

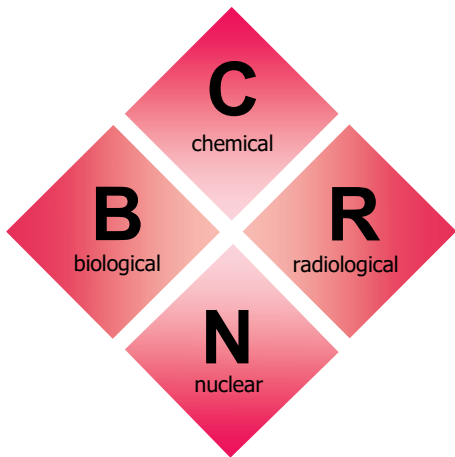


Federal Ministry  
of the Interior, Building  
and Community



# 4<sup>th</sup> International Development

# Symposium on of CBRN Protection Capabilities 03<sup>rd</sup> - 05<sup>th</sup> September 2018, Berlin



## Conference Programme

as of 28<sup>th</sup> August, 2018

Conference Language is ENGLISH

The 2018 Conference is organized by:



Federal Ministry  
of the Interior, Building  
and Community



Federal Ministry  
of Defence



Federal Office  
of Civil Protection and  
Disaster Assistance



Bundeswehr  
CBRN-Defence  
Command



CBRN Working Group in the  
Association of the German Army



German Association for  
Defence Technology  
Centre for Studies  
and Conferences

### Outdoor Demonstration & Icebreaker

03<sup>rd</sup> September 2018  
Schloss Diedersdorf  
15831 Großbeeren (near Berlin)  
Bus-Transfer from / to Hotel Maritim

### Conference & Exhibition

04<sup>th</sup> - 05<sup>th</sup> September 2018  
Maritim Hotel proArte  
Friedrichstraße 151  
10117 Berlin

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Silver Sponsor 2018



Bronze Sponsors 2018





# 4<sup>th</sup> International Symposium on Development of CBRN Protection Capabilities

03<sup>rd</sup> - 05<sup>th</sup> September 2018, Berlin

## ■ Conference Ratio

The 4<sup>th</sup> International Symposium on Development of CBRN Protection Capabilities will take place in Berlin from 3 to 5 September 2018.

As in previous years, Germany will once again provide a professional platform for encounters and exchange of the international CBRN protection community. International experts will inform representatives from the fields of politics, administration, industry, academia, civilian and military organisations about latest developments in security policy and provide an up-to-date risk assessment with a view to chemical, biological, radiological and nuclear risks and the challenges they represent for military and civilian systems when it comes to hazard prevention.

The list of international participants clearly indicates that protecting against the effects and impact of CBRN dangers is a top priority around the globe. As a result, CBRN continues to be in the focus when it comes to improving preventive security measures.

The repeated use of chemical weapons in conflict areas, the Ebola epidemic in West Africa, the Fukushima disaster and, last but not least, the international community's growing concern of the threat of nuclear terrorism in the light of the advancing proliferation of weapons of mass destruction are proof that CBRN protection within national and international security architectures remains relevant. In addition to the analysis of latest security developments, a special focus will be on presenting current conceptual foundations to meet the requirements of modern CBRN protection. Representatives from competent ministries and government authorities will explain the guidelines for the further development of CBRN protection.

Specific assessments by industry and academia will complement the picture. The symposium will particularly focus on three relevant areas for development of CBRN protection: National and international **cooperation** which need to be improved with the ultimate objective to establish a comprehensive network of CBRN protection capabilities. Taking into account recent developments within NATO and the EU, it is necessary to discuss the issue of **prevention** (averting hazard or damage situations in the first place) as the overriding principle when fulfilling CBRN protection tasks.

At the same time, the efforts to create a resilient system, recognising its vulnerabilities, need to be discussed as well. **Resilience** is also key to increase survivability in general while preparing for damaging events that could not be averted.

The citizens' preparedness and ability to contribute to their own protection (ability to help oneself), but also to endure possible damage without giving up the principles of the rule of law must be a central elements of any resilience strategy. This is particularly true in the case of stressful CBRN scenarios with a national dimension.

