

RSC Applied Interfaces

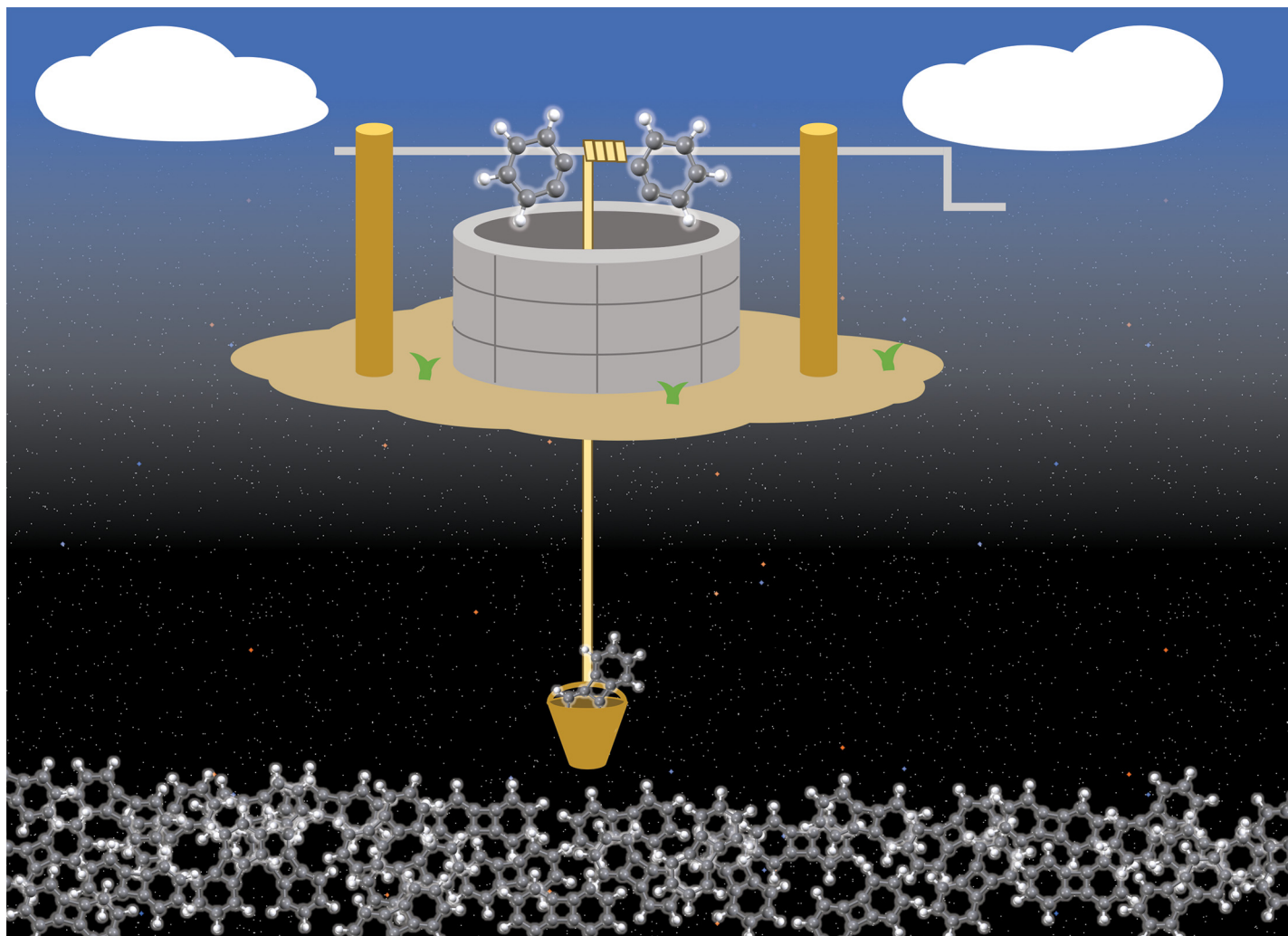
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**Interfacial and surface research
with an applied focus**

Interdisciplinary and open access

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**Fundamental questions
Elemental answers**



Showcasing research from The Computational Astrochemistry Group at Ole Miss, Department of Chemistry & Bio Chemistry, University of Mississippi, Mississippi, USA.

Polycyclic (anti)aromatic hydrocarbons: interstellar formation and spectroscopic characterization of biphenylene and benzopentalene

This article is showcasing how the association of two benzyne molecules in the gas phase leads to the creation of biphenylene in a deep energy well that is unlikely to be surmounted by subsequent processes. This molecule in this deep well also exhibits novel IR spectra typically attributed to polycyclic aromatic hydrocarbons giving even greater complexity for interstellar IR observations.

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As featured in:



See Ryan C. Fortenberry *et al.*,
Phys. Chem. Chem. Phys.,
2025, **27**, 10456.