Guest exchange in soft porous supramolecular network

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A soft porous supramolecular architecture, [Co(L)2(NCS)2]-2CH3OH (L = N-(2'-pyridylmethylene)-2,3-dimethylaniline) has been synthesized. The title compound is stable up to 250 °C and flexible to external stimuli, showing reversible single-crystal-to-single-crystal transformations in response to methanol, ethanol, isopropanol, acetonitrile, and ammonia, as demonstrated by X-ray crystallography, FTIR and TGA. More interestingly, the title compound exhibits various color change when exposed to different guest vapor. Such results indicated that the sensing performances.

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