

## Polycyclic Aromatic Azomethine Ylides as Versatile Building Blocks for Unique N-Containing Polycyclic Aromatic Hydrocarbons

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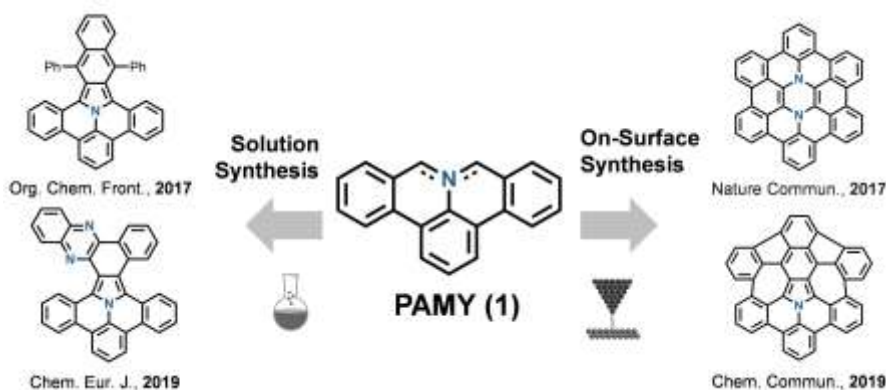
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Polycyclic aromatic hydrocarbons (PAHs) are attractive organic materials for potential applications in nano- or optoelectronics. For such applications, a steady advancement in molecular design as well as synthetic methodology is indispensable. The introduction of nitrogen atoms into a polycyclic aromatic scaffold is a powerful strategy to tailor their optical and electronic properties. However, the selective and precise incorporation of nitrogen atoms into PAHs is still challenging due to the demanding synthesis.

In 2014, our group demonstrated the synthesis of polycyclic aromatic azomethine ylides (PAMY, **1**), which is a versatile building block for the synthesis of unprecedented nitrogen-containing PAHs (N-PAHs).<sup>[1]</sup> In this work, we demonstrate the variety of the PAMY building block both in solution and on-surface synthesis (Figure 1).<sup>[2-5]</sup>

### References

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**Figure 1:** PAMY (**1**) is a versatile building block for the solution as well as on-surface synthesis of unprecedented PAHs.