Presentazione corsi di Master Internazionali di I e II Livello in Protection against CBRNe events

Andrea Malizia, Ph.D.

International Master Courses in
Protection Against CBRNe events

UNIVERSITY OF ROME TOR VERGATA

Who am I?

Academic position – University of Rome Tor Vergata

- (2012-present). Senior Researcher in Nuclear Measures and Instrumentation
- (2010-2012). Post-doc fellow in Experimental Physics
- Author of more that 300 papers, 2 books, 2 National patents, Editorial Director of the CBRNe book series, Guest Editors of books and proceedings on CBRNe emergencies

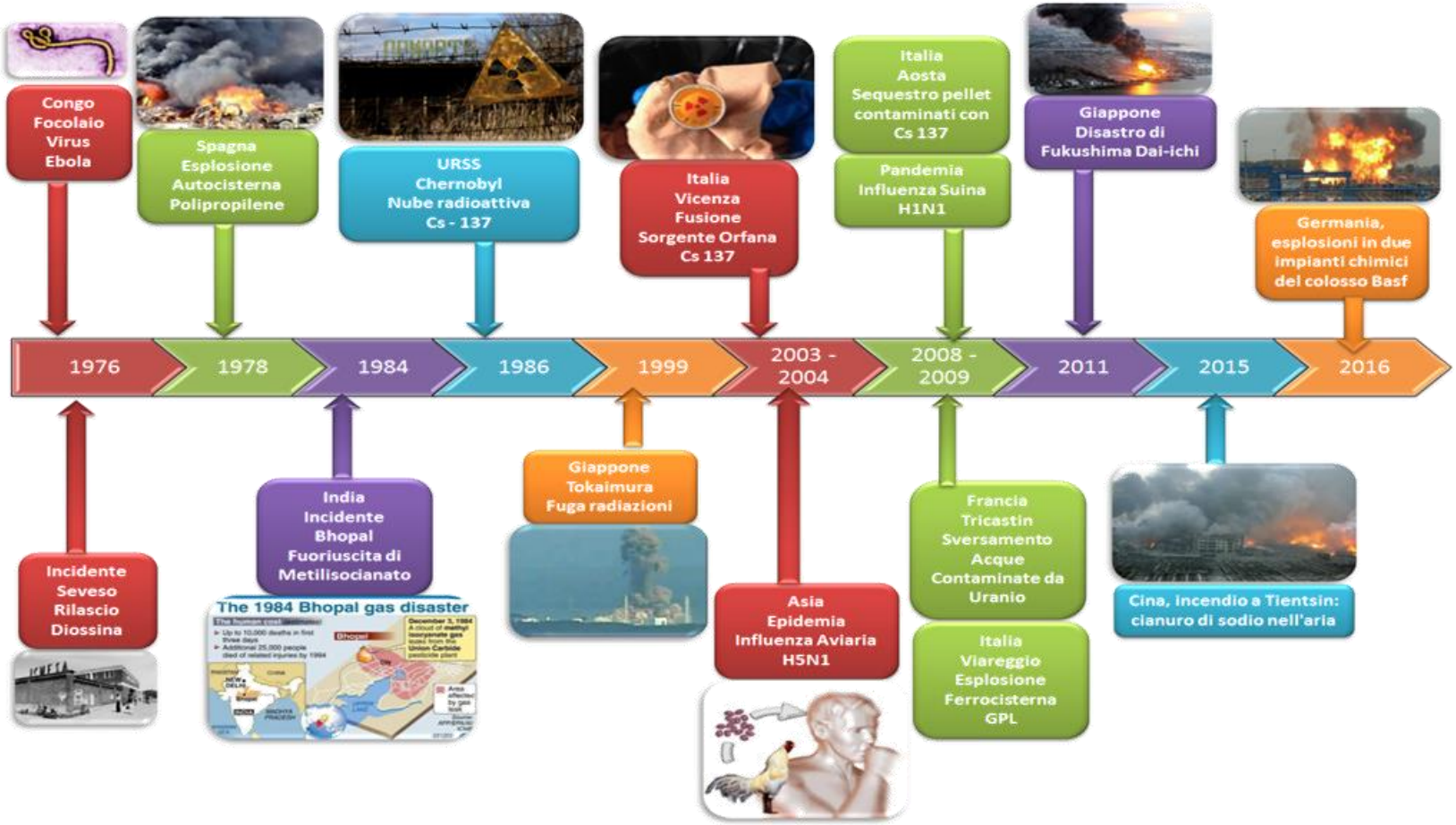
Didactic positions

- (2010-present). Didactic Coordinator of the International Master courses in Protection Against CBRNe events
- (2014-present). Assistant Professor in Nuclear Measure and Applied Physics for Bachelor Degree and Master Degree Courses at the Faculties of Engineering and Faculty of Medicine
- (2011-Present). Lecturer at the PhD course of Industrial Engineering and at the CBRNe Master courses of the University of Rome Tor Vergata
- (2013-Present). Lecturer at the NATO School (Obberammergau, Germany) and at the JCBRNe Centre of Excelllence (Vyskov,Czech Republic)
- (2008-2012). Tutor assistant in Applied Physics for the Bachelor Degree courses of Engineering, University of Rome Tor Vergata

Academic titles achieved at the University of Rome Tor Vergata

- (2017). PhD in Industrial Engineering
