

1st International Symposium on Development of CBRN Defence Capabilities

2010: A National Approach in a Multinational Environment

November 30th - December 1st, 2010
bcc / Berlin Congress Centre
Alexanderstrasse 11
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Association for Defence Technology (SGW)

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1st International Symposium on Development of CBRN Defence Capabilities

The Main Programme

Tuesday, November 30th

- 07:00 Check In Counter opens
- 08:15 Opening of the Exhibition
- 08:45  **Welcome Notes and Opening Ceremony of the Symposium**
General (ret.) Rainer Schuwirth, Chairman of the German Association for Defence Technology
-  **Brigadier General Winfried Zimmer**, Director "Fü S IV", Federal Ministry of Defence, Bonn
-  09:00 **Opening Key-Note**
Brigadier General Winfried Zimmer, Director "Fü S IV", Federal Ministry of Defence
-  09:30 **Decisions of the NATO Summit in Lisbon and Their Significance for WMD Non-Proliferation and CBRN-Defence**
Ambassador Jacek Bylica, Head, WMD Non-Proliferation Centre, NATO
-  10:00 **Future-oriented Solutions for Effective CBRN Defence for Armed Forces and Civil Defence**
Dr.-Ing. Hagen R. Gehringer, Managing Director, Kärcher Futuretech
-  10:30 **The Importance of Strategy for Countering Weapons of Mass Destruction**
Rebecca Hersman, Deputy Assistant Secretary of Defense for Countering WMD, DoD, USA
- 11:00 *Coffee Break / Exhibition / Press Conference*
-  11:30 **EDA's Contribution to Bio Defence**
Major General Jukka Juusti, Armaments Director, European Defence Agency
-  12:00 **Modern Developments in NBC-Defence Systems**
Peter S.H. Georgi, Board Member, RMMV and Dr. Bernhard Halstrup, Head of Competence Center NBC Defence Systems
- 12:30 *Luncheon / Buffet*
- 14:00 **PANEL SESSIONS 1 - 5 and 11**
- 15:45 *Coffee Break / Exhibition*
-  16:15 **NATO's Role and Means in Civil Defence against CBRN-Threats**
Dr. Denisa-Elena Ionete, CBRN and Medical Civil Emergency Planning Operations Division, NATO
-  16:45 **CBRN-Defence – the European Civilian Approach**
Dr. Irmtraud Taufer, Armaments Counsellor, Permanent Representation of the Federal Republic of Germany to the European Union
-  17:15 **A National Response on CBRN Threats**
Dr. Marc Cadisch, Director SPIEZ LABORATORY, DDPS and Vice President KomABC
-  17:45 **Security Research in CBRN-Defence**
Tjen Khoem Liem, DG Enterprise, European Commission
- 18:15 **Reception / Dinner Buffet / Music** by the Ragtime-Quintet of the chamber orchestra of Prussia
- 21:15 End of first day

Session I
Opening / Political Key Notes

Session II
Technical Aspects

Session III
Civil CBRN Defence

Speakers 2010

 Rebecca Hersman Deputy Assistant Secretary of Defense for Countering WMD, DoD, USA	 Jacek Bylica Head, WMD Non-Proliferation Centre-NATO	 Dr. Margareta Sudhof Deputy Head of Unit Crisis Management, Federal Ministry of the Interior
 MajGen Jukka Juusti Armaments Director European Defence Agency (EDA)	 Tjen Khoem Liem Deputy Director General of DG Enterprise, European Commission	 Dr. Stefano Miorotti CBRN General Manager of Cristanini
 Albrecht Broemme President of GE Federal Agency for Technical Relief (THW)	 Dr.-Ing Hagen R. Gehringer Managing Director of Kärcher Futuretech	 Dr. Irmtraud Taufer Armaments Counsellor German Representation to the European Union
 Brigadier General Winfried Zimmer Director Fü S IV, German Ministry of Defence	 Peter Georgi Board Member, Rheinmetall MAN Military Vehicles	 Bruce Barnett ThermoFischer Scientific
 Brigadier General Jean-Francois Parlanti CBRN Executive Committee, EMA	 Colonel Prof. Dr. Lothar Zöller Head of Bundeswehr Institute for Microbiology	