The symposium's aim is to inform participants about the importance attached to CBRN protection internationally and to discuss the way ahead. The plenary will debate political and strategic issues; technical and operational questions are discussed in expert panels. This year, the Federal Ministry of the Interior is in charge of the content of this high-level international conference, supported by the Federal Ministry of Defence, the Federal Office of Civil Protection and Disaster Assistance, the Bundeswehr CBRN Defence Command and the Association of the German Army. The event is organised by the Research Association of the German Association of Defence Technology.





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## ■ Programme on Monday, 03<sup>rd</sup> September 2018

- 13:00 **Bus Transfer from Conference Hotel to the Castle of Diedersdorf**  
Busses depart from station „Unter den Linden“ 100 meters from the hotel every 20-30 minutes, transfer time around 30 minutes. First bus departs at 13:00, last bus departs at 18:30.  
Individual transfer is possible as well [Schloss Diedersdorf | Kirchplatz 5 | 15831 Großbeeren].
- 14:00 **Outdoor Demonstration of Civil and Military CBRN Protection Capabilities in the Castle Courtyard**  
Drinks and Snacks served during the day
- 18:00 **Ice Breaker | Cocktail Reception**
- 18:15 **Welcome Notes**  
**General (ret.) Rainer Schuwirth**, Chairman of the German Association for Defence Technology
- 18:30 **Walking Dinner Buffet in Diedersdorf Castle**  
Eat, Drink and Talk | Outdoor Exhibition
- 21:15 First Bus returns to Conference Centre
- 22:15 Last Bus returns to Conference Centre





# 4<sup>th</sup> International Symposium on Development of CBRN Protection Capabilities

03<sup>rd</sup> - 05<sup>th</sup> September 2018, Berlin

## ■ Programme on Tuesday, 04<sup>th</sup> September 2018

- 07:00 Conference Counter opens
- 08:00 **Opening of the Exhibition** | Welcome Coffee served
- 08:30 **Opening of the Conference**  
*General (ret.) Rainer Schuwirth*, Chairman of the German Association for Defence Technology

### Key Notes

- 08:40 **Key Note by the German Federal Ministry of the Interior, Building and Community**  
*Horst Seehofer*, Minister of the Interior, Building and Community, Germany
- 09:00 **Key Note by the Acting Presidency of the Council of the European Union**  
*Herbert Kickl*, Minister of the Interior, Austria
- 09:20 **Introduction to the 4<sup>th</sup> Symposium**  
*Christoph Unger*, President, Federal Office of Civil Protection and Disaster Assistance (BBK), Germany

### CBRN Protection: Security Policy Framework Concepts

- 09:40 Introduction by the Session Chairwoman  
*Ayleen Bock*, German Federal Ministry of the Interior, Building and Community, Division for Civil Protection
- 09:50 **The Essential Role of Multilateral Nonproliferation and Disarmament Regimes in Preventing CBRN Attacks**  
*Dr. Oliver Meier*, Deputy Head of International Security Division, German Institute for International and Security Affairs (SWP)
- 10:15 **The Future of Non-Proliferation - The Role of Nuclear Weapons in the Global Security Policy Context**  
*Dan Smith*, Director, Stockholm International Peace Research Institute (SIPRI), Sweden
- 10:40 Coffee Break | Exhibition | Poster Sessions
- 11:20 **CBRN Threats and our Preparation**  
*Colonel Kideuk Byun*, Head of CBR Defense Research Institute, Armed Forces of South Korea
- 11:45 **Resilience - Contribution of Industry on CBRN Protection Equipment**  
*Sebastian Meyer-Plath*, President Bruker Detection
- 12:10 **The EU CBRN Action Plan**  
*Hans Das*, Head of Unit Terrorism and Radicalisation, DG Home, European Commission
- 12:35 Luncheon | Exhibition | Poster Sessions

### National and International Cooperation

- 14:00 Introduction by the Session Chairman  
*Brigadier General Wolfgang Gäbelein*, German Federal Ministry of Defence, Chief of Division Forces Policy II
- 14:10 **Science and Technology: the Value of Cooperative Networks**  
*Dr. Marc Cadisch*, Director, Spiez Laboratory, Switzerland



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## ■ Programme on Tuesday, 04<sup>th</sup> September 2018

