Monday, May 29th

12h30 – 13h00  INTRO-01  Introduction by the French state representatives on protection & security

Historical & legal aspects
13h00 – 13h30  INTRO-02  Olivier LION - CBRNE Historical retrospective
13h30 – 14h00  INTRO-03  Jean-Louis BRUGUIERE - Legal aspects

Threats
14h00 – 14h20  INTRO-04  Alan GRIMMER (Interpol) - C & B Threats
14h20 – 14h40  INTRO-05  Sylvain BARROT (French Police Central Laboratory, LCPP)
14h40 – 15h00  INTRO-06  Hervé DUPONT (French MoD, DGA-MNRBC)

15h00 – 15h30  Coffee break, poster session, industrials & responders exhibition

Responses to CBRNE crisis
15h30 – 15h50  INTRO-07  Lionel LACHENAUD (French General Secretary for Defense and national security, SGDSN)
15h50 – 16h10  INTRO-08  Fabrice JEAN (French General Directorate for civil protection and crisis management)
16h10 – 16h30  INTRO-09  Christophe LIBEAU (Paris Fire Brigade), CBRNE risks management
16h30 – 16h50  INTRO-10  Adrien SIVIGNON (French General Police Directorate), CBRNE risks management: forensic investigations in a contaminated environment

16h50 -17h10  Coffee break, poster session, industrials & responders exhibition

Technological Challenges
17h10 – 17h25  INTRO-11  Yannick MOREL (French MoD, DGA) - CBRNE defense: technological challenges
17h25 – 17h40  INTRO-12  Christophe BOSSUET (French CEA) - French joint ministerial CBRN-E research and development program

Economical issue
17h40 – 18h00  INTRO-13  Mark Lawrence JOHNSON - Risk-Informed Demand for CBRN Medical Countermeasures

Industrial responses
18h00 – 18h20  INTRO-14  Invited Industrial speaker
18h20 – 18h40  INTRO-15  Invited Industrial speaker
18h40 – 19h00  INTRO-16  Invited Industrial speaker

Cocktail
Tuesday, May 30th

**MEDICAL COUNTERMEASURES – 1** – Session part of the NATO-supported Advanced Research Workshop on “CBRN Exposure Assessment and Medical Countermeasures”

08h00 – 08h35 **MCM/ARW-01** Michael ABEND - Establishing gene expression for prediction of the hematological acute radiation syndrome - Plenary

08h35 – 09h00 **MCM/ARW-02** Peter BLAIN - Incapacitating Chemical Agents and other Less-lethal Technologies - Key Note

09h00 – 09h25 **MCM/ARW-03** Marti JETT - Integration of systemic host responses to a lethal exposure with Y. pestis – Key note

09h25 – 09h40 **MCM/ARW-04** Thomas HENRY - Challenges in antimicrobial research: the example of the class A bioterrorism agent Francisella tularensis

09h40 – 09h55 **MCM/ARW-05** Anissa BRAÏKI - Tertiary amine-3-hydroxyridine aldoxime conjugates as efficient uncharged reactivators for acetylcholinesterase inhibited by organophosphorus nerve agents

09h55 – 10h10 **MCM/ARW-06** Amélie ZAZA - Development of bivalent vaccine candidates based on Z-deleted arenaviruses

10h10 – 10h40 Coffee break, poster session, industrials & responders exhibition

**DECONTAMINATION – Human** – Session part of the NATO-supported Advanced Research Workshop on “CBRN Exposure Assessment and Medical Countermeasures”

10h40 – 11h15 **DEC/ARW-01** Robert P. CHILCOTT - Project GO-AHEAD: guidance on all-hazards enhanced action decontamination - Plenary

11h15 – 11h40 **DEC/ARW-02** Howard MAIBACH - Mechanisms of skin decontamination - Key Note

