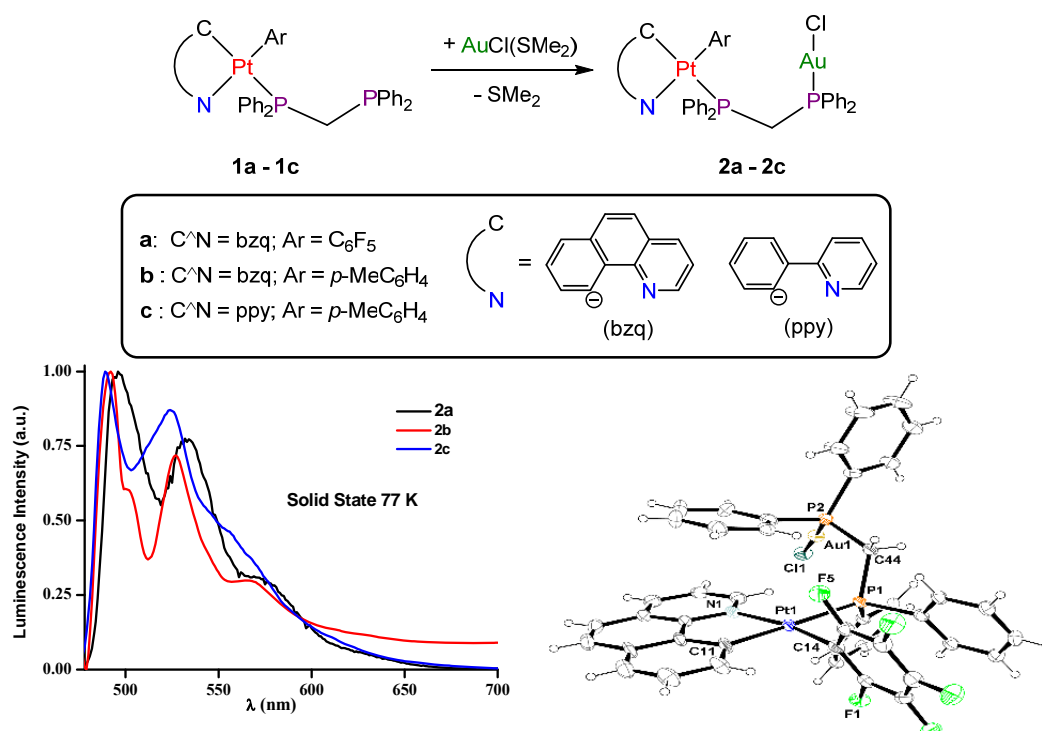
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A strategy in the field of optoelectronic consists in the design of heterobimetallic complexes bearing diverse metal centers with distinct photophysical properties [1]. This approach is aimed at exploiting the possible synergism existing among the individual metal centers, which may contribute to overcome the thermally accessible deactivating states [2]. The underlying rationale is that the incorporation of two metals into the same molecule may greatly modify and/or improve the emissive behaviour of the resulting species [3].

Following our research on synthesis of the heterometallic complexes, in this contribution we report on the preparation, characterization and optoelectronic properties of some bimetallic Pt<sup>II</sup>-Au<sup>I</sup> complexes, containing a cycloplatinated(II) moiety and a gold(I) chloride unit linked through the diphosphane ligand, 1,1-bis(diphenylphosphino)methane (dppm).



### References

- [1] J. R. Berenguer, E. Lalinde, M. T. Moreno, *Coord. Chem. Rev.*, **2018**, 366, 69-90.
- [2] R. Muñoz-Rodríguez, E. Buñuel, J. A. G. Williams, D. J. Cárdenas, *Chem. Commun.*, **2012**, 48, 5980-5982.
- [3] J. Forniés, N. Giménez, S. Ibáñez, E. Lalinde, A. Martín, M. T. Moreno, *Inorg. Chem.*, **2015**, 54, 4351-4363.