- 14:35 **The Notion of Networked Security in the Cooperation between National and International Organizations**  
*Wolfgang Rudischhauser*, Vice-President, German Federal Academy for Security Policy
- 15:00 Coffee Break | Exhibition | Poster Sessions
- 15:30 **Framework Nations Concept (FNC) Cluster CBRN Protection - a Lighthouse Project of an European Cooperation Initiative**  
*Colonel (DEU Army) Henry Neumann*, Commander, Bundeswehr CBRN Defence Command  
*Colonel (CZE Army) Jiri Gajdos*, Chief FNC Cluster Support Cell CBRN Protection, Bundeswehr CBRN Defence Command
- 15:55 **Jordan Civil Defence - Experience in Dealing with CBRN**  
*Captain Ahmad Mansour Suleiman Al Zu'bi*, Hazmat Team Training Officer, Jordan Civil Defense, Ministry of Interior, Jordan
- 16:20 **Operational CBRN Decon/Detox of Platforms and "On-Site" Sensitive Equipment Decon Capability**  
*Stefano Miorotti*, Cristanini, Italy
- 16:45 Short Coffee Break | Find your Panel Session
- 17:00 **Conference Continues with Panel Sessions A1 - A7**  
Panel A1: Social Resilience  
Panel A2: Prevention and Countermeasures  
Panel A3: Risk Analysis, Assessment and Crisis Communication  
Panel A4: Stand-Off-Detection  
Panel A5: Protection (Suits)  
Panel A6: Decontamination and Disinfection I  
Panel A7: Innovations by Industries
- 19:00 Beer Call in the Exhibition Area
- 19:30 Walking Dinner Buffet in the Exhibition Area
- 22:00 Last Order
- 22:15 End of first day

## ■ Panel Session A1: Social Resilience

- 17:00 Introduction by the Panel Chairman: *Sebastian Meyer-Plath*, President Bruker Detection
- 17:10 **Network Enabled CBRNE Resilience**  
*Lothar Pelz*, Bruker Detection
- 17:30 **The Multi-Laboratory International Collaboration Environment: Connecting Stakeholders Globally for Knowledge and Data Sharing**  
*Dr. Krista M Versteeg*, Research and Development Partnerships- NBAF, Science & Technology Directorate, Department of Homeland Security, USA
- 17:50 **Protection of Population in Case of Spreading a Toxic Substance in Public Buildings**  
*LTC Dr. Ladislava Navratilova*, Population Protection Institute, Czech Republic
- 18:10 **Psychology after CBRN Attacks**  
*Özcan Erdogan*, Bezmialem Vakif University Department of Disaster Management, Istanbul, Turkey
- 18:30 **International and Supranational Collaboration Countermeasures**  
*Zoran Sandev*, Specialized Officer, Bioterrorism Prevention Unit, INTERPOL
- 18:50 Discussion



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## ■ Panel Session A2: Prevention and Countermeasures

- 17:00 Introduction by the Chairman: **Dr. Jan Kämpen**, Federal Office of Civil Protection and Disaster Assistance
- 17:10 **Investing in Public Health Gives - Especially in Low Income Countries - Extremely Impressive Returns**  
**Cdr Dr. Stef Stienstra**, Royal Dutch Navy reserve
- 17:30 **Determination of Medical Countermeasures Requirements for CBRN Terrorism in Canada**  
**Milan Patel**, Regulatory Policy and Risk Management Specialist, Centre for Emergency Preparedness and Response, Canada
- 17:50 **Electromagnetic Protection of Critical Infrastructures**  
**Dr. Martin Willenbockel**, Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
- 18:10 **Equipment and Capabilities of Fire and Rescue Service of the Czech Republic to Respond to Radiological Event**  
**Dr. Michal Setnička**, Population Protection Institute, Czech Republic
- 18:30 **Success and Failure Factors in EU Transboundary Crisis Management**  
**Claudia Berchtold**, Fraunhofer INT
- 18:50 Discussion

## ■ Panel Session A3: Risk Analysis, Assessment and Crisis Communication

- 17:00 Introduction by the Chairman: **Dr. Roman Trebbe**, Federal Office of Civil Protection and Disaster Assistance
- 17:10 **Radiological Threat and Risk Assessment**  
**Prof. Dr. Natividad Carpintero-Santamaría**, Instituto de Fusión Nuclear – Universidad Politécnica de Madrid, Spain
- 17:30 **Risk and Crisis Communication, Information and Knowledge Management, Risk Analysis/Risk Assessment, Detection, Identification and Monitoring and Innovation Research and Development**  
**Mark Woolley**, Arktis Radiation Detection Ltd
- 17:50 **CBRE Collective Protection in Buildings**  
**Daniel Jordi**, Ministry of Defence, Switzerland
- 18:10 **The German CBRN Command and Control Unit**  
**Stefan Wilbert**, Federal Office of Civil Protection and Disaster Assistance
- 18:30 **Command & Control Software for CBRN Reconnaissance Vehicles in Civil Protection**  
**Dipl. Informatiker Helge Koch-Eschweiler**, tms
- 18:50 Discussion

