ID: Type: **Poster**

and Verification Systems for Nuclear Tests with Biological Indeces.

Humankind since its inception has tried to reduce the risks of natural or anthropogenic disasters. Remote sensors, mathematical models, numerical simulations, automatic stations are among the mechanisms used to monitor and infer the study parameters (Poon and Kinoshita, 2018). However, anomalous events such as accidents or nuclear tests in a climate change scenario present serious predictive difficulties (Elmendorf et al., 2015). As a result, mechanisms for monitoring and controlling the peaceful use of nuclear energy, among other applications, are now being questioned (Lourenc et al., 2016). On the other hand, the scientific community is making great efforts to combine technology with information obtained directly from living creatures or ecological systems (J. R. Smith et al., 2017). Developing biological indexes to monitor water quality levels (Deley & Santillán, 2016), soil or air (RJ Smith et al., 2017), as well as, microbial biosensors of various types (Su et al., 2011). Due to their short life cycles, greater sensitivity to radiation (Lourenc et al., 2016), the ease of quantifying the diversity and frequency of macroinvertebrates and microorganisms, it will become an indispensable input in mathematical models. Tools that influence the design of policies to reduce the risk of nuclear disasters.

Primary author: MORENO, Celso (Escuela Superior Politécnica de Chimborazo)

Presenter: MORENO, Celso (Escuela Superior Politécnica de Chimborazo)

Track Classification: Theme 1. The Earth as a Complex System