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Emergent Magnetism in Mesoporous Materials¹ SHER ALAM, CHEP, and Collaborative Research with KEK, Japan, AJAYAN VINU, University of Queensland — We discuss the emergence of magnetism in Mesoporous Materials. We have obtained experimental results showing a variety of magnetic behaviors arising, by using different types of mesoporous or nanoporous templates. Since the templates allow different magnetic properties to arise naturally we have dubbed this as dynamic templating method. Our procedure and realization incidentally demonstrates the idea of Nanoarchitectonics proposed by Aono, as a MANA concept. Which, simply means to allow different nano-blocks to interact to obtain a certain desired structure and properties.

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