# NKS GammaSkill – Training event – 26 September 2023

A one-day training event will be organized on Tuesday 26 September 2023, directly before the GammaSkill seminar (27-28 September 2023). The training event will focus on fundamentals of gamma-ray spectrometry as applied in a typical radioanalytical laboratory.

The intended target audience for the training day are students and young scientists, technical staff who are new to the field of gamma-ray spectrometry as well as more experienced practitioners who would like to have a repetition of key topics without going into too many complex details.

As part of the training day agenda includes doing some online practice exercises, participants are encouraged to bring a laptop computer.

The tentative agenda for the training event is shown in the below table.

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| **Time slot** | **Agenda item** | **Responsible person** |
| 09:00-09:15 | Introduction and practical information | Roy Pöllanen (STUK) |
| 09:15-10:00 | Gamma-ray spectrometry basics #1:  What are gamma-rays and how can we measure them? | Alexander Mauring (IFE) |
| *10:00-10:15* | *Coffee break* | *-* |
| 10:15-11:00 | Gamma-ray spectrometry basics #2: Gamma spectrum analysis and activity calculations | Alexander Mauring |
| *11:00-11:15* | *Coffee break* | - |
| 11:15-11:30 | Summary of the gamma-ray spectrometry measurement and analysis process from A to Z | Alexander Mauring |
| 11:30-12:00 | Practice exercises on basics of gamma-ray spectrometry | Alexander Mauring |
| *12:00-13:00* | *Lunch break* | *-* |
| 13:00-13:10 | Exercise solutions and results | Alexander Mauring |
| 13:10-14:00 | Detector efficiency calibration basics | Guillaume Lutter (DTU) |
| *14:00-14:15* | *Coffee break* | *-* |
| 14:15-15:00 | Uncertainty calculations and results reporting | Henrik Ramebäck (FOI) |
| *15:00-15:15* | *Coffee break* | *-* |
| 15:15-15:45 | Application of gamma-ray spectrometry in a nuclear power plant | Laura Togneri (STUK) |
| 15:45-16:00 | Summary, feedback and closing |  |