- (2010). International Master Course in Protection Against CBRNe events (Advanced Level)
- (2009). PhD in Quantum Electronics and Plasma Physics
- (2005). Master Degree in Environmental Engineering

Introduction to CBRNe risks



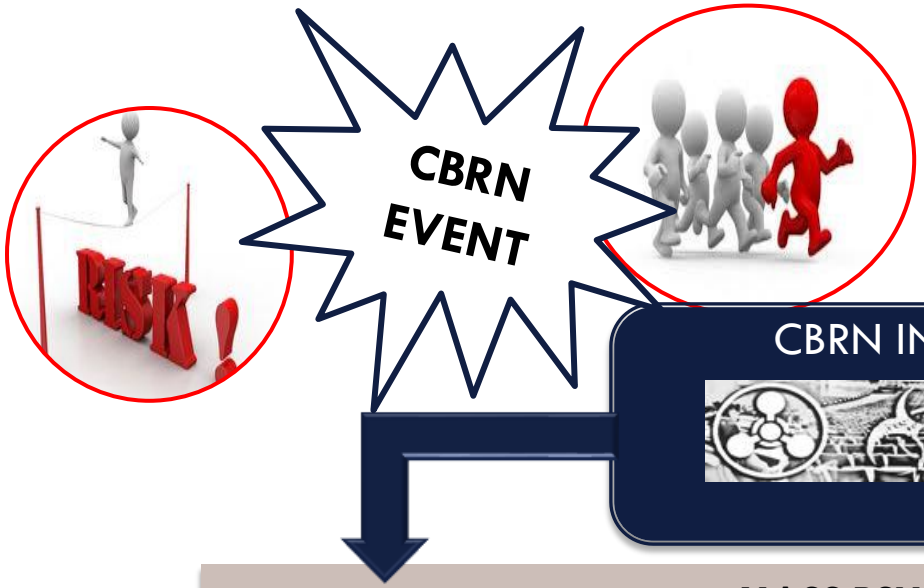
Industrialization and CBRN Risk

The industrialization process has caused a continuous increase in the number of potentially hazardous facilities

This phenomenon concerns geographical areas in countries where, for lack of experience, weak state structures and/or high exposure to corruption, are not able to ensure adequate prevention and crisis/emergency management

This is associated with an increase of industrial risks associated with industrial residues that potentially increase the environmental pollution phenomenon in terms of storage, disposal and transport

Terrorism and CBRN Risk



- Components and
- Drones
- Transports
- Fanaticism

CBRN INCIDENT

MASS PSYCHOSIS
MEDIA RESONANCE
HIGH COSTS ASSOCIATED AT THE EMERGENCY MANAGEMENT

All this entails a high sensitivity, with a strong irrationality component , of public opinion concerning CBRN issues.

For this reasons, the relevance of CBRN aspects should be assessed from the point of view of "objective" vulnerabilities related to the nature of the threat (with a focus on the terrorist factor) and from the "subjective" vulnerability of the response system (with attention to institutional and technical-operational criticalities).

