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| **Time** | **Monday 6** | **Tuesday 7** | **Wednesday 8** | **Thursday 9** | **Friday 10** |
| 9:00 – 9:45 | **Official opening:***Mr R. Padilla* ([[1]](#footnote-1))*Mr S. Tarjan* ([[2]](#footnote-2))*Mr A. Mauring* ([[3]](#footnote-3))*Mr/Ms Local organizer*Self-introduction of the participants | **Field exercises:**In working groups*A. Mauring, S. Tarjan, R. Padilla* | **Field exercises (continued)** | **Field exercises (continued)** | **Practical exercise 4:**Presentation of results by working groups |
| 9:45– 10:30 | **Lecture 1:** Short history of the exercise field as former uranium mining area*A. Varhegyi* ([[4]](#footnote-4)) |
| 10:30 – 10:45 | *Coffee break* |
| 10:45 – 11:30 | **Lecture 2:**The rationale of in-situ approach: NSIL activities*R. Padilla*  | **Field exercises (continued)** | **Field exercises (continued)** | **Field exercises (continued)** | **Practical exercise 4:**Presentation of results by working groups |
| 11:30 – 12:15 | **Lecture 3:** Radiation detectors for in situ measurements: Comparison of performance, calibration, control checks*S. Tarjan*  | **Final discussions and remarks****Official closure** |
| 12:15-13:45 | *Lunch break* |

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| **Time** | **Monday 6** | **Tuesday 7** | **Wednesday 8** | **Thursday 9** | **Friday 10** |
| 13:45 – 14:30 | **Lecture 4:** In situ measurements using HPGe detectors: Methodology, calibration and verification.*A. Mauring* | **Field exercises (continued)** | **Field exercises (continued)** | **Practical exercise 2:**Installation of R-based module for production of maps: demonstration of use*R. Padilla* |  |
| 14:30 – 15:15 | **Lecture 5:** In-situ measurements using dose rate meters and high efficiency scintillators. Data interpretation and geo-statistics for production of maps.*R. Padilla* | **Practical exercise 3:**Production of maps |
| 15:15 – 15:45 | *Coffee break* |
| 15:45 – 16:15 | **Lecture 6:** Radiological evaluation of contaminated sites and soil*M. Lavielle [[5]](#footnote-5)* | **Field exercises (continued)** | **Field exercises (continued)** | **Practical exercise 3:**Production of maps |  |
| 16:15 – 17:30 | **Practical exercise 1:**Description of the field exercises and demonstration of used instruments*R. Padilla, A. Mauring*, *S. Tarjan* |
| 17:30 – 19:30 |  | **Reserved for calculations and reporting** | **Reserved for calculations and reporting** | **Reserved for calculations and reporting** |  |

Field exercises:

1. Verification of GPS readings at a reference point
2. Calibration of gamma-ray spectrometer using Eu-152 source and determining angular correction
3. Control measurements over a mosaic reference field
4. Measurement of bulk calibration containers
5. Measurement of tanks in precipitation reactor
6. GPS-linked pathway measurements over uranium tailings dumps area to identify dose rate anomalies and gathering data to produce maps
7. GPS-linked pathway measurements over rock waste area to identify dose rate anomalies and gathering data to produce maps
8. Dose rate measurements around yellowcake storage building
1. Mr Roman Padilla Alvarez, Nuclear Instrumentation Physicist, Nuclear Science & Instrumentation Laboratory, IAEA, Seibersdorf, Austria [↑](#footnote-ref-1)
2. Mr Sandor Tarjan, Reference Materials Specialist, Terrestrial Environmental Laboratory, IAEA, Seibersdorf, Austria [↑](#footnote-ref-2)
3. Mr Alexander Mauring, Gamma Spectrometry Specialist, Terrestrial Environmental Laboratory, IAEA, Seibersdorf, Austria [↑](#footnote-ref-3)
4. Mr Andras Varhegyi, Mecsek Environmental Protection Branch, Hungary [↑](#footnote-ref-4)
5. Dr. Marie Lavielle, Commissariat à l'Energie Atomique (CEA), France [↑](#footnote-ref-5)