## ■ Panel Session A4: Stand-Off-Detection

- 17:00 Introduction by the Chairman: **Dr. Roland Harig**, Bruker Optik
- 17:10 **Future Remote Controlled and Autonomous Chemical Detection Systems**  
**Dr. Ralf Helmut Hetzer**, Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
- 17:30 **The Use of IR Standoff Detectors for the Protection of Emergency Personnel against a Threat of Hazardous Material Clouds**  
**Frank Wilsenack**, Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
- 17:50 **Evaluation of the Ultrafast Remote Sensing Hyperspectral Imager HI90 for Real-time Identification of Chemical Warfare Agents**  
**Rene Braun**, Bruker Optik GmbH
- 18:10 **Prospects for Biological and Chemical Substance Classification Using a Standoff Laser Induced Fluorescence Detection System**  
**Dr. Florian Gebert**, German Aerospace Centre (DLR)
- 18:30 **Innovative Improvements to Handheld CBRNE Threat Identification**  
**Travis Thompson**, Metrohm Raman
- 18:50 Discussion



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## ■ Panel Session A5: Protection (Suits)

17:00	Introduction by the Panel Chairman: <b>Friedrich Hesse</b> , Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
17:10	<b>System Testing of CBRN-Suits Using Physical Aerosol</b> <b>Friedrich Hesse</b> , Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
17:30	<b>Mobility and Flexibility Offensive for CBRN Situations - Blower-Ventilated Full Protective Suit</b> <b>Dr. Gabriele Bartel-Lingg</b> , BARiT GmbH / Vitmo GmbH
17:50	<b>A Future Concept for Gastight NBC Protective Clothing</b> <b>Karola Hagner</b> , Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
18:10	<b>Options for Broad Chemical and Biological Protective Personal Protective Equipment Offering Improved Heat Stress and Mission Effectiveness</b> <b>Michael Merrick</b> , W.L. Gore & Associates
18:30	Discussion

## ■ Panel Session A6: Decontamination and Disinfection I

17:00	Introduction by the Panel Chairwoman: <b>Nahid Derakshani</b> , BBK
17:10	<b>From Lab to Full Size Systems: Drinking Water from VX Contaminated Raw Water</b> <b>Dr.-Ing. Jeldrik Moritz</b> , Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
17:30	<b>Next Generation Detection Sensitivity and Decontamination Efficiency with Enzymatic Technology</b> <b>Jason Robosky</b> , FLIR Systems, Inc.
17:50	<b>Contamination Control for CBRN-Recce-Equipment – Field Testing Possibilities for Triage prior to Decontamination</b> <b>Dipl.-Ing. Gerald Bauer</b> , CBRN Defence Command & CBRN Defence School, Austrian Armed Forces
18:10	<b>The Challenge of Ensuring Sufficient Water Supply based on CBRN-Contaminated Raw Waters</b> <b>Franz Weber</b> , Kärcher Futuretech GmbH
18:30	Discussion

## ■ Panel Session A7: Innovations by Industries

17:00	Introduction by the Chairman: <b>Colonel (Res.) Wolfgang Widders</b>
17:10	<b>Civil-Military Co-operation in CBRN and Civil Protection – Possibilities of Industrial Support</b> <b>Rico Becker</b> , Rheinmetall Electronics GmbH <b>Dr. Bernhard Christoph Halstrup</b> , Rheinmetall MAN Military Vehicles GmbH
17:30	<b>Rapid Deployable CBRN Solutions for Today's Challenges</b> <b>Dr. Markus Hellmuth</b> , Kärcher Futuretech GmbH
17:50	<b>Urban Terrain Modelling in NEWS (NBC Evaluation and Warning System)</b> <b>Yücel Ahi</b> and <b>Dr. Jens Fiedler</b> , Technisch-Mathematische Studiengesellschaft mbH
18:10	<b>A Comprehensive Bio Identification Strategy</b> <b>Dr. Marcus Erbedinger</b> , FLIR and Dr. Christopher Poehlmann, Bruker
18:30	<b>CBRN Management in D-LBO (Digital-Land Based Operations)</b> <b>Andreas Schlier</b> , ESG Group
18:50	Discussion



