## Project 2.5 Ambipolar polyaromatic compounds in the shape of a bowl, containing precisely localized admixtures of nitrogen atoms. A unique class of highly efficient OLED emitters (BOwLEDs)

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## **Background:**

The prospective candidate will be involved in the synthesis of aromatic compounds. The obtained compounds will be analyzed with common spectroscopic tools i.e. NMR, MS, IR, EA.

## Aim:

The project aims at the synthesis of bowl-shaped PAHs containing fully conjugated architectures and their regioisomeric forms, with closely assembled electron-rich and -deficient heteroatoms, thus providing an access to efficient multiresonance (MR) thermally activated delayed fluorescence (TADF) OLED emitters.

## **Requirements:**

- desirable competences,
- experience in organic synthesis and transition metal catalyzed reactions