

#### **International Master Courses in**

#### "PROTECTION AGAINST CBRNe EVENTS"

The evolution and increase in Safety and Security 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 the 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 relevant areas.

Given the global interest in these issues, the Department of Industrial Engineering and the Faculty of Medicine and Surgery of the Tor Vergata University organize the international Master Courses in "Protection against CBRNe events": I Level Master Course in "Protection against CBRNe events" (120 ECTS) and II Level Master Course in "Protection against CBRNe events" (60 ECTS). These courses aim at providing attendees with comprehensive competences in the field of CBRNe Safety and Security, through teaching and training specifically focusing on real needs.

The creation of the "Click & Read" newsletter, that connects directly to the International CBRNe Master website simply clicking on the blue titles of each news, would be a monthly appointment about the main news around International CBRNe Master Courses... and more!

Enjoy!!!



### Click & Read N° 28/29 - September/October 2016



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

2<sup>nd</sup> Announcement - Preliminary Program

3rd International CBRNe Workshop

IW CBRNe 2016

Building a strong CBRNe scientific community

#### 25 November 2016

University of Rome Tor Vergata Villa Mondragone Via Frascati 51 (Monteporzio Catone, Rome)



#### The workshop addresses current CBRNe risk scenarios, focusing on:

- Capacities and best practices to enhance CBRNe security worldwide and to reduce CBRNe threats
- Cyber security: the next frontier of CBRNe
- Bio-safety and security issues
- Programs to support first responders during an hazmat incident
- The use of chemicals in war theaters: a comprehensive view

... and much much more!

For REGISTRATION please CLICKHERE or contact: iw2016@mastercbrn.com

#### International CBRNe Master Courses

Department of Industrial Engineering, University of Rome "Tor Vergata" Via del Politecnico 1, Roma, Italy - Zip Code 00173 Phone: 0039 0672597201 - Mail Address: info@mastercbrn.it



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

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#### 10.28.2016 - Master CBRNe and Gen. Galatas

Brigadier General (ret'd) Ioannis Galatas, MD, MA (Army MC), is a retired military physician with +35 years of military industry experience. His is specialized in Allergy and Clinical Immunology (Board certified) and for more than two decades he served as Head of the Department of Allergy & Clinical Immunology at Army General Hospital of Athens, Greece.



Since 2001 he has been involved in CBRNE operations as planner and instructor trained (including live agent training) in a number of countries abroad. His main passion is "Hospitals' CBRN Defense & Preparedness in Megapolis Environment" and "CBRNE Design/Hardening of Critical Infrastructure" [airports, shopping malls, hotels etc]. During the 2004 Athens' Olympic Games, he served as Commandant of the Olympic Hospital CBRN Response Unit – the only hospital-based specialized unit (70 people) deployed for the Games... (read more)



### Click & Read N° 28/29 - September/October 2016

#### 10.27.2016 - New Scientific Paper Published!

We are glad to announce that the paper:

A novel integrated approach for the hazardous radioactive dust source estimationin future nuclear fusion power plants

has been published by: L.A. Poggi , A.Malizia, J.F.Ciparisse, P.Gaudio on the journal Heliyon, Volume 2, Issue 10, October 2016, Article e00184

The journal is index on SCOPUS. You can download the paper <u>HERE</u>! Greetings to Luigi Antonio Poggi, first author of the paper!

#### 10.26.2016 - Master CBRNe and Dr. Paolo Maurizio Soave

Dr. Paolo Maurizio Soave came yesterday to give a lecture on CBRNe medical management and first AID. The class was enthusiast about the technical approach of Maurizio full of operative details.

Maurizio serves at the *Fondazione Policlinico Gemelli, Università Cattolica* and also as Didactic Coordinator of the International Master Courses in Protection Against CBRNe events. He is involved in several national and International research project on CBRNe and non conventional safety and security.

We are proud to work with you Maurizio.

You can see the interview to Maurizio HERE.



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#### 10.25.2016 - Dr. Stef Stienstra @MasterCBRNe

It is a pleasure announce that **Dr. Stef Stienstra** is officially part of the Didactic Board of the International Master Courses in Protection Against CBRNe events.