11h40 – 12h05 **DEC/ARW-03** Jean-Ulrich MULLOT - Evaluating performances of materials and procedures by using CWA simulants - Key Note

12h05 – 12h20 **DEC/ARW-04** Stacey WYKE - Optimising existing and novel decontamination techniques for hair and skin (PHOENIX project)

12h20 – 12h35 **DEC/ARW-05** Alicia SALERNO - Model-based optimization of parameters for degradation reaction of an organophosphorus pesticide, Paraoxon, using CeO2 nanoparticles in water media

*End of the NATO-supported ARW session*

12h35 – 12h50 **DEC-06** Boban CEKOVIC - DECPOL® (new emergency decontamination mitt) Decontamination and neutralization performance overview on real agents

12h50 – 13h05 **DEC-07** Navneet SHARMA - Topical Formulation for Radiological and Nuclear decontamination
Lunch, poster session, industrials & responders exhibition
Philipe QUEVAUVILLER - Workshop on EU-Research on CBRN-E – How to ensure efficient science-policy-practitioners interactions in support of knowledge-based decisions?

DETECTION – Alert – Session part of the NATO-supported Advanced Research Workshop on “CBRN Exposure Assessment and Medical Countermeasures”

14h30 – 14h55 DET/ARW-01 Fabiana ARDUINI - Paper-based devices for the detection of chemical warfare agents - Key Note

14h55 – 15h10 DET/ARW-02 Stéphanie SIMON - Activities of the Laboratory for Immunoanalytical Researches in the french CBRNe program

15h10 – 15h25 DET/ARW-03 Véronique REBUFFEL - A single-cell Raman Spectroscopy device dedicated to fast and robust pathogen threat detection during in the field interventions

15h25 – 15h40 DET/ARW-04 Guillaume SANNIE - The H2020 C-BORD project: advanced non-destructive techniques to improve control of cargo containers

15h40 – 15h55 DET/ARW-05 Emmanuel EGGER - A vehicle for detection of neutron and gamma ray sources

15h55 – 16h10 DET/ARW-06 Romain VEROLLET - Detecting Unknown Chemical Gas Clouds at Distance with Multispectral Imagery

16h10 – 16h25 DET/ARW-07 Guillaume MONTEMONT - NuVision: a portable spectrometric imaging device for searching and identifying radioactive sources

16h25 – 17h00 Coffee break, poster session, industrials & responders exhibition

RISKS MANAGEMENT

17h00 – 17h25 RM-01 Kai KÈHE - CBRN Medical Defence in Germany: new Challenges - Key Note

17h25 – 17h50 RM-02 Richard AMLÔT - Psychological First Aid: mitigating against long-term psychosocial effects of CBRNe incidents - Key Note

17h50 – 18h05 RM-03 Rebecca HOILE - Bioterrorism Preparedness - ‘Don’t Sweat the Small Stuff’

18h05 – 18h20 RM-04 Emma-Jane GOODE - Project 54: enhancing the systems in place in the MIE region (Iraq, Jordan, Lebanon) for medical preparedness and medical emergency response to CBRN incidents

18h20 – 18h35 RM-05 Sébastien BEAUME - Management of the initial response against CBRN threats in an Emergency Medical Fire Department

20h30 Gala evening and dinner
Wednesday, May 31st

**DETECTION – Identification** – Session part of the NATO-supported Advanced Research Workshop on “CBRN Exposure Assessment and Medical Countermeasures”

08h00 – 08h25 **DET/ARW-08** Dan NOORT - Development of methods for assessment of chemical exposures within the framework of the Generic Integrated Forensic Toolbox (GIFT) project - Key Note

08h25 – 08h50 **DET/ARW-09** Håkan WINGFORS - Exposure assessments of air pollutants in the occupational environment of deployed soldiers - Key Note

08h50 – 09h05 **DET/ARW-10** Ladislava NAVRATILOVA - Methodology for on site identification of solid and liquid chemicals

