IAEA
International Atomic Energy Agency

Joint ICTP-IAEA School on LoRa Enabled Radiation and Environmental Monitoring Sensors

ICTP

Radiation Shield Deployment

Iain Darby

Head, Nuclear Science & Instrumentation Laboratory

NAPC/PH

i.darby@iaea.org

nsil@iaea.org

https://at.linkedin.com/in/idarby

https://www.facebook.com/iain.darby.662

IAEA
International Atomic Energy Agency

Challenge 1

Working from Marco Rainone's code:

- **test your system**
- **modify the readout to display nano Sieverts per hour**

++ Can you dynamically change the display range ? ++

IAEA
International Atomic Energy Agency

Challenge 2

Using your now tested system apply your knowledge from week 2 to transmit sensor data to TheThingsNetwork:

- **How might this data be visualised?**
- **Send the dose or send pulse information?**

IAEA
International Atomic Energy Agency

Challenge 3

Contextualise your data by adding an additional sensor of your choice:

- **Send all data to TheThingsNetwork**
- **Collect radiation data only under specific conditions e.g. when it's dark, or when it's hot**

!! Think about how the shield works when choosing your additional sensor!!

IAEA
International Atomic Energy Agency

ReNuAL Renovation of the Nuclear Applications Laboratories

Department Nuclear Sciences & Applications

Division Physical & Chemical Sciences

Physics Section

Further Information: nsil@iaea.org

Thank you!