How to Protect Against a CBRN Event? A Multidisciplinary Approach

Directive Board Master CBRNe

DIRECTOR
CBRNe Master Courses
Prof. Leonardo Palombi

COORDINATOR
CBRNe Master Courses
Prof. Pasquale Gaudio

President R&D Board
Research and Development Board
Prof. Francesco d'Errico

President of the
Scientific Board
Prof. Carlo Bellecci

Director of the
Didactic Activities
Dr. Andrea Malizia

Director of the
Training Activities
Michael Ian Thornton, M.Sc.

Head of
Administration and Accounting
Colomba Russo, M.D., M.Sc.

Responsible for Drill, Table Top,
Functional and Full scale Exercises
Alba Iannotti, M.D., M.Sc.

DIDACTIC BOARD - Master CBRNe

CBRNe Master Vision

CBRNe

A NEW ACADEMIC DISCIPLINE

CBRNe Master MISSION

Organizative Boards

MASTER CBRNe Chemical, Biological, Radiological, Nuclear and explosive Department of Industrial Engineering and School of Medicine and Surgery
TOR VERGATA UNIVERSITY OF ROME
DICI DIPARTIMENTO DI INGEGNERIA CIVILE E INDUSTRIALE UNIVERSITÀ DI PISA
HESAR HEALTH SAFETY ENVIRONMENTAL RESEARCH ASSOCIATION ROME
INAC International Alliance CBRN
SIEVERT ACADEMY ALL ABOUT RADIATION SAFETY
CBRN ACADEMY EDUCATION & TRAINING
CBRN PROTECTION DEVELOPING SAFETY & SECURITY SOLUTIONS

The International Master Courses in Protection Against CBRNe events asserted themselves in a strong way obtaining the status of *"NATO Selected"* directly from the HQ in Norfolk (Virginia, USA). Also, they are included in the *NATO Education and Training Opportunities Catalogue* (ETOC), and they entered into cooperation agreement with the *Organization for the Prohibition of Chemical Weapons* (OPCW), the *NATO Joint Centre Of Excellence* (Czech Republic), the *NATO SCHOOL of Oberammergau* (Germany)

SUPPORTED BY OPCW
NATO OTAN
NATO SELECTED STATUS
NATO SCHOOL Oberammergau

University of Rome Tor Vergata has signed a Cooperation Agreement with the **OPCW** (Organization for the prohibition of Chemical Weapons), which support the Master Courses

As it is stated in the OPCW Press Release,

"It is the first such agreement the OPCW has made with a university in this field"


THE THIRD
OPCW-
THE HAGUE
AWARD
OPCW-THE HAGUE AWARD
OPCW
VREDE EN RECHT
The Hague

Both Master Courses have been granted with the NATO SELECTED status by the NATO HQ SACT (Supreme Allied Commander Transformation – Norfolk, Virginia, USA).

CEPOL
EUROPEAN UNION AGENCY FOR LAW ENFORCEMENT TRAINING

CEPOL FRAMEWORK PARTNER

The University of Rome Tor Vergata has signed a cooperation agreement with the Abu Dhabi Police State Department in the aim of Master CBRNe activities last 28 of June 2018

IAEA
International Atomic Energy Agency
Atoms for Peace and Development

Requirements: Bachelor Degree or Equivalent title in Engineering, Science, Medicine, Biology, Chemistry, Physics, Law, Politic Science, Strategic Science, Journalism or similar (contact: info@mastercbrn.it)

Requirements: Master Degree or Equivalent title in Engineering, Science, Medicine, Biology, Chemistry, Physics, Law, Politic Science, Strategic Science, Journalism or similar (contact: info@mastercbrn.it)

1st Level Course

120 ECTS – 2 YEARS

(European Credit Transfer System)

