Functional Heterocyclic □-Systems by Multicompoment and Domino Syntheses

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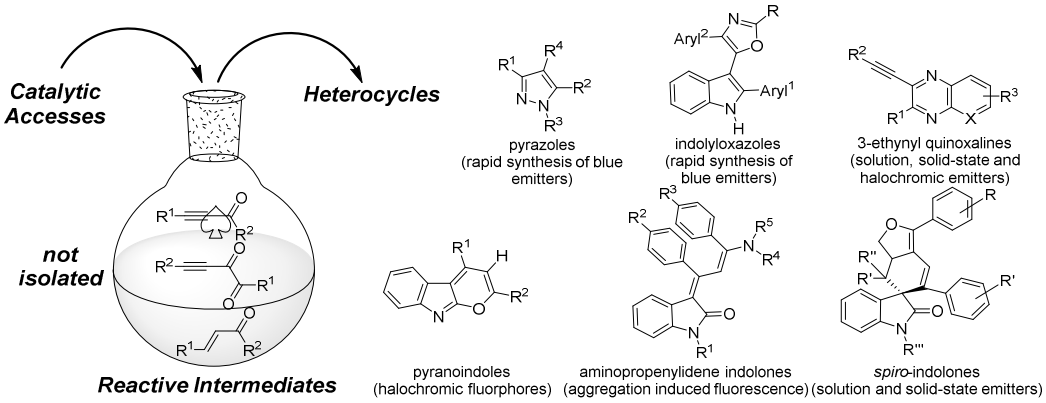
Multi-component and domino reactions are efficient and effective methods in the rapid and diversity-oriented synthesis of heterocycles. In particular, transition metal catalyzed multi-component sequences have recently gained a considerable interest.[1] Based upon transition metal catalyzed entries to ynones, diynones, and enones and sequentially Pd-catalyzed processes we have opened new avenues to one-pot syntheses of numerous classes of heterocyclic frameworks.[2] Among functional □-electron systems[3] selected luminescent heterocycles are readily accessible in a modular fashion. They display peculiar photophysical properties, such aggregation induced emission,[4] pronounced emission solvochromicity, and photoinduced charge separation in DSSC.



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