



## TIEMS International Pool Teacher & Trainer Biography

**Name:** *Roberto Mugavero*

**Position:** *Professor at University of Rome "Tor Vergata"*  
*President of Observatory on Security and CBRNe Defence*

**Organization:** *University of Rome "Tor Vergata"*  
*Rome, Italy*

**Date of Birth:** *22.09.1964*

**Nationality:** *Italian*

**Mobile:** *+39 3355462043*

**E-mail:** [\*mugavero@ing.uniroma2.it\*](mailto:mugavero@ing.uniroma2.it)  
[\*r.mugavero@osdife.org\*](mailto:r.mugavero@osdife.org)



### Biography:

Roberto Mugavero has a degree in Environmental Engineering, and he is a Professor of "Action Planning for Homeland Security" at University of Rome "Tor Vergata"- Faculty of Engineering. He is a Scientific Director of Master of Science "Systems and Electronic Technologies for Security, Defence and Intelligence" at University of Rome "Tor Vergata" – Department of Electronic Engineering, and he is Head of Branch Security, Defence and Chemical, Biological, Radiological and Nuclear Risk at University of Rome "Tor Vergata" – Department of Electronic Engineering. He is President of the national "Observatory on Security and CBRNe Defence". He is also President of the "National Association of Volunteer Firefighters".

He is a Professor and Conferences Speaker in the fields of Security, Safety, CBRNe Risk, Emergency Management, Risk Management, Crime Prevention and Technological-Industrial Risk. He is a National CBRN Defense Expert and Italian Representative, as "Coordination Expert CBRN" in the European Civil Protection Task Force. He is also a Board Member at the Ministry of the Interior and at the Presidency of the Council of Ministers – National Department of Civil Protection. Volunteer Firefighter Officer, Rank Colonel, at Rome Fire Brigade. He is a Board Member at ISPRO Institute – Italian Institute for Studies and Research on Security, Civil Protection and Defense. He also collaborates with several Organizations, Associations, Magazines and Industry in the field of Security and Safety. He has participated in many national and international exercises and emergency activities.



## TIEMS International Education Program Course

**Teacher & Trainer:** *Roberto Mugavero*

**Title of Course:** *CBRN Risk, Protection and Defence - Elements of Analysis, Evaluation and Procedures for Mitigation, Preparedness, Response and Recovery*

### Course content:

This course introduces the key elements of CBRN Risk where, the spread of biological agents, hazardous chemicals, ionizing radiation or radioactive substances, may result a contamination threat to humans and environment. The course will review issues, scenarios and features of CBRN events, intentional like war and terrorist attack or accidental like natural and incidental events, enabling students and attendees to develop their knowledge and understanding of the challenges and potential solutions.

### Topics Include:

- CBRNe risk
- CBRNe agents and substances
- contamination
- spreading
- events classification
- contamination effects
- effects' containment
- detection
- protection
- personal protection
- medical protection
- collective protection
- response actions
- identifying a CBRN event
- zoning
- protection of operators in the contaminated area
- protection of population
- agencies involved in response actions
- rescue operations in the affected area
- containment of dangerous substances
- decontamination
- remediation

### Objectives:

- To understand the key elements for analysis and evaluation of CBRN risk
- To understand the key elements for recognition of risk scenarios
- To understand the key elements for early warning and detection of CBRN agents
- To understand the key elements for personal and collective protection
- To understand the key elements for emergency response
- To understand the key elements for containment, mitigation and consequence management
- To learn about general framework of the institutional response at national/international level
- To learn about the general framework of the rescue operations.