2nd Level Course

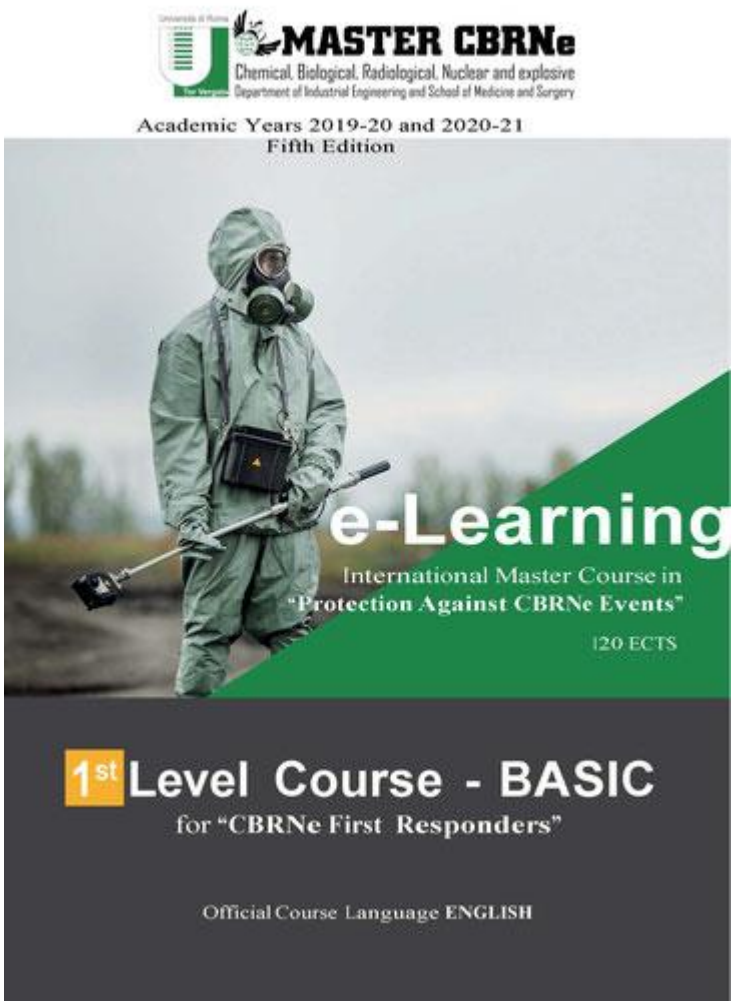
60 ECTS – 1 YEAR

(European Credit Transfer System)