Wednesday, December 01st

- 07:30 Opening of the Exhibition
- 08:00 **Opening Key-Note**
Dr. Margareta Sudhof, Deputy Head of Directorate-General Crisis Management, Ministry of the Interior
- 08:30 **CBRN-Operation: a Horrible or Controllable Scenario for Operational Forces?**
Albrecht Broemme, President, Federal Agency for Technical Relief (THW)
- 09:00 *Coffee Break / Exhibition*
- 09:15 **Panel Sessions 6 - 10**
- 11:00 *Coffee Break / Exhibition*
- 11:30 **Medical Biodefense: Challenges and Solutions**
Colonel Prof. Dr. Lothar Zöller, Head of Bundeswehr Institute for Microbiology
- 12:00 **Modernizing CBRN-Defence Capabilities**
Colonel (GS) Dieter Jaksik, MoD, Bonn
- 12:30 **SX 34 System for the Decontamination of Sensitive Equipments**
Dr. Stefano Miorotti, CBRN Area General Manager, Cristanini S.p.A.
- 13:00 *Luncheon*
- 14:45 **Perspective & Objective of the French CBRN Defence**
Brigadier General Jean-Francois Parlanti, CBRN Executive Committee, EMA
- 15:15 **Advances in Handheld, Field-Based Chemical Identification**
Bruce Barnett, Thermo Fisher Scientific
- 15:45 **CBRN Defence – The Austrian Approach**
Lt.Colonel Franz Gaugl, Chief CIMIC Section & NBC Expert, MOD
- 16:15 **Transformation: From Homeland Defence to Operational Capabilities**
Major Gal Gilboa, Head of Unconventional Weapon (WMD) Section, Home Front Command
- 16:45 **Closing Remarks**
Major General (ret.) Wolfgang Döring, German Association for Defence Technology
- 17:00 End of Conference

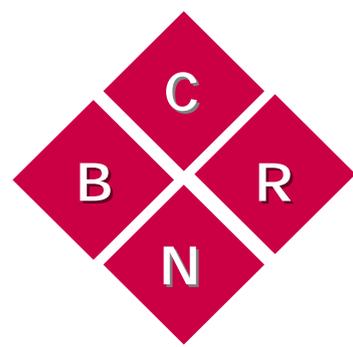
Session III (continuation)
Civil CBRN Defence

Session IV
Military CBRN Defence



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The Panel Programme

Panel 1: Room A03 / Basement

Detection of Biological Threats

- Chairman: LTC Hans-Jürgen Jacob, Joint Support Command, Cologne
- Speakers: **Automatic Immunomagnetic Separation and Detection of Viruses – Identifying Adenovirus via Sandwich ELISA and PCR Amplification of the Hexon Gene**
Dr. Alois Friedberger, EADS Innovation Works
- A Rapid Deployable Bio Lab – Microbiological High-Tech Diagnostics for Operations Abroad**
LTC Dr. Roman Wölfel,
Microbiological Institute of the German Armed Forces
- The BiGRUDI project: Development of mobile Diagnostic Platforms for rapid Detection of Biothreat Agents**
Heinz Ellerbrok, Robert Koch Institut, Centre for Biological Safety, Berlin, Coordinator BiGRUDI project
- An Integrated Approach to Detection and Identification of Aerosolized Biological Agents**
Ken Klein, Product Manager, Smiths Detection
- Rapid on-site-detection of Biowarfare Agents with Lateral Flow Assays (LFA)**
Dr. Sybille Pagel-Wieder, miprolab GmbH

Panel 2: Room A04 / Basement

Lab on the chip

Miniaturising of Equipment for Detection and Identification

- Chairman: Dr. Christophe Pannetier, DGA CBRN Defence, Paris
- Speakers: **Automated DNA-Preparation System for Bacteria out of a Millilitre Liquid Sample**
Rainer Gransee, Mainz Institute for Microtechnology
- Electrical Bio-Chips – A new Dimension in Biological Warfare**
Thomas Elßner
Bruker Daltonik GmbH
- Advances in Handheld, Field-Based C-Identification**
Servantech
- Chip-Based Detection of Viruses**
Oberregierungsrätin Dr. Birgit Hülseweh,
Bundeswehr Research Institute for Protective Technologies and NBC Protection (WIS)
- Design and Assessment of CBRN Identification Systems**
Roberta Collino, THALES