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## ■ Programme on Wednesday, 05<sup>th</sup> September 2018

07:00 Conference Counter opens  
08:00 **Opening of the Exhibition** | Welcome Coffee served | Find your Panel Session

08:30 **Conference Continues with Panel Sessions B1 - B7**  
Panel B1: Information and Knowledge Management  
Panel B2: Innovation, Research and Development  
Panel B3: Education, Training & Simulation  
Panel B4: Point Detection  
Panel B5: Protection (Filtration)  
Panel B6: Decontamination and Disinfection II  
Panel B7: Bio-Defence and Medical Countermeasures

10:30 Coffee Break | Exhibition | Poster Sessions

### Resilience of the Society

11:00 Introduction by the Session Chairwoman  
**Friederike Dahns**, German Federal Ministry of the Interior, Building and Community, Head of Division for Population Development and Demographic Studies and Chair of NATO Civil Protection Group

11:10 **Resiliency – Basic Concept for Civil Protection and Disaster-Risk-Management (13 Questions and Answers from a German Perspective)**  
**Giulio Gullotta**, Head of Directorate Science and Technology, Federal Office of Civil Protection and Disaster Assistance

11:35 **Resilience - a Scientific Perspective**  
**Prof. Dr. Shinichi Egawa**, Division of International Cooperation for Disaster Medicine, International Research Institute of Disaster Science (IRIDeS), Tohoku University, Japan

12:00 Discussion Round  
**Resilience of Society in the Context with National CBRN Threats and Hazards**

Chairman: **Dr. Marcus Pindur**, Deutschlandradio

Speaker: **Giulio Gullotta**, Federal Office of Civil Protection and Disaster Assistance  
**Prof. Dr. Shinichi Egawa**, Tohoku University, Japan  
**Prof. Dr. Francesco D'Errico**, Yale University, USA  
**Marc Finaud**, Arms Proliferation Cluster Leader, Geneva Centre for Security Policy

13:00 Luncheon | Exhibition | Poster Sessions

### Prevention: Paradigm Change in CBRN Protection

14:30 Introduction by the Session Chairman  
**Colonel (GS) Hans-Christian Hettfleisch**, German Federal Ministry of Defence, Chief of Branch Forces Policy II 2

14:40 **The Correlation between Prevention, Reaction and Rehabilitation in Civil Protection**  
**Jan-Olof Lind**, Director General, Swedish Defence Research Agency

15:05 **Disablement of Weapons of Mass Destruction: How NATO Takes Into Account the Paradigm Change**  
**Colonel (U.S. Air Force) Anthony Stroup**, Chief Nuclear & CBRN Defence Policy Branch, NATO International Military Staff, Policy & Capabilities Division  
**Lt. Colonel Bernd Allert**, Chief of Concepts and Doctrines Section, Joint CBRN Defence Centre of Excellence

15:30 **Population Growth, Urbanization, Climate Change – Global Trends and their Implications on Security Research**  
**Prof. Dr. Dr. Michael Lauster**, Director, Fraunhofer Institute for Technological Trend Analysis INT

15:55 **Conclusions | Farewell**

16:10 End of the Conference





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## ■ Panel Session B1: Information and Knowledge Management

08:30	Introduction by the Panel Chairman: <b>LtCol Hartmut Appetz</b>
08:40	<b>Do We Have any Talent of Search in Google Trends Query Data</b> <b>Prof. Dr. Volkan Ülker</b> , Disaster Medicine of Health Sciences of Bezmi Alem Foundation University Istanbul, Turkey
09:00	<b>CBRN Threats and Chemical Terror on the Move from the Military Battle Field Into our Cities and Public Venues</b> <b>Erik Ellinghaus</b> , CEO, Bruhn Newtech
09:20	<b>The Role of Expert Support in Nuclear Security</b> <b>Krister Liljegren</b> , Environics Oy
09:40	<b>True 5D</b> <b>Oliver Zimmermann</b> , LUCIAD   Hexagon Geospatial
10:00	Discussion

