

National Workshop on
Train-Trainer Workshop in frame of

**Curriculum Development and Launching of a Program on
Nuclear Science and Technology for Secondary Schools**

October 8-10, 2018
Executive Office of the Nuclear Energy Commission
Mongolia

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| National Workshop on TRAIN THE TRAINERS ON NUCLEAR SCIENCE & TECHNOLOGY | |
| Project | “Supporting Sustainability and Networking of National Institutions in Asia and the Pacific Region” RAS0079: Educating Secondary Students and Science Teachers on Nuclear Science and Technology |
| Organizer | International Atomic Energy Agency (IAEA), Vienna, Austria |
| Host Institution | Nuclear Energy Commission, Government of Mongolia 17032 Uildverchid street 2, Khan-Uul District, Khoroo 2, Ulaanbaatar, Mongolia |
| Objectives of the National Workshop | The objective of the national workshop is to train secondary and high school science teachers in Mongolia in strengthening their competency for delivering nuclear science and technology topics and to convey it to students through effective and engaging teaching or learning processes. |

TENTATIVE AGENDA, v.3, 2018:09:28

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| Sunday 07 October 2018. ARRIVAL OF IAEA EXPERTS | | |
| Arrival of IAEA Experts | | |
| 1st Day * MONDAY * 08 October 2018 * Opening Ceremony & Classroom Lectures | | |
| Time | Activity | Resource Person/Person Responsible |
| 9:00-9:30 | Registration | Executive Office, NEC |
| Opening Session | | |
| 9:30-10:00 | Welcome Remarks | M.Chadraabal, National RCA Representative |
| | Message | Jane Gerardo-Abaya, Department of Technical Cooperation, IAEA |
| | Self-Introduction of the Participants | |
| | Group Photo | |

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| 10:00-10:30 | COFFEE BREAK | |
| 10:30-11:10 | <ul style="list-style-type: none"> - Overview of the IAEA Project Background of the RAS/0/079 on Educating Secondary Schools on Nuclear S & T; - Outline of the Training Objectives - Overview of IAEA activities | Jane Gerardo-Abaya, IAEA |
| 11:10-11:30 | Lecture 1. Radiation Education with WOW Factor- Message from Team JAPAN Prof. Dr. Takeshi IIMOTO (UTokyo) | |
| 11:30-12:10 | Lecture 2. Radiation Application (using DVD) Prof. Dr. Takeshi IIMOTO (UTokyo) | |
| 12:10-14:00 | LUNCH | |
| 14:00-14:40 | Lecture 3. Nuclear Science & Technology Materials Integration in Science Subjects at Secondary Level Dr. Dimas IRAWAN (BATAN, Indonesia) | |
| 14:40-15:00 | Q/A | |
| 15:00-15:30 | COFFEE BREAK | |
| 15:30-16:10 | Lecture 4. Experience Sharing: Collaborative Works for Nuclear Introduction at Secondary Level Dr. Dimas IRAWAN (BATAN, Indonesia) | |
| 16:10-16:40 | Lecture 5. Online Resources for Nuclear Science & Technology Learning Dr. Dimas IRAWAN (BATAN, Indonesia) | |
| 16:40-17:00 | Q/A | |

| 2nd Day * TUESDAY * 09 October 2018 * & Experiments & Classroom Lectures | | |
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| Time | Activity | Resource Person/Person Responsible |
| Workshop Proper | | |
| 9:00-9:40 | Lecture 6. Radiation Basics Types, Unit, Half-life and Radiation Protection (using DVD) Prof. Dr. Takeshi IIMOTO (UTokyo) | |
| 9:40-10:20 | Experiment 1. Environmental Radiation Dose Survey Using Handy Detector Ms. Kayo MAKABE (JAERO) *Indoor and/or outdoor activity | |
| 10:20-10:40 | COFFEE BREAK | |
| 10:40-11:20 | Lecture 7. Challenges to put WOW Factor in Radiation Education (using DVD) Peltier Cooling Type Cloud Chamber and New Short Movies Prof. Dr. Takeshi IIMOTO and Ms. Kayo MAKABE | |
| 11:20-12:00 | Group Work: Laboratory Experiments on Detection of Gamma-spectrum of Natural Radioactive Samples | |
| 12:00-14:00 | LUNCH | |

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| 14:00-14:40 | Group Work: Laboratory Demonstrations on Detection of Gamma-spectrum of Natural Radioactive Samples | |
| 14:40-15:20 | Analysis of experimental results and discussions | |
| 15:20-15:40 | COFFEE BREAK | |
| 15:40-16:10 | Lecture 8. Role of Extracurricular Activities in Introducing Nuclear Science & Technology Mr. Dimas IRAWAN (BATAN, Indonesia) | |
| 16:10-16:40 | Lecture 9. Munkhuu BATBAYAR, Nuclear Energy as a Climate-Friendly Source of Energy. | RAS0079-RTC in USA 2018 |
| 16:40-17:00 | Q & A | |
| END OF DAY 2 | | |

| 3rd Day * WEDNESDAY * 10 October 2018 * Teaching Demonstrations (Venue: Shine Mongol" High School) | | |
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| 9:30-10:10 | Lecture 10. Lessons Learning from Fukushima Daiichi Accident. Mr. Batttulga BATBEKH | NT Seminar 2017, JAEA |
| 10:15-11:55 | Lecture 11. Open Lecture for students. Fundamentals of the Atom. Mr. Myagmar EENKHBAT | RAS0079-RTC in USA 2018 |
| 12:00-12:40 | LUNCH | Canteen of SMHS |
| 12:45-13:25 | Lecture 12. Applications of Nuclear Technology in Agriculture. Mr. Enkhbuyan LKHAGVASUREN | RAS0079-RTC in Indonesia 2018 |
| 13:30-14:00 | Discussion: Lecturers' Presentations | |
| 14:00-14:30 | Participants' Impressions and Evaluation of the course activities Concluding Session | |
| 14:30-15:00 | Closing | |