Yesterday he has completed a lecture on medical management in the module dedicated of the medical issues in case of CBRNe events.

Dr. Stef Stienstra is a Strategic consultant in biomedical science, with a parallel career as a Commander of the reserve of the Royal Dutch Navy. He is a Key Expert for CBRN Center of Excellence P48 (Improve regional management of outbreaks in countries) at Expertise France.

For the Dutch Armed Forces he has responsibility for the counter measures in CBNRe threats and medical consequence management both in a military and a civilian setting.

He was the director of the 2014 and 2016 World Congress of CBRNe Science & Consequence Management in Tbilisi, Georgia. And he is also visiting professor for Punjab University in Pakistan and Rhein-Waal University in Germany. He has finished his studies in Medicine and in Biochemistry at the University of Groningen in The Netherlands and has extensive practical experience in cell biology, immunohematology, biodefense and transfusion medicine.

You can see the interview to Dr. Stienstra HERE! WELCOME on BOARD STEF!!

The pictures available on our social networks!!!



### Click & Read N° 28/29 - September/October 2016

#### 10.24.2016 - Master CBRNe and COCIM



We are proud to announce that the International Master Courses in Protection Against CBRNe events and the <u>Centro Alti Studi per la Difesa (CASD)</u> have started an official cooperation in the aim of the <u>activities</u> of the course "Civil-Military Cooperation", *Cooperazione Civile Militare* (COCIM).

The course is at the 37<sup>th</sup> edition but thanks to this official cooperation, starting from this year, the course is part of the activities of the International Master Courses in Protection Against CBRNe events and the attendees of the course can achieve 12 ECTS at the end of the course (if they pass the final exam). It is an important sign of Civil-Military cooperation, natural consequence of our official convention with the Ministry of Defence. We want official thank the Director of CASD Gen. B. Lombardi, and the Responsible for COCIM Course Col. Nardelli that has been the principal promoter of this initiative!

The greetings of the Directive Board are also dedicated to Valentina Gabbarini, part of the Didactic Management Unit, that has successfully completed the COCIM course.

#### PROUD TO WORK WITH THE ITALIAN MINISTRY of DEFENCE!

Visit our social networks to see more pictures... (read more)



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#### 10.21.2016 - NEW SCIENTIFIC PAPER PUBLISHED!!!!

We are glad to announce that some member of the CBRNe Master Course Board togheter with the <u>QEP research group</u> and colleagues of Vitrociset have published the following paper: Real-time vehicle emissions monitoring using a compact LiDAR system and conventional instruments: first results of an experimental campaign in a suburban area in southern Italy

realized by: Stefano Parracino, Maria Richetta, Michela Gelfusa, Andrea Malizia, Carlo Bellecci, Leonardo De Leo, Carlo Perrimezzi, Alessandro Fin, Marco Forin, Francesca Giappicucci, Massimo Grion, Giuseppe Marchese, Pasquale Gaudio published on: *Optical Engineering 55(10), 103107 (2016), doi: 10.1117/1.0E.55.10.103107*.

This journal is index on **SCOPUS**. You can download the paper <u>HERE</u>.



### Click & Read N° 28/29 - September/October 2016

10.20.2016 - Internet of Things and Master CBRNe: the new frontiers of didactic and research

The International Master Courses in Protection against CBRNe events have been invited for a speech at the :

<u>Conference on Internet of Things (IoT) — A Technological Approach held at the</u>

<u>National Technological University, Buenos Aires, Argentina - 14 October 2016</u>

Dr. Andrea Malizia and Dr. Pasquale Gaudio, from our Directive Board, have prepared a presentation on how IoT has influenced the way to do research and didactic.

The lecture has been entitled:

The IoT as an innovative approach to do multidisciplinary research and didactic

The presentation can be downloaded <u>HERE</u>, under the section: <u>CBRNe – Didactical and</u> Training activities

You can also see the video send to present the work **HERE** or on our social networks!