## ■ Panel Session B2: Innovation, Research and Development

08:30	Introduction by the Chairman: <b>Stefan Wilbert</b> , Federal Office of Civil Protection and Disaster Assistance
08:40	<b>Detection of Trace Substances using Low Energy Electron Ionization: Open Sensor Design, Raw Data Fusion in Neuronal Networks and Environmental Correlations</b> <b>Prof. Dr.-Ing. Theodor Doll</b> , DBT GmbH
09:00	<b>Evaluation of Measurement Devices for Radioactive and Nuclear Material</b> <b>Dr. Monika Risse</b> , Fraunhofer INT
09:20	<b>EC Project ENCIRCLE - European Cbrn Innovation for the maRket CLustEr.</b> <b>LtCol Bartłomiej Jankiewicz</b> , Military University of Technology, Institute of Optoelectronics, Warszawa, Poland
09:40	<b>Contamination Detection and Self-decontamination Capability as a New Standard for CBRN Protective Garments?</b> <b>Dr. Jakub Vaněk</b> , National Institute for NBC Protection, Czech Republic
10:00	<b>The Case of Autonomous CBRN Recce Systems – Will Crews Become Obsolete?</b> <b>Dr. Bernhard Christoph Halstrup</b> , Rheinmetall MAN Military Vehicles GmbH
10:20	Discussion

## ■ Panel Session B3: Education, Training & Simulation

08:30	Introduction by the Chairman: <b>Dr. Martin Weber</b> , Federal Office of Civil Protection and Disaster Assistance
08:40	<b>National Training and Exercises Carried out by the German Federal Office for Radiation Protection: Recent Experience and Lessons Learned</b> <b>Dr. Emily Kröger</b> , German Federal Office for Radiation Protection
09:00	<b>CBRN Medical Training in the UK</b> <b>Robbie Beech</b> , WO2 (OR8), Lead Nurse for CBRN Medicine, UK
09:20	<b>Compact Facility for CBRN Testing, Education and Training</b> <b>Lukáš Králík</b> , National Institute for NBC Protection, Laboratory of Chemical Monitoring and Protection, Czech Republic
09:40	<b>Educational Project for First Responders from East African Community</b> <b>LTC Dr. Ladislava Navratilova</b> , Population Protection Institute, Czech Republic
10:00	<b>Biological Facility Exploitation, Assessment and Reconnaissance Course (BioFEAR Course)</b> <b>Martin Weiler</b> , CBRN Defence Command & CBRN Defence School Austrian Armed Forces
10:20	Discussion



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## ■ Panel Session B4: Point Detection

08:30	Introduction by the Panel Chairman: <b>Major André Althoff</b>
08:40	<b>Key Capabilities and Major Trends in Aerial-Based Chemical Weapons Detection</b> <b>John Hart</b> , Stockholm International Peace Research Institute (SIPRI)
09:00	<b>New Concept in Detection of Chemical Warfare Agents – GDA-P</b> <b>Dr. Bert Ungethüm</b> , AIRSENSE Analytics
09:20	<b>Development of a Rapid, Sensitive, Generic and Easy to Use Organophosphate Skin Disclosure Kit</b> <b>Colonel Prof. Dr. Franz Worek</b> , Bundeswehr Institute of Pharmacology and Toxicology, Munich, Germany
09:40	<b>Adaptable Detection Technology for Tomorrow's Emerging Threats Rugged, Handheld Mass Spectrometry for Priority Threat Detection</b> <b>Trey Sieger</b> , 908 Devices
10:00	<b>Detection of Radiologic Bombs for Field-Camp-Protection</b> <b>Prof. Dr. Wolfgang Koch</b> , Fraunhofer FKIE
10:20	Discussion

## ■ Panel Session B5: Protection (Filtration)

08:30	Introduction by the Chairwoman: <b>Dr. Christine Doffek</b> , Federal Office of Civil Protection and Disaster Assistance
08:40	<b>Multilayered Filtration Systems with Activated Carbon, Metal-organic Frameworks and Hopcalite</b> <b>Thomas Dawert</b> , Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
09:00	<b>Physical Protection for air crew members with NBC-tasks</b> <b>Philipp Ostertag</b> , Autoflug
09:20	<b>Protection During and After Recce and Sampling Missions</b> <b>Dr. Baldur Stulgies</b> , Rheinmetall MAN Military Vehicles
09:40	<b>Bone Marrow Selective Shielding as an Approach to Protect First Responders from Deterministic and Stochastic Radiation Effects</b> <b>Dr. Gideon Waterman</b> , STEMRAD
10:00	Discussion

