International Conference on the Management of Naturally Occurring Radioactive Materials (NORM) in Industry



Contribution ID: 258 Type: Poster

Fabrication of Polymer Composites from NORM-Phosphogypsum and Thermoplastics in Vietnam: Processing, Properties and Applications

Vietnam has a large agricultural industry and is producing considerable amounts of phospahte fertilizer domestically. Approximately 1,000,000 tons NORM-phosphogypsum byproduct occure in Vietnam from domestic phosphate rock processing to mineral fertilizer at the DinhVu plant every year. This study presents the main constituent of these phosphogypsum particles (PPGS) provided by Dinh Vu DAP fertilizer plant, Hai Phong, Vietnam. The paper reviews a number of studies using PPGS granules as fillers for thermoplastics such as PVC, PE, PP, EVA and the potential applications in the field of polymer composite material manufacturing in Vietnam. The paper also mentions the biodegradability of PPGS and its composites.

Primary authors: NGUYEN, Vu Giang (Institute for Tropical Technology, Vietnam Academy of Science and Technology, 18 Hoang Quoc Viet str., Caugiay dist., Hanoi Vietnam); LAN, Ho Thi Huong (University of Economics, Hue University, 99 Ho Dac Di St., Hue, Vietnam); HANEKLAUS, Nils (Td Lab Sustainable Mineral Resources, Danube University Krems, Krems 3500, Austria); STEINER, Gerald (Td Lab Sustainable Mineral Resources, Danube University Krems, Krems 3500, Austria)

Presenter: NGUYEN, Vu Giang (Institute for Tropical Technology, Vietnam Academy of Sciemce and Technology, 18 Hoang Quoc Viet str., Caugiay dist., Hanoi Vietnam)

Session Classification: Session VI - Solutions for Residue and Waste Management

Track Classification: NORM Residue and Waste Management