

## **Tuning Molecular and Material Properties via Strong Light-Matter Interactions**

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Strong coupling of light and matter can give rise to a multitude of exciting physical effects through the formation of hybrid states. Molecular materials have been used increasingly for the study of strong coupling since the large molecular transition dipole moment permits the observation of Rabi splitting in the range of a few hundreds of meV at room temperature. Such large modifications in the energy levels have significant implications for molecular and material sciences which will be discussed together with the presentation of our recent research on this topic.