## ■ Panel Session B6: Decontamination and Disinfection II

08:30	Introduction by the Panel Chairman: <b>LtCol Johann Georg Kappelmeier</b>
08:40	<b>FLED2 - The Forward Light Element for Decontamination of Patients and Personnel</b> <b>Colonel PD Dr. Roman Wölfel</b> , Bundeswehr Medical Academy
09:00	<b>Cold Atmospheric Plasma for Sensitive Equipment Decontamination</b> <b>Dr. Kathrin Kluge</b> , Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
09:20	<b>DEC'POL® - Decontamination and Neutralization Performance Overview on Real Agents</b> <b>Ludovic Ouvry</b> , President, OUVRY SAS
09:40	<b>Casualty Decontamination in Individual and Mass-Casualty Scenarios—Procedures, Decon Agents and Tactics</b> <b>Thilo Schuppler</b> , OWR
10:00	<b>New B-Decontamination Process: Automatized Aerosolization of a Novel Decont Agent</b> <b>Helena Horn</b> , Helmut-Schmidt Universität/Universität der Bundeswehr Hamburg
10:20	Discussion



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## Panel Session B7: Bio-Defence and Medical Countermeasures

08:30	Introduction by the Panel Chairman: <b>Dr. Pasquale Gaudio</b> , Department of Industrial Engineering, University of Rome Tor Vergata
08:40	<b>Rapid tests for simulants for biological threat agents - new horizons for training</b> <b>Dr. Sibylle Pagel-Wieder</b> , Director Operations & Sales, miprolab
09:00	<b>Botulism: Clinical Update</b> <b>Dr. Tim Babinchak</b> , Emergent Biosolutions
09:20	<b>Topic tbd</b> <b>Hans Zimmermann</b> , Managing Director, Abacus Analytical Systems
09:40	<b>Optical fast detection of Bio Agents through LiF techniques: preliminary results</b> <b>Dr. Jean-François Ciparisse</b> , University of Rome Tor Vergata
10:00	Discussion

## Poster Sessions

- Poster #1 **Nuclear Protection of Military Equipment**  
**Berthold Römer**, Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
- Poster #2 **Network Enabled CBRN Concepts**  
**James Hall**, Consulting Adviser – CBRNe Networked Operations, Bruker CBRNe Detection
- Poster #3 **NEMP Qualification of Military Equipment**  
**Gernot Schmidt**, Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
- Poster #4 **A Comprehensive Biodetection Strategy**  
**Dr. Christopher Poehlmann**, Bio Application Manager, Bruker CBRNe Detection
- Poster #5 **Metagenomics Using Nanopore Technology**  
**Jeanette Klenner**, Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
- Poster #6 **The Role of Interoperability between the CBRN Defence Systems**  
**Fatoş Beyza Özkan**, Havelsan, Turkey
- Poster #7 **Chemical Warfare Agents and Related Chemicals: Sample Preparation and Mass Spectrometric Analysis**  
**Dr. Arne Ficks**, Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
- Poster #8 **New Logistic Concepts for CBRN**  
**Dr. Markus Hellmuth**, Kärcher Futuretech
- Poster #9 **Design Concept for Smart Radioactive and Nuclear Sensors**  
**Dr. Stefan Potthast**, Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
- Poster #10 **Internationale Master Courses in Protection Against CBRNe events as an academic example to let military, private and public institutions work together**  
**N.N.**, University of Rome Tor Vergata
- Poster #11 **Contributions of the OPCW Designated Laboratory in Munster Germany**  
**Dr. Damian Magiera**, Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)