**ENJOY!!!** 



### Click & Read N° 28/29 - September/October 2016

#### 10.14.2016 - NEW SCIENTIFIC PAPER PUBLISHED!

Dear All, we are glad to announce that the paper:

A Review of Dangerous Dust in Fusion Reactors: from Its Creation to Its Resuspension in Case of LOCA and LOVA

by Andrea Malizia, Luigi Antonio Poggi, Jean-François Ciparisse, Riccardo Rossi, Carlo Bellecci and Pasquale Gaudio - *Energies 2016, 9(8), 578; doi:10.3390/en9080578* 

Greetings to the authors from the CBRNe Master Course. To download the paper click HERE

#### 10.13.2016 - NEW SCIENTIFIC PAPER PUBLISHED!

Dear All, e are glad to announce that the paper:

Plasma-material Interactions Problems and Dust Creation and Re-suspension in Case of Accidents in Nuclear Fusion Plants: A New Challenge for Reactors like ITER and DEMO

by A. Malizia, L.A. Poggi, J.F. Ciparisse, S. Talebzadeh, M. Gelfusa, A. Murari and P. Gaudio published by: Scrivener Publishing LLC.

The title is index on SCOPUS. To download the paper click **HERE** 



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#### 10.08.2016 - Master CBRNe proud of GIADA BELLANCA

Giada Bellanca, a valuable student of the current edition of the first level Master Course has been interviewed at the TV show "Tutta salute" Yesterday morning on "RAI 3" a national TV channel.

Giada has been invited to tell about her amazing work in saving immigrants and saving people, answering to all the question coming from home and closing with a beautiful sentence "Men, women and children are equal everywhere...we have to help humans as human". That is it!

We are proud to have you in our class Giada and we fully support you!





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## 10.07.2016 - The 1<sup>st</sup> level Master Course students invited to the DPD service presentation

The Directive Board of the International CBRNe Master Courses wishes to thank <a href="DPD">DPD</a> service for the invitation to the event of 30<sup>th</sup> September. The students of the Ist Level Master Course in Protection against CBRNe events had the chance to participate to this important presentation, getting an overview on the cutting edge technological developments in terms of chemical and radiological detection, and CBRNe protection technologies.

The participants had the possibility to attend lectures given by the representatives of four international factories (Environics Aisense, Temet and SEC-Technologies) and try some of their products.





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#### 10.04.2016 - Project EDEN- Simulation of a maxi emergency

On the 28th and 29th of September, the Department of emergency (Dea – Dipartimento di emergenza e accettazione) and the Emergency Room of University General Hospital A. Gemelli has hosted the simulation of a Maxi Emergency to test the internal plan for the massive access of injured people (Peimaf – Piano emergenza Interno Massiccio Afflusso Feriti). The event, organized by the experts of the faculty of Medicine and Surgery of the Università Cattolica and of the General Hospital A. Gemelli is part of the activities that fall under the implementation of the EU founded project EDEN (European End User Driven Demo for Cbrne).

The students of the first level master course had the unique chance to participate, as observers, to the exercise, while Dr. Carestia, member of the master's didactic management unit, gave her contribution as chairwoman of the focus group "Handling Emergency Situations", discussing on the gaps and needs of healthcare settings during CBRNe maxi emergencies.





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#### 10.03.2016 - Dr. Luca Rotondi awarded best BLSD instructor '16

The first deaf former Student of the International Master Courses in Protection against CBRNe events, Dr. Luca Rotondi, was awarded as "Best National BLSD Instructor" by the Salvamento Academy during an event organized at Potrtoferraio (Italy).

This is another of the achievements of reached by Dr. Rotondi, to whom the Directive Board of the International Master Courses in Protection against CBRNe events extends its warmest congratulations.





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#### 09.29.2016 - NEW SCIENTIFIC PAPER PUBLISHED!!

We are glad to announce that the paper

Biological Dual-Use Research and Synthetic Biology of Yeast.

by Cirigliano A., Cenciarelli O., Malizia A., Bellecci C., Gaudio P., Lioj M., Rinaldi T.

has been published on "Science and Engineering Ethics" Journal (from SPRINGER Verlag), DOI: 10.1007/s11948-016-9774-1, indexed in Scopus and PubMed.