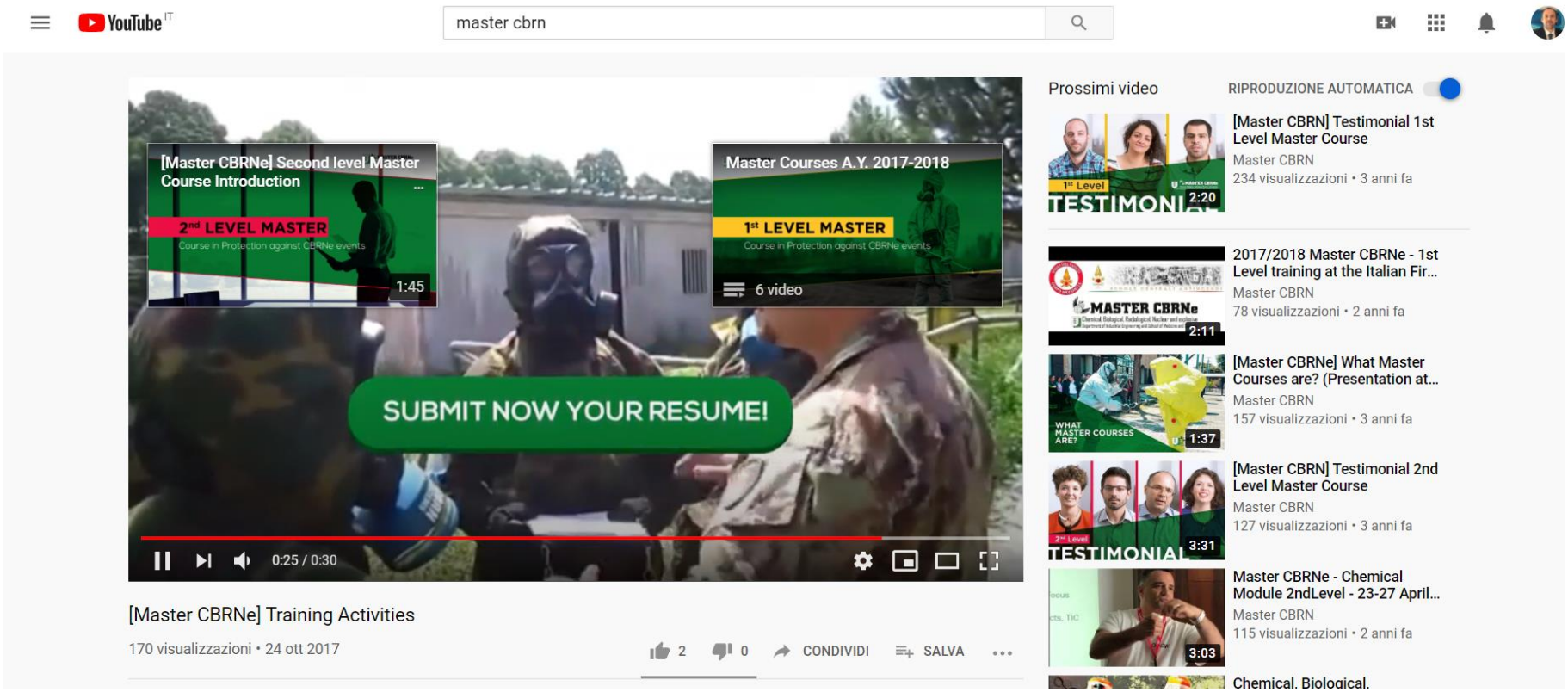
OFFICIAL ACADEMIC TITLES *RECOGNIZED BY "BOLOGNA PROCESS"*

ALLOW ACCES to 2nd Level Course

ALLOW ACCES to PhD Programs in Safety & Security


MASTER CBRNe
Chemical, Biological, Radiological, Nuclear and explosive
Department of Industrial Engineering and School of Medicine and Surgery
Academic Years 2019-20 and 2020-21
Fifth Edition
e-Learning
International Master Course in
"Protection Against CBRNe Events"
120 ECTS
1st Level Course - BASIC
for "CBRNe First Responders"
Official Course Language ENGLISH


MASTER CBRNe
Chemical, Biological, Radiological, Nuclear and explosive
Department of Industrial Engineering and School of Medicine and Surgery
Academic Year 2019-2020 | 10th EDITION
e-Learning
International Master Course in
"Protection Against CBRNe Events"
60 ECTS
2nd Level Course - ADVANCED
Official Course Language ENGLISH


YouTube IT
master cbrn
[Master CBRNe] Second level Master Course Introduction
2nd LEVEL MASTER
Course in Protection against CBRNe events
1:45
Master Courses A.Y. 2017-2018
1st LEVEL MASTER
Course in Protection against CBRNe events
6 video
SUBMIT NOW YOUR RESUME!
0:25 / 0:30
[Master CBRNe] Training Activities
170 visualizzazioni • 24 ott 2017
2
0
CONDIVIDI
SALVA
Prossimi video
RIPRODUZIONE AUTOMATICA
[Master CBRN] Testimonial 1st Level Master Course
Master CBRN
234 visualizzazioni • 3 anni fa
2:20
2017/2018 Master CBRNe - 1st Level training at the Italian Fir...
Master CBRN
78 visualizzazioni • 2 anni fa
2:11
[Master CBRNe] What Master Courses are? (Presentation at...
Master CBRN
157 visualizzazioni • 3 anni fa
1:37
[Master CBRN] Testimonial 2nd Level Master Course
Master CBRN
127 visualizzazioni • 3 anni fa
3:31
Master CBRNe - Chemical Module 2ndLevel - 23-27 April...
Master CBRN
115 visualizzazioni • 2 anni fa
3:03
Chemical, Biological,

Università di Roma Tor Vergata

CBRN GATE

facebook

Università di Roma Tor Vergata

CBRN GATE
a comprehensive portal

LinkedIn

Università di Roma Tor Vergata

Master CBRN

YouTube

Università di Roma Tor Vergata

CBRN GATE

YouTube


EXIT
CONTEMPORARY
CBRN BODY
PROTECTION
SYSTEMS
EXIT

Support for Emergencies Simulation activities from Italy

SIMULATION EXERCISE TYPES

- TTX (TableTop Exercise)
- Drill Exercise
- Functional Exercise
- Full-Scale Exercise

Support for Emergencies Simulation activities from Italy

WHAT IS A TABLETOP EXERCISE?

A tabletop exercise (TTX) is a disaster preparedness activity that takes participants through the process of dealing with simulated disaster scenario.

response process, but enables administrators to evaluate the effectiveness of the organization's emergency response practices.

