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# FeN<sub>4</sub>ユニットを有する炭素質2次元格子

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## A carbonaceous two-dimensional lattice with FeN<sub>4</sub> units

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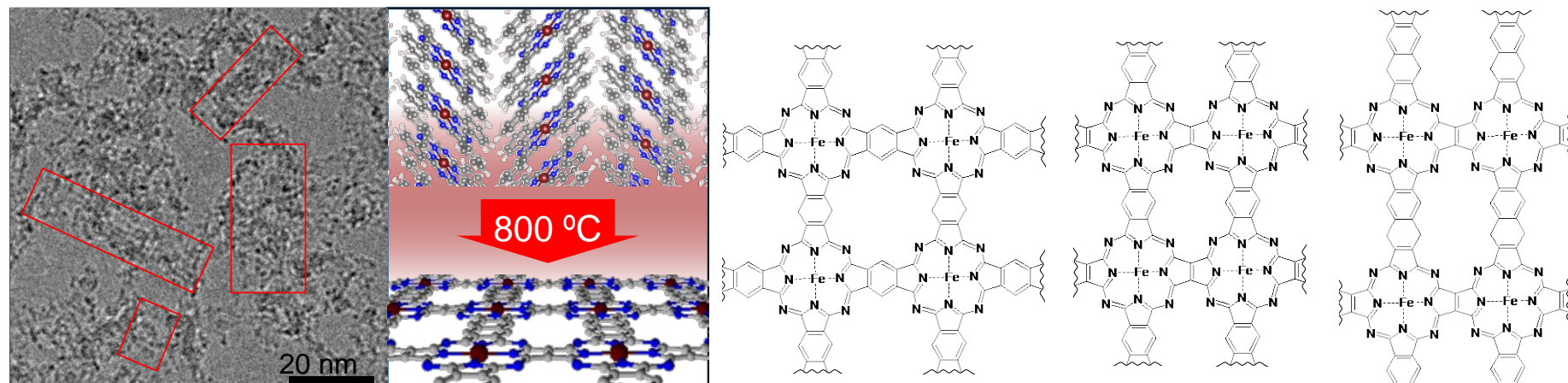


Figure (from left to right) Transmission electron micrograph of carbonaceous two-dimensional lattice with FeN<sub>4</sub> units formed on graphene, schematic diagram of its formation through sublimation, deposition, and pyrolysis at 800 °C, and possible two-dimensional models based on N K-edge X-ray absorption near-edge structure and DFT calculation results.

鉄フタロシアニンの昇華、グラフェン面上への析出、その場での熱分解により、金属を含有する2次元格子状炭素質物を作製しました。鉄フタロシアニン由来の  $\pi$  共役系の生成と成長は、グラフェン面に対して垂直に配向した状態から水平配向への転換と、窒素K殻のX線吸収端近傍構造に反映されていました。

A metal-containing carbonaceous two-dimensional lattice was formed on a graphene plane by sublimation, deposition, and pyrolysis of Fe phthalocyanine (Pc). The formation and growth of the FePc-derived  $\pi$ -conjugated planar system were reflected by its orientation conversion from the perpendicular to horizontal mode and by the N K-edge X-ray absorption near-edge structure.