

lädt ein

gemeinsam mit der Gesellschaft
Deutscher Chemiker
zum

Vortrag

von Herrn

**Prof. Dr. Colin P.
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Chemistry
Columbia University*



**“Contorted
Aromatic Building
Blocks as the
Basis for
Materials”**

am: Mittwoch, 01.10.2025

um: 13:00 Uhr

WO: im Raum A12.153

Gäste sind herzlich willkommen!



TECHNISCHE UNIVERSITÄT
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**“Contorted Aromatic Building Blocks as the Basis for
Materials”**

This presentation highlights the use of contorted aromatics as the basis for materials. One series uses prototypical contorted aromatics as the building blocks for two-dimensional materials. We have found that fullerenes, one of the most exotic carbon allotropes, can be polymerized to form single crystals of layered 2D fullerenes. This material is now known as graphullerene. It is a new allotrope of carbon. Another series is the functional graphene nanoribbons (F-GNRs) synthesized via a bottom-up approach. These F-GNRs are atomically precise, defect-free, fully conjugated, and extend to lengths of several hundred nanometers. Their structural purity and ease of chemical modification enable the preparation of materials tailored for diverse advanced applications. Collectively, these advances in the synthesis and functionalization of F-GNRs open up significant opportunities for next-generation electronics, energy storage, and neurotechnologies.