09h05 – 09h20 **DET/ARW-11** Julie BENSIMON-ETZOL - DosiKit, a new portable assay for fast external irradiation biodosimetry

09h20 – 09h35 **DET/ARW-12** Céline BIGOT - High-throughput DNA sequencing and bioinformatics for the detection and identification of pathogenic organisms in complex mixtures

09h35 – 09h50 **DET/ARW-13** Conrad WEICHBRODT - Next level toxicity screening: from single channel to overall cell behavior

09h50 – 10h05 **DET/ARW-14** Vincenzo MAZZARACCHIO - An impedimetric aptasensor for the detection of Bacillus anthracis spores

10h05 – 10h20 **DET/ARW-15** Jesús ZUECO CRUZ - Development of reagents for the detection of spores of Bacillus thuringiensis var. kurstaki. A comparison between latex slide agglutination, slide co-agglutination and ELISA

10h20 – 10h50 Coffee break, poster session, industrials & responders exhibition

**PROTECTION - Depollution**

10h50 – 11h15 **PRO-01** Masaru WATANABE - Production of flexible carbon in hydrothermal condition: functionalized carbon for applications in radioactive cleanup prepared with hydrothermal treatment of lignocellulose - Key Note

11h15 – 11h30 **PRO-02** Pauline JACQUET - Improvement of hyperthermostable enzyme for external decontamination of organophosphorus chemicals

11h30 – 11h45 **PRO-03** Thomas HOFMANN - Interactions, dynamics and removal of caesium from building materials: dirty bomb & decontamination

11h45 – 12h00 **PRO-04** Esther LE TOQUIN - New sporicidal form for biological decontamination of facilities

12h00 – 12h15 **PRO-05** Pauline BARROIS - Toward smart textile: new coatings for photocatalytic decontamination
12h15 – 12h30  PRO-06  Marie VANDESTEEN - Smart technical textiles for decontamination of chemical warfare agents

12h30 – 12h45  PRO-07  Mark BARRETT - Experimental derivation of chemical evaporation rates from unclothed and clothed sebum-coated discs under various exposure conditions

12h45 – 14h15  Lunch, poster session, industrials & responders exhibition

MEDICAL COUNTERMEASURES – 2 – Session part of the NATO-supported Advanced Research Workshop on “CBRN Exposure Assessment and Medical Countermeasures”

14h15 – 14h50  MCM/ARW-07  Frédéric DORANDEU - 100-Years Anniversary of Sulfur Mustard Military Grand Debut – Has Research Improved Medical Management of Casualties? - Plenary

14h50 – 15h25  MCM/ARW-08  Sina BAVARI - Ebola virus disease: implications and treatments - Plenary

15h25 – 15h50  MCM/ARW-09  Jean-Nicolas TOURNIER - Medical counter-measure at the age of bioterror: from anthrax model to emerging diseases - Key Note

15h50 – 16h15  MCM/ARW-10  John MIKLER - Efficacy of scopolamine and epinephrine in simulating respiration following soman exposure - Key Note

16h15 – 16h30  MCM/ARW-11  Diane RICCOBONO - Cell therapy for skin and muscles damages in cutaneous radiation syndrome: overview of present and future strategies

16h30 – 16h45  MCM/ARW-12  Jiri KASSA - The influence of modulators of acetylcholinesterase on the resistance of mice against soman and on the efficacy of antidotal treatment of soman poisoning in mice

16h45 – 17h00  MCM/ARW-13  Benjamin BACCUS - Acute organophosphorus pesticide poisoning: a paraoxon-ethyl model in mice.