This is a great success of the International CBRNe Master Courses.

To consult the paper click here.

#### 09.28.2016 - The module on Explosive has been concluded

We are proud to say that the module regarding the Explosive has been successfully concluded.

The students of the 1st Level Master Course in Protection against CBRNe events had the chance to work, get lectures and made training activities with personell of: Italian Ministry of Interior, Italian Ministry of Defence, Irish Defence Force Training Centre, Ireparma esplosivi and they had the chance also to visit the BMD factory one of the most important one in the CBRNe field.

(Read more)

# MASTER CBRNe



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### <u>09.20.2016 - NATO Biological Warfare Defence Awareness</u> Course

At the NATO school in Oberammergau (Germany) is currently ongoing the 3rd edition of the *NATO Biological Warfare Defence Awareness Course (M3-81)*. The course is attended by more than 40 students, included the II Level Master Course Students.

As reported on the website of the NATO School, the aim of this course is to provide students with foundational knowledge of current and emerging biological warfare hazards, risks, threats and implications for Medical Countermeasures within the context of NATO Biological Defence Policy and capabilities.

According to a Memorandum of Understanding between NATO School and The University of Rome Tor Vergata, the NATO Biological Warfare Defence Awareness Course (M3-81) represents a module related to Biological Aspects of the 2nd Level International Master Course in Protection against CBRN events for Decision Maker's Advisors.

The Directive Board want to thanks Lt.Col. Andrea Gloria, the Course Director Maj. Oswald, the Senior representative of Italy at the NATO school Col. Mattina and the Dean of the School for the hospitality.

For more information, please to see the website of the NATO School <a href="http://www.natoschool.nato.int">http://www.natoschool.nato.int</a>.



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### 09.16.2016 - Final Defence of 2<sup>nd</sup> Level Master Course

The final defence of the 2<sup>nd</sup> Level Master Course in "Protection against CBRNe events" took place this morning.

The title of the thesis were:

- 1) Destruction of Chemical Weapons. An innovative pathway to scheduled compounds and subsequent wastes;
- 2) Study on copper electroplating and setting of a numerical simulation model for nuclear fusion applications;
- 3) "Reversed engineered approach" and "Gap Analysis" to evaluate CBRN training outcomes in Italian Red Cross Military Corps Bio-containment response and Disaster Victim Management activities, working in Migratory Flows Control operations High/Medium Biological Risk.

Greetings from the Directive Board of the International CBRNe Master Courses to all the students that achieved the Title today and complete this important experience!



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09.15.2016 - MEETING A.N.U.T.E.I. @Ufficio Tecnico Territoriale
Armamenti Terrestri Nettuno



The Directive Board of the International CBRNe Master Courses is pleased to thanks ANUTEI for the invitation at this important meeting:

### EQUIPAGGIAMENTO E PROTEZIONE DEL SOLDATO E DEI VEICOLI LEGGERI DA COMBATTIMENTO

organized by A.N.U.T.E.I. (Associazione Nazionale Ufficiali Tecnici Esercito Italiano).

The meeting has taken place today Thursday 15 September 2016 at "Ufficio Tecnico Territoriale Armamenti Terrestri" in Nettuno (Rome)

<u>Dr. Andrea Malizia, representative of our Master Courses, has participated with a speech about the role of prevention in CBRNe field.</u>



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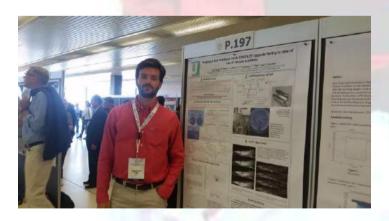
#### 09.12.2016 - SOFT 2016





From 5<sup>th</sup> to 9<sup>th</sup> September 2016, a member of the QEPM Research Group attended the 29th edition of the Symposium on Fusion Technology (SOFT 2016) in Prague, Czech Republic, with posters presentation.

The biennial Symposium on Fusion Technology is the leading conference in this field in Europe, representing a great event to meet scientists, engineers, industry representatives and exhibitors from all over the world interested on the developments on fusion field.







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