Panel 3: Room B05 / Ground Floor

Decontamination

The way ahead: Nano Technology/Enzymatic/Modern Technologies

- Chairman: Dr. Alexander Grabowski,
Bundeswehr Research Institute for Protective Technologies and NBC Protection (WIS)
- Speakers: **Development of Enzyme Systems to Combat Chemical and Biological Threat Agents**
Christopher Barnett,
Director Scientific Applications, Genencor
- Patient and Casualty Decontamination System Mobile Tent Based Decontamination System for Walking and Stretcher Patients**
Thilo Schuppler, OWR GmbH
- Sporicidal Efficiency of Disinfectants on the Surfaces of Personal Protective Equipment – a Model for the Validation**
Karin Lemmer, Robert-Koch-Institute
- Decontamination Systems**
Dr. Stefano Miorotti,
CBRN Area General Manager Cristanini S.p.A.
- CBRN DECONTAMINATION – Industry Considerations**
Laura Cochrane, RSDecon
- Skin Decontaminants for Emergency Management and Military Operations**
LTC Dr. Martin Weber, Pharmacist and Food Chemist
Medical Service of the GE Armed Forces

Panel 4: Room C01 / Plenum

21st Century CBRN-Reconnaissance-Requirements of Future Missions

- Chairman: Peter S.H. Georgi, Board Member RMMV and Dr. Bernhard Halstrup
Head of Competence Center NBC Defence Systems
- Speakers: **CBRN System Integration Challenge – Benefits to the Mission**
Dr. Stulgies, Head of Unit Research, Rheinmetall
- Mrs Heidi Laug, Senior Engineer and Major Rognerud both Norwegian Defence Logistics Organization (DLO)
- Colonel Wolfgang Klos
Commander NBC Defence School, German Armed Forces
- Colonel Christophe Baumberger
Chief Doctrine Operations and Deputy Commander NBC Competence Center, Swiss Army

Panel 5: Room B09 / Ground Floor

Protection

Strategies, Research and Solutions

- Chairman: Dr. Stephan J. Lee, Chief Scientist (ST),
Office of the Director, U.S. Army Research Office
- Speakers: **Comprehensive Air Treatment – a decisive requirement for future Collective Protection Systems (COLPRO)**
Jehuda Fehlauer, Beth-El Industries Ltd.
- Integration of the Individual CB Protection into the Clothing System of the Soldier**
Hans-Jörg Wickert, Blücher GmbH
- The Analytical Task Force – An Element of a Modern Civil Protection System**
Dr. Roman Trebbe, Head of the Analytical Task Force,
Federal Office of Civil Protection and Disaster Assistance (BBK)
- Availability of Medical Countermeasures**
Mark L. Johnson, Emergent BioSolutions
- Protecting People and Critical Infrastructure in a Multi-Organizational Approach to Hazard Response**
Karin Potje-Kamloth, Mainz Institute for Microtechnology

Panel 11: Room A05-A06 / Basement

Countering Large Scale Disasters

- Chairman: Beate Coellen, Head of the Presidential Office and Head of Project Group FIFA World Cup 2010, Federal Office of Civil Protection and Disaster Assistance (BBK)
- Speakers: **The International Committee of the Red Cross: Towards International Assistance to Victims of NRBC-Events**
Gregor Malich, Head of NRBC Operational Response
International Committee of the Red Cross, Genf
- High Level Chemical detection equipment for security at public events**
Nuno Miguel da Silva Ferreira
Airsense Analytics GmbH
- Olympic & Major Event Security:- The Evolving Response in Countering the CBRN Threat**
Alphus Hinds
Smiths Detection
- Bioagent detected, Now What?**
Roman Bradel,
Emergent BioSolutions
- NATO Crisis Response**
Lt.Colonel Andreas Kayser
SHAPE CPP WMD Directorate, NATO
- Austrian Civil Protection System**
Lt.Colonel Franz Gaugl
Chief CIMIC Section & NBC Expert, MOD Austria

