

IAEA/RCA Regional Training Course on Isotope Hydrology
Training Course on the Use of Environmental Isotope Techniques to Assess Water Contamination
 Vienna, Austria, 4th November - 8th November 2019
MOE27 (Main)
COURSE SCHEDULE

| | Monday | Tuesday | Wednesday | Thursday | Friday |
|-----------------------------------|---|--|--|---|--|
| | Day 1 (4-11-2019) | Day 2 (5-11-2019) | Day 3 (6-11-2019) | Day 4 (7-11-2019) | Day 5 (8-11-2019) |
| 9:30-10:30 | Opening & Welcome: Registration Welcome and opening remarks by the IAEA Remarks by the External Expert (Lecturer) Introduction of presenters and participants Group photo <i>(Javier Romero as chairman)</i> | Lecture -3: Groundwater recharge, origin, surface water-groundwater interactions using isotopes - Case studies <i>(Iñaki Vadillo)</i> | Lecture -6: Data interpretation of radioactivity (alpha and beta isotope emitters) in natural waters <i>(Trevor Elliot)</i> | Lecture -8: Case studies on the use of Nitrogen isotope and other related techniques to assess nitrogen pollution <i>(Iñaki Vadillo)</i> | Lecture -10: Concepts of groundwater age dating and various dating tools <i>(Trevor Elliot)</i> |
| 10:30-11:00 – Coffee Break | | | | | |
| 11:00-12:00 | Lecture -1: Introduction to basic concepts of isotope hydrology and isotope applications in water resources management <i>(Trevor Elliot)</i> | Lecture -4: Basic principles of water contamination (radioactivity, heavy metals, etc.) <i>(Trevor Elliot)</i> | Lecture -7: Nitrogen isotope and other related techniques to assess nitrogen pollution in water bodies <i>(Iñaki Vadillo)</i> | Lecture -9: Groundwater contamination related to salinization and seawater intrusion <i>(Trevor Elliot)</i> | Lecture -11: Sampling techniques for stable isotopes and chemistry <i>(Iñaki Vadillo)</i> |
| 12:00-13:30 – Lunch Break | | | | | |
| 13:30–14.30 | Lecture -2: Variation of isotopic signatures and responsible factors in the water cycle <i>(Iñaki Vadillo)</i> | Lecture -5: Isotope techniques to assess contamination from radioactivity (alpha and beta) <i>(Trevor Elliot)</i> | Hands-on Training: Exercise on the on the use of Nitrogen isotope and other related techniques <i>(Iñaki Vadillo)</i> | Hands-on Training: Exercise on groundwater contamination related to salinization <i>(Trevor Elliot)</i> | Discussion/Wrap-up Summary and Questions <i>(IAEA)</i> |
| 14:30-17:30 | Country presentations | Country presentations | Discussion on the progress and achievements of RAS7032 and fine-tuning | Laboratory visit: <i>(IAEA)</i> | Discussion/Wrap-up Summary and Questions Presentation of certificates |

Mr. Trevor Elliot (T.elliott@qub.ac.uk), Queen's University Belfast, United Kingdom; Mr. Iñaki Vadillo (Vadillo@uma.es), University of Málaga, Spain; Mr. Javier Romero, IAEA, (J.Romero@iaea.org); Mr Ioannis Matiatos, IAEA, (I.Matiatos@iaea.org)