Support for Emergencies Simulation activities from Italy

TABLETOP EXERCISE

Tabletop exercises fall into the discussion-based list, along with seminars, workshop and games.

A tabletop exercise involves key personnell discussing simulated scenarios in an informal setting.

Support for Emergencies Simulation activities from Italy

OTHER EXERCISES (DRILL)

A drill is performed when one specific function or process can be tested.

Support for Emergencies Simulation activities from Italy

OTHER EXERCISES (FUNCTIONAL)

A functional exercise examines and/or validates the coordination, command and control between various multi-agency coordination centers (e.g. emergency operation center, joint field office, etc.).
A functional exercise does not involve any «boots on the ground».

Support for Emergencies Simulation activities from Italy

OTHER EXERCISES (FULL-SCALE)

A full-scale exercise imitates the response as closely to real situation as possible, engaging with emergency services and possibly even local businesses.
Full-scale exercises entail responding in real-time and on-location.

Support for Emergencies Simulation activities from Italy

CBRN GATE
EDUCATION TRAINING RESEARCH

HESAR
HEALTH SAFETY ENVIRONMENTAL RESEARCH ASSOCIATION ROME

MASTER CBRNe
Chemical, Biological, Radiological, Nuclear and explosive
Department of Industrial Engineering and School of Medicine and Surgery

INAC
International Alliance CBRN

SICC

RESEARCH ACTIVITIES

Support for Emergencies Simula

Sigma Times

www.sigmatimes.com Thursday, 29th March, 2018 £2.86 $4.00 €3.23

Flu Epedemic hits Sigma City

Flu epedemic is not to be sniffed at! Know the symptoms and take proper precaution.

The number of people in Sigma City affected by the outbreak of flu is continuing to rise. Latest figures show that cases of the virus have increased by a third in the past week.

FLU SYMPTOMS CAN INCLUDE:
- Sudden fever - a temperature of 38C or above
- Runny nose
- Aching body
- Feeling tired or exhausted
- Dry, chesty cough
- Sore throat
- Headache
- Loss of appetite
- Diarrhoea or tummy pain
- Nausea and being sick

If you become ill with influenza symptoms you should stay home and avoid contact with other people except to seek medical care. You should seek medical care if you have a very high fever and an unusually severe headache or abdominal or chest pain, or if you have a chronic condition such as asthma, diabetes or heart disease. Most people are able to recover at home from flu, without medical care. Some people are at greater risk from serious flu-related complications. They are:
- Children younger than 5, especially children younger than 2 years old
- People 65 and older
- Pregnant women (and women up to two weeks postpartum).

PRECAUTIONS IN GENERAL:
- Avoid close contact with anyone who has a cold or flu
- Drink plenty of fluids
- Get lots of fresh air
- Exercise regularly and frequently
- Eat healthy, especially foods high in vitamins and minerals
- Don't smoke and decrease alcohol consumption. □

Doctors Oakwise: get rest, drink plenty of liquids and take in fresh air and nutritious food.

Mayor Murray talks expansion with business community

Mayor Michael Murray spoke to the business community, about new business development in the Central Business District (CBD). Discussions were centred around accessability to the area with improved infrastruture surrounding transport, telecommunications and improved entertainment facilities close to the CBD. "I see a future where stronger infrastructure centered around the business community where issues like uninterupted transport routes to the CBD, improved telecommunications and better after work facilities in the immediate CBD area will generate the cost of revenue needed for a thriving economy.

...Continued on page 8

Airport staff shortage causing delays

Travellers passing through the Omega Airport are expected to experience more disruption as a result of industrial action by baggage handlers. Passengers are being advised to travel with only carry-on luggage if possible.

Unions have for months been complaining about the reduction in the number of baggage handlers at Omega Airport due to forced redundancy. Omega airport spokesperson Andrew Wright had this to say...