17h00 – 17h15  MCM/ARW-14  Marios JOOSEN - Application of intraosseus countermeasure administration in a guinea pig model

17h15 – 17h30  MCM/ARW-15  Nicolas BAILLET - Study of the early pathogenic events during Lassa fever in cynomolgus monkeys and its correlation with the outcome

17h30  Industrials session & show room - aperitif
Thursday, June 1st

MEDICAL COUNTERMEASURES – 3

08h10 – 08h35  MCM-16 Felicia PRADERA - The Australian government medical countermeasures initiatives - Key Note
08h35 – 09h00  MCM-17 Michel DROUET - New paradigms of the treatment of Acute Radiation Syndrome - Key Note
09h00 – 09h15  MCM-18 Alain CHAPEL - Generation of hematopoietic stem cells from non-hematopoietic iPS in patients with acute irradiation syndrome an innovative therapeutic strategy of hematopoietic syndrome
09h15 – 09h30  MCM-19 Jérôme GABARD - Phage therapy to treat respiratory tract infection
09h30 – 09h45  MCM-20 Arnaud AVRIL - Strategy for the development of recombinant human-like antibodies against rare diseases for biodefense

09h45 – 10h15  Coffee break, poster session, industrials & responders exhibition

DETECTION – Post-crisis analysis and forensics

10h15 – 10h50  DET-16 Steven SCHUTZER - Microbial Forensics - Plenary
10h50 – 11h15  DET-17 Jean ARMENGAUD - Return of experience for Phylopeptidomics: from biotox-piratox national network exercises to microbiota feces - Key Note
11h15 – 11h30  DET-18 Marco VALENTE - Radiation exposure biomarkers: results and perspectives of the French Armed Forces Biological Dosimetry Laboratory
11h30 – 11h45  DET-19 Olivier GORGE - Pathogenic bacteria DNA’s half-life in environment: a mouse study
11h45 – 12h00  DET-20 Robert diTARGIANI - Developing an Automated Method for the Verification of Human Exposure to the Chemical Warfare Agents

12h00 – 13h30  Lunch, poster session, industrials & responders exhibition

Roberto MUGAVERO and Frédéric DORANDEU, Workshop on education & training

DETECTION – Explosives

13h30 – 14h05  DET-21 Jimmie OXLEY - Issues with Analysis of Homemade Explosives - Plenary
14h05 – 14h30  DET-22 Pierre CHARRUE - STANDEX: an innovative concept of real time checking and detection system developed in the frame of NATO/SPS program – Key Note
14h30 – 14h45  DET-23 Joachim TABARY - Baggage imaging system by x-ray diffraction combining opened collimations with spatially- and energy-resolved CdZnTe detectors
14h45 – 15h00  DET-24 Didier POULLAIN - New developments for explosives detection at CEA: answering to field needs
15h00 – 15h15  DET-25 Céline FRENOIS - Vapor explosives detector: from multi-sensor prototype development to an industrial device

15h15 – 15h45 Coffee break

MEDICAL COUNTERMEASURES – 4

15h45 – 16h20 MCM-21 Lucille LUMLEY - Efficacious treatment of soman-induced status epilepticus with synergistic drug combinations - Plenary
16h20 – 16h35 MCM-22 Elizabeth POSILLICO - Development of Obiltoxaximab for Prophylaxis and Treatment of Inhalational Anthrax
16h35 – 16h50 MCM-23 Kelly BASI - Dimethyl trisulfide (DMTS) is an effective treatment in an inhalation model for cyanide poisoning using unanesthetized mice
16h50 – 17h05 MCM-24 Julia HERBERT - Precision cut lung slices as test system for candidate therapeutics in organophosphate poisoning
17h05 – 17h20 MCM-25 Michel POPOFF - Atypical outbreaks of Clostridium baratii botulism in France and antibiotic resistance in Clostridium botulinum
17h20 – 17h35 MCM-26 Fabrice BIOT - The Diagnosis of Melioidosis Outside Endemic Areas: a French Experience
17h35 – 17h50 MCM-27 Matthias PORT - Prediction and medical management of acute radiation syndrome using clinical signs and symptoms - from statistical tool development to training of first responders

End of the conference - Conclusions