

**STSM Applicant:** Ms Uche Chukwura, University of the West of Scotland, Paisley, Renfrewshire (United Kingdom)

**STSM Topic:** Evaluating hydrological controls on the migration of metallic contaminants in urban soil

**Host Institute:** National Laboratory for Civil Engineering (LNEC), Lisbon (Portugal)

**Work Plan Summary:**

The contribution of human interactions with soil often results in the addition of materials from a variety of sources with correspondingly varied physical and chemical properties. The Short-term Scientific Mission will involve a month visit to the National Laboratory for Civil Engineering (LNEC) Lisbon, Portugal to model pollutant transport on contaminated urban soil followed by analytical work for trace metals (ICP analysis) to be done in my home institution University of the West of Scotland, United Kingdom. The purpose of this STSM is to help in understanding metal leaching and release to both local groundwater and vegetables in urban allotments, as well as assessing its temporal variability. The visit will help yield gain and motivation for collaboration for my broader study; in building synergy and partnership with LNEC by supporting work in the experimental DHASol allotment at LNEC campus, gain experience of collection and analysis and additional sample collection for follow up work on soil quality evaluation, soil-plant transfer and bio-accessibility assessments that can be useful to understand the urban contaminated soil effect in food security.