



národní
úložiště
šedé
literatury

Transition Metal Complexes with Aza[n]phenacene Ligands.

Váňa, Lubomír
2019

Dostupný z <http://www.nusl.cz/ntk/nusl-395990>

Dílo je chráněno podle autorského zákona č. 121/2000 Sb.

Tento dokument byl stažen z Národního úložiště šedé literatury (NUŠL).

Datum stažení: 10.04.2024

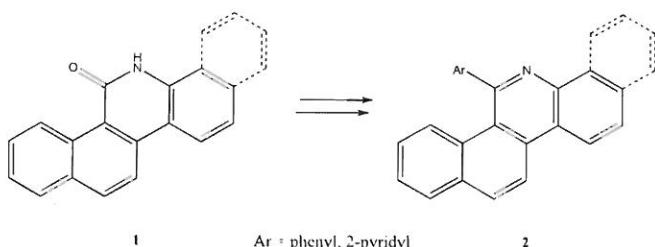
Další dokumenty můžete najít prostřednictvím vyhledávacího rozhraní nusl.cz.

Transition Metal Complexes with Aza[n]phenacene Ligands

Student: Ing. Lubomír Váňa
Supervisor: Dr. Ing. Vladimír Církva

Chelating ligands are important in the development of both classical coordination chemistry and modern material chemistry employing transition-metal or lanthanides based compounds. This wide group of compounds is interesting because of its efficient luminescent properties and potential applications in organic light-emitting diodes (OLEDs) and other electroluminescent technologies.^{1,2}

This work is aimed at the synthesis of new aza[n]phenacenes 2 ($n = 4$ or 5 , Ar = phenyl or 2-pyridyl), where [n]phenacenes 1 with δ -lactam ring are used as starting material (Scheme 1). The resulting compounds are subsequently investigated in terms of their complexation properties with transition metals (Cu, Ni, Co, Pt, Ir) (e.g. Figure 1) due to their potential application as photoluminescent complexes.



Scheme 1. Synthesis of aza[n]phenacene ligands

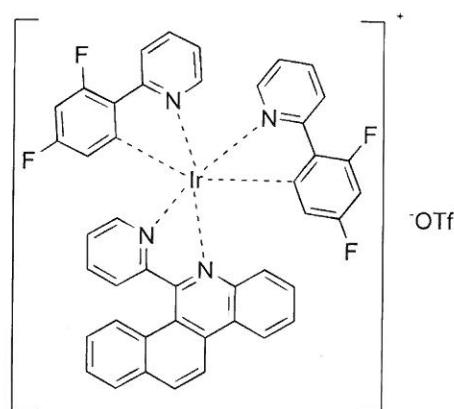


Figure 1. Iridium complex

Acknowledgement
The financial support of the Grant Agency of the Czech Republic No. 17-02578S is gratefully acknowledged.

References

1. Chi, Y.; Chou, P.-T. *Chem. Soc. Rev.* **2010**, 39, 638–655.
2. Lowry, M. S.; Bernhard S. *Chem. Eur. J.* **2006**, 12, 7970–7977.