

2nd International Conference on

MAGNETISM AND MAGNETIC MATERIALS

September 24 - 26, 2018 | Budapest, Hungary

Young-Wan Kwon, Mater Sci Nanotechnol 2018, Volume 2

HIGH TEMPERATURE ALL ORGANIC FERROMAGNETIC MATERIALS

Young-Wan Kwon

Korea University, Korea

High-temperature organic and polymeric ferromagnetic materials have been attempted by many researchers for several decades. In the earlier studies, the intrinsic magnetism of the natural DNAs in dry state was reported and the discotic liquid crystals with a porphyrin core and iron (III) phthalocyanine intercalators showed a high-temperature ferromagnetism. In this presentation, the room temperature ferromagnetic properties of all organic composites with an ordered structure will be discussed by electron paramagnetic resonance (EPR) spectroscopy and superconducting quantum interference device (SQUID) measurement. This new finding for the magnetism of all organic compounds enables to trailblaze new high-temperature organic and polymeric ferromagnetic materials and devices.

BIOGRAPHY

Young-Wan Kwon has received his BS and MS degrees in Chemistry from Korea University, Seoul, Korea, in 1993 and 1996, respectively, and the PhD degree in Polymer Chemistry from Korea University, Seoul, Korea, in 2006. He is currently a Research Professor, KU-KIST Graduate School of Converging Science and Technology, Korea University, Seoul, Korea.

ywkwon@korea.ac.kr



Note: