



Radiation Measurements Cross Calibration (RMCC) Project – Brief History and Achievements

**Presented by
Dr. Amir H. Mohagheghi**

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SAND# 2010-3150 C, 2008-1469 C, 2007-1960 C, 2005-7088 C

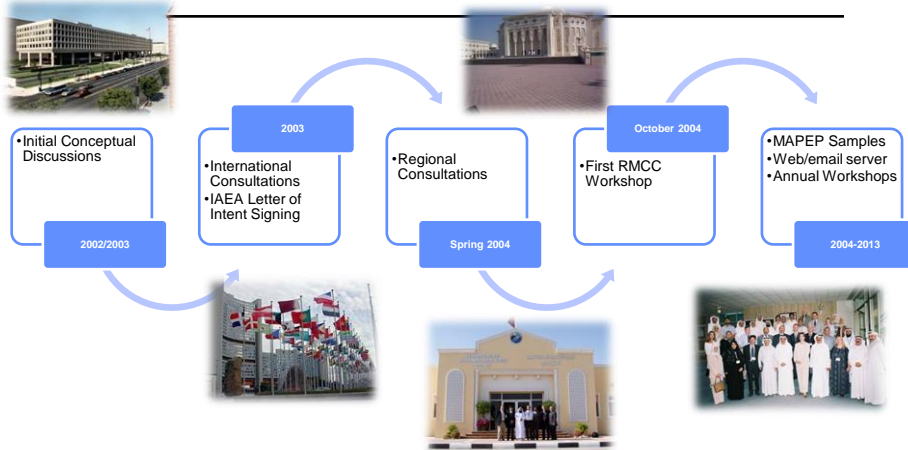
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Overview

- **Brief History**
- **RMCC Objective and Processes**
- **RMCC Project Benefits**
- **Past RMCC Workshops**
- **Future Plans**

Brief History



Radiation Measurements Cross Calibration (RMCC) Project – Motivations

- **All countries in the Middle East have radiation measurement capabilities associated with (partial list):**
 - Power and research reactors
 - Nuclear Security, Safeguards, and Safety
 - Radioactive sources in medicine, commerce, industry
 - Radiological Security and Safety
 - Responding to accidental or intentional radiation releases
 - Environment, health and safety
 - Disposing of radioactive sources
- **Concern: Quality of Data/Information; Development of Capacity (laboratories, human resources)**
- **Improving and standardizing nuclear monitoring and measurement capabilities in the Middle East are essential elements of developing an approach to such concerns**



RMCC Objective and Processes

- **Objective: Develop a set of internationally recognized standards for laboratory radiation measurements in the Middle East**
- **The project Processes consists of**
 - **Signup for the DOE proficiency testing program (MAPEP)**
 - Receive test samples
 - Analyze and report
 - Follow-up with regional workshops to discuss the results and identify technical assistance needs
 - **Participate in targeted studies by the IAEA labs in Seibersdorf**
 - **Participate in Annual Workshops: Presentations and Group Discussions**
 - On the Quality Assurance requirements and implementation
 - Methodologies for radioactive sampling and laboratory analyses
 - Environmental Monitoring Methods
 - Natural Radioactivity
 - Emergency preparedness – for laboratory analyses
 - Impact of nuclear accidents on laboratory analysis and operations

5



The RMCC Project Benefits

- **Increased confidence in data quality across the region**
- **Availability of a network of qualified labs for radiological measurements**
 - Build up the capacity in the region to produce reliable radiological data
- **Improved scientist-to-scientist communication**
 - Provides a mechanism for sharing of agreed upon information
 - Enables scientists in the region to work cooperatively to create indigenous solutions to the problems in the region
 - Fosters the development of a network of scientific experts in the region
- **Training Opportunities**
 - Austria – The IAEA Labs in Seibersdorf
 - Germany – Federal Bureau for Radiation Protection
 - USA – Sandia National Laboratories
 - Regional Opportunities



6





Past RMCC Workshops

- **RMCC-I:** Co-hosted by the Kuwait Institute for Scientific Research (KISR), October 2004
 - Participation from Kuwait, Saudi Arabia, Qatar, UAE, Bahrain, Oman, and Jordan
- **RMCC-II:** Co-hosted by the Supreme Council for the Environment and Natural Reserves (SCENR), Doha, Qatar, November 2005
 - Participation from Kuwait, Saudi Arabia, Bahrain, Qatar, UAE, Oman, Jordan, and Yemen
- **RMCC-III:** Co-hosted by the Ministry of Regional Municipalities, Environment and Water Resources (MRMEWR), Muscat, Oman, April 2007
 - Participation from Kuwait, Bahrain, Iraq, Qatar, Oman, Jordan, and Yemen
- **RMCC-IV:** Co-hosted by the University of Bahrain and the Marine Emergency Mutual Aid Centre (MEMAC), Kingdom of Bahrain, March 2008
 - Participation from Kuwait, Saudi Arabia, Bahrain, Qatar, Oman, UAE, and Jordan
- **RMCC-V:** Co-hosted by The Qatar University and The Qatar Petroleum, Doha, Qatar May 2010
 - First participation by France, and North Africa (Tunisia, and Morocco)



7



Past RMCC Workshops

- **RMCC VI – June 2011:** Coordinated by the Middle East Scientific Institute for Security (MESIS), Jordan, and Co-hosted by Jordanian Atomic Energy Commission and Jordanian Nuclear Regulatory Commission (JNRC)
 - Participation by all RMCC Members from the Middle East and North Africa
 - Tour of the Jordanian Royal Scientific Society Laboratories
- **RMCC VII – June 2012:** Coordinated by the National Center for Energy Sciences and Nuclear Techniques [Centre National de l'Energie, des Sciences et Techniques Nucléaires] (CNESTEN), Rabat, Morocco
 - Participation by RMCC Members from the Middle East and North Africa
 - Tour of the CNESTEN



8





The RMCC Future

- Transfer of RMCC Ownership to the region
 - The Middle East Scientific Institute for Security (MESIS) to host the project
 - Regional support is required for success
 - Formation of RMCC Advisory Council ?
 - Other thoughts?



9



Thank You
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10