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The Panel Programme

Panel 6: Room B09 / Ground Floor

Network Centric Warfare and CBRN Defence

Computer assisted CBRN Defence? Contributions by industry

- Chairman: LTC Georg Gnan, Joint Support Command, Cologne
- Speakers: **Integrated Network Solutions for CBRN Detection**
Richard D. Read, Lockheed Martin
- Design and assessment of the CBRN defense systems based on simulation**
Stefane Morel, THALES
- Consequence Management/Analysis – Modelling, Simulation and Software**
Norbert Kopp,
TMS technisch-mathematische studien-gesellschaft mbH
- NEXSENSE-C – A fast und robust solution for detection and classification of hazardous chemicals and warfare agents**
Stuart Duncan,
SELEX Systems Integration GmbH
- Operational prediction of hazardous atmospheric dispersion with HEARTS**
Marcus Herold, AGeoBw

Panel 9: Room B05 / Ground Floor

Detection of Radiological and Nuclear Threats

- Chairman: Colonel Klaus-Werner Schiff
German NBC Defence and Self-Protection School
- Speakers: **The GE central Support Unit for Nuclear Defence**
Elmar Lillpopp, Federal Criminal Police Office
- Preventing Terrorists Acts by Early Detection of illicit RN-Material on Site**
Dr. Wolfgang Rosenstock, Fraunhofer INT
- Biosensors for Standoff-Detection of Explosives and CBRN-Threats: Options and Challenges**
Dr. Martin Wehner, Fraunhofer ILT
- LLR-Detection, Mobile and Stationary**
Dr. Jürgen Böttcher,
Sales & Marketing Manager Military Technics, Thermo Fisher

Panel 7: Room A03-A04 / Basement

Robotics in CBRN(E) Defence

- Chairman: Frank E. Schneider, Fraunhofer FKIE
- Speakers: **Robot Based Laser-Drilling Technologies in Conjunction with Chemical Sensors**
Prof. Dr. Peter Kaul,
University Bonn-Rhein-Sieg
- Telemax – Effective Teleoperated Sensing and Sampling**
Dr. Andreas Ciossek,
Telerob GmbH
- An Experimental CBRN(E) Recon Robot**
Frank E. Schneider,
Fraunhofer FKIE
- Automation of Sample Drawing with Robot Based System for Investigation of CBRN- Disasters**
Dr.-Ing. Olena Kuzmicheva,
Friedrich-Wilhelm-Bessel-Institute Research Society

Panel 10: Room A05-A06 / Basement

Stand-Off Detection

- Chairman: Dr. Peer Rechenbach, State Department of Disaster Response Management and Civil Protection, Ministry of the Interior and Sport of Hamburg
- Speakers: **Expanding EGIS III Detection Capabilities through Differential Ion Mobility Spectrometry**
Joe Dorion,
Thermo Fisher Scientific
- Stand-Off Detection of C-Agents – Parameters of Chemical Imaging and Application**
Wolf Münchmeyer,
CEO, Airsense Analytics
- Chemical Agent Detection and Identification with a Hyperspectral Imaging Infrared Sensor**
Philippe Lagueux, Telops Inc, Canada
- Agenda 2020 for an European Certification System for CBRNE Sensor Systems and Devices – the Concept for a Roadmap**
Dr. Jörg Beckmann,
Federal Institute for Materials Research and Testing (BAM)

Panel 8: Room C01 / Plenum

State-of-the-Art in Decontamination

Forward-looking Decontamination Systems in Serial Production

- Chairman: Prof. Dr.-Ing. Bernd Niemeyer,
Chair of Process Engineering, Helmut-Schmidt-University
- Introduction: Dr.-Ing. Hagen R. Gehringer,
Managing Director, Kärcher Futuretech
- Speakers: **Current Aspects of CBRN Decontamination**
Hans-Joachim Töpfer, Product Manager NBC Protection Systems, Kärcher Futuretech
- Specific Technological Solutions for Decontamination of Sensitive Equipment**
Markus Kostron, Manager R&D Maintenance and NBC Protection Systems, Kärcher Futuretech
- CBRN Decontamination: The Philosophy of the German Armed Forces**
Lt.Colonel Hans-Jürgen Bauer
German NBC Defence and Self-Protection School
- Test and Evaluation of Modern BC-decontaminants: Methods and Challenges**
Martien Broekhuijsen
Managing Director Marble ChemBio Consulting
- Purification of CBRN Contaminated Water**
Dr.-Ing. Patrick Marcus
Product Manager Water Purification, Kärcher Futuretech