Continued on page 5

Anti-animal testing, University Vandalised

Sigma University rector reported an attack at the animal research facility during the night. "Stop animal testing" slogans were painted on the walls, one laboratory was trashed and there was evidence of possible theft of material, although at this stage it is unclear what may have been stolen. The science department has been under pressure to quit all testing on animals. □

Winter Fair University of Sigma pulls off a win

The annual Winter Fair was held on Saturday and Sunday 24th and 25th of March. Hundreds of people of all age groups attended the fair where the highlight event saw the University rugby team beat rivalling Pocford University at the annual Winter Fair tug of war. Captain of the tug of war team Tom Marshall said, "The conditions were rough in the Marshy ground but we managed to get a solid win". Other colourful events like the cheese roll, fay tail throwing and pie eating were also on the fun filled agenda. □

ABOVE: Sigma University rugby team raises tug of war.
BELLOW: Dan Pratt launches the tug ball in the ball throwing competition.

Weather Update

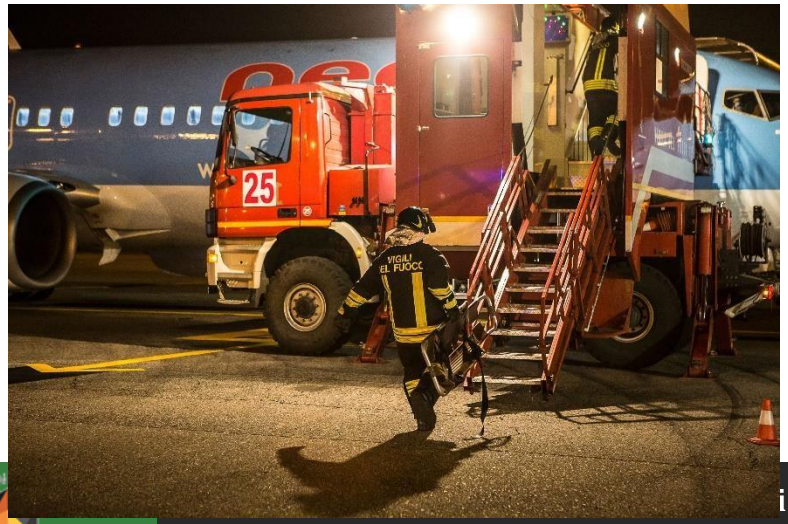
Today
12°C
Humidity: 88%
Feels like: 8°C
Wind: 10 km/h (NW)
Sunrise: 6:45
Sunset: 19:03

Tomorrow
8/12°C
Mainly cloudy

Saturday
8/14°C
Cloudy with sunny spells

THIS LAYOUT IS FOR EXERCISE PURPOSES ONLY. INAC

Support for Emergencies Simulation activities from Italy



Our experience with EU grants on CBRN

- CBRN Integrated Response Italy
- SOS-Alert Solution
- eNOTICE
- MELODY
- EUProtect
- TRANSTUN
- RESIST

- Community of Users on disaster management
- Great opportunity to increase the network
- Close cooperation with end users and stakeholders

PUBLICATIONS

PUBLICATIONS DIVIDED PER SCIENTIFIC AREAS

Click on the area of your interest to read the related papers

- Chemical
- Biological
- Radioactive - Nuclear
- explosive
- CBRNe Emergency
- CBRNe Didactical and Training activities

