

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 <u>INTRO-13</u> *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



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-hydropyridine 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 <u>DEC/ARW-04</u> Stacey WYKE Optimising existing and novel decontamination techniques for hair and skin (PHOENIX project)
- 12h20 12h35 <u>DEC/ARW-05</u> 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 <u>DEC-06</u> 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



13h05 – 14h30 Lunch, poster session, industrials & responders exhibition
Philippe 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	<u>DET/ARW-05</u> 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	<u>DET/ARW-07</u> 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 KEHE - 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 DET/ARW-12 Céline BIGOT - High-throughput DNA sequencing and bioinformatics 09h20 - 09h35 for the detection and identification of pathogenic organisms in complex mixtures <u>DET/ARW-13</u> Conrad WEICHBRODT - Next level toxicity screening: from single 09h35 - 09h50 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 VANDESTEENE - 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 Marlos 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	<u>DET-24</u> Didier POULLAIN - New developments for explosives detection at CEA:
	answering to field needs



15h00 – 15h15 <u>DET-25</u> *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 unanesthesized 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