CBRNe Book Series

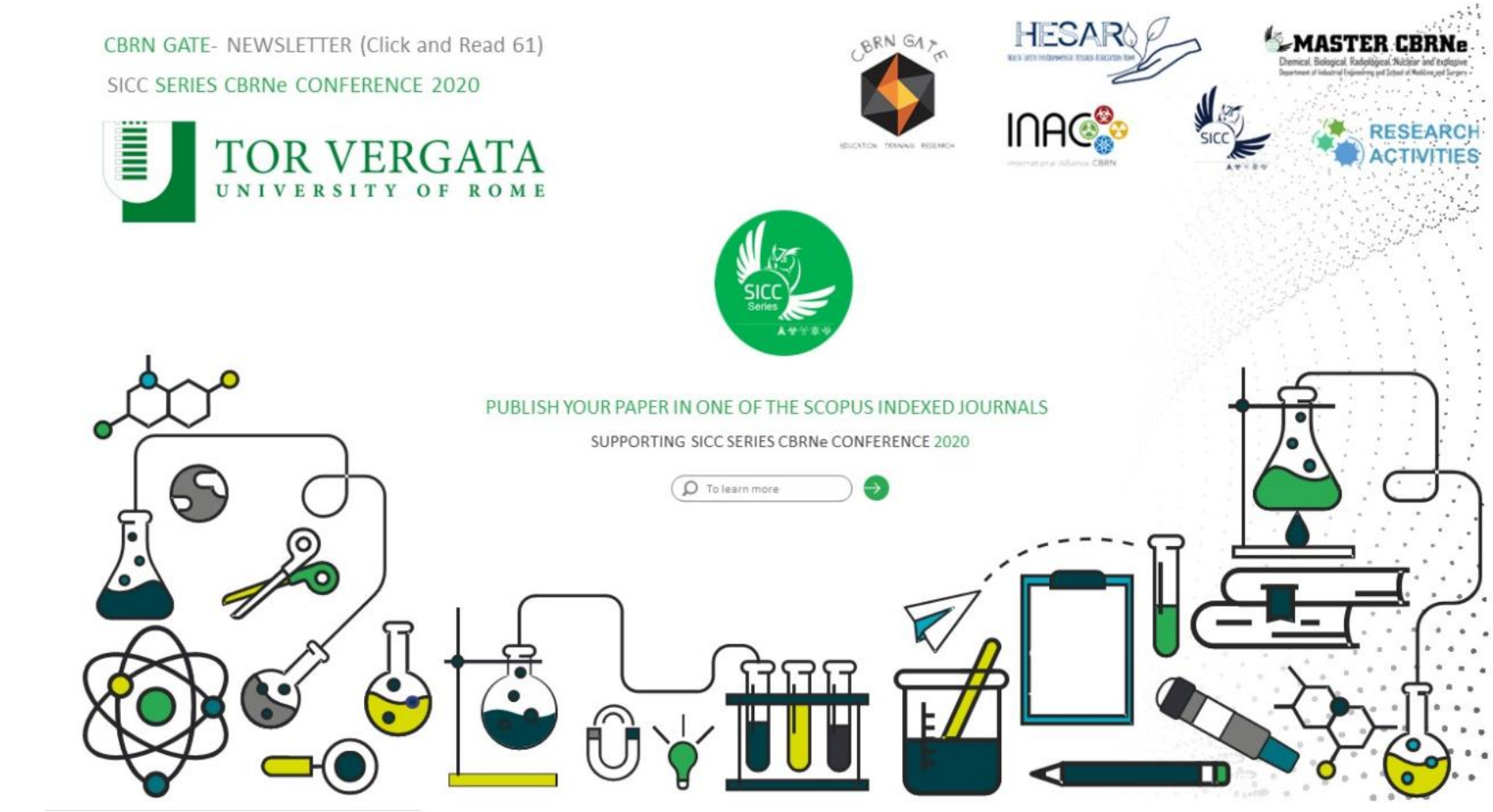
The CBRNe Book Series was born as an initiative of the Directive Board and of the Scientific Committee of "International Master Courses in Protection Against CBRNe events" (www.cbrngate.com) at the University of Rome Tor Vergata.

The evolution and increase in Security and Safety threats at an international level place remarkable focus on the improvement of the emergency systems to deal with crisis, including those connected to ordinary and non-conventional events (Chemical, Biological, Radiological, Nuclear, and explosives). In every industrial Country there are multiple entities with specialized teams in very specific fields, but the complexity of the events requires professionals that not only have specific know-how, but also expertise in the entire relevant areas.

During the month of August, 2016, the Italian Minister for Instruction, University and Research (MIUR) has officially added this book series in the list of the official publications recognized by the Minister itself with the following references:
classification code: E237557;
title: CBRNE BOOK SERIES.

DIRECTOR SCIENTIFIC BOARD: **PROF. CARLO BELLECCI**
DIRECTOR EDITORIAL BOARD: **DR. ANDREA MALIZIA**

CLICK & READ - THE CBRNe newsletter



SCIENTIFIC EVENTS

CONFERENCES

WORKSHOPS


SICC Series
Epidemics, biological threats and radiological events
The importance of multidisciplinary approach for International Research Cooperation
10-12 December 2020
Rome - ITALY
ABSTRACT SUBMISSION
DEADLINE EXTENDED
09 November 2020

Presentazione corsi di Master Internazionali di I e II Livello in Protection against CBRNe events

Andrea Malizia, Ph.D.

International Master Courses in Protection Against CBRNe events

UNIVERSITY OF ROME TOR VERGATA

E-mail: *malizia@ing.uniroma2.it*