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## Poster Sessions

- Poster #12 **Rapid on-site analysis with the handheld Raman spectrometer Progeny ResQ and the portable GC / MS system Torion T-9**  
*Dr. Thorsten Heinlein*, Application Specialist, Abacus Analytical Systems
- Poster #13 **Numerical Simulation of Neutron Transport and Activation of Infrastructure**  
*Lars Wolf*, Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
- Poster #15 **Fire Protection in Armored Vehicles**  
*Felix Kümmerlen*, Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
- Poster #16 **Reactive Fabrics for CWA Decomposition**  
*Myungkyu Park*, Agency for Defense Development, Korea
- Poster #17 **Vacuum Decontamination to Clean C Contaminated Exhibits whilst Preserving DNA and Fingermarks**  
*Dr. Matthias Berger*, Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
- Poster #18 **Radioactive Waste Management**  
*Özcan Erdogan*, Bezmialem Vakif University Department of Disaster Management, Istanbul, Turkey
- Poster #19 **Core Competences of the Biological Laboratory**  
*Dr. Thorsten Meißner*, Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS)
- Poster #21 **FIRE-IN – Fire & Rescue Innovation Network**  
*Dr. rer. nat. Merle Missoweit*, Fraunhofer INT
- Poster #22 **Testing of Physiologic Response of Patients Transported in Portable Isolation Units**  
*Kamila Lunerová*, National Institute for NBC Protection, Laboratory of Chemical Monitoring and Protection, Czech Republic
- Poster #23 **Design of a CBE Standoff Detector for Operational Use by Fire Brigades**  
*Christoph Kölbl* M.Sc., German Aerospace Centre
- Poster #24 **Improve Operative CBRN Processes with Digital, Interactive & Mobile Mission Support Software**  
*Dr. Olaf Grebner*, mobilion.eu
- Poster #25 **Using Metal-organic Frameworks (MOFs) for C-protective Clothing and Respiratory Cartridges (MOFSchutz, BMBF funded)**  
*Frank Schnürer*, Fraunhofer ICT

## Hotels | Accomodation

The Conference takes place in the Hotel Maritim proArte in the Centre of Berlin.

### Conference Hotel

Rooms are reserved in the Conference Hotel with a 10% discount from the recent internet-rate **until July 09, 2018**. Please use the **booking code "CBRN 18"** and book at +49-30-20335. As there is the large international fair "IFA" at the same time in Berlin we **strongly recommend to book your room as soon as possible**.

### Alternative Hotels:

<b>Castle of Diedersdorf:</b> (40 Rooms available)	89,- € / night incl. Breakfast Tel.: +49-3379-35350   info@schlossdiedersdorf.de (Bus Shuttle Hotel <=> Conference provided)
<b>Vandervalk Hotel Berlin Brandenburg:</b> (70 Rooms available)	110,00 € / night incl. Breakfast Tel.: +49-33708-580   reservierung@berlin.vandervalk.de (Bus Shuttle Hotel <=> Conference provided)
<b>Holiday Inn Berlin Airport Schönefeld:</b> (70 Rooms available)	105,00 € / night incl. Breakfast 25-30 Minutes Transfer via Train RE / Metro. Tel.: +49-30-634010   <a href="#">Booking Link</a>

**Booking-Code in all alternative Hotels: CBRN 2018**

**=> ROOM RATES GUARANTEED UNTIL JULY 09, 2018 <=**



# 4<sup>th</sup> International Symposium on Development of CBRN Protection Capabilities

03<sup>rd</sup> - 05<sup>th</sup> September 2018, Berlin

## Terms and Conditions for Visitors

The conference is open for members of the armed forces, police forces, the civil services, the parliaments and ministries, embassies, academia and business. The conference rates are as follows:

**Category A)** Public Services (i.e. Armed Forces, Police, Authorities, THW, Diplomatic, Parliament, Fire Brigades)

**Category B)** Research (Students, Universities, Research Institutes)

**Category C)** Industries

The Conference rate includes:

	Attendance	Ice-Breaker / 2x Lunch / Dinner
Category A)	45,00 €	16,81 € each or 50,42 € Catering-Package
Category B)	220,00 €	included
Category C)	1190,00 €	included

Prices do **not** include GE taxes (+19% VAT) and costs for travelling and accommodation. Special rates available (Exhibitors, Speakers, "Early-Birds"). If you are not sure about your status, please contact our organisation office in forefront of your registration.

## Terms and Conditions for Sponsors (Prices on Request)

### Bronze-Sponsoring

12 m<sup>2</sup> Booth incl. "Option C"  
4 Included Tickets

Guaranteed Speaker Slot in a Panel-Session  
Company Logo at the first page of the invitation

### Silver-Sponsoring

20 m<sup>2</sup> Booth incl. "Option D"  
6 Included Tickets

Guaranteed Speaker Slot in a Main- and Panel-Session  
Company Logo at the first page of the invitation

### Gold-Sponsoring

50 m<sup>2</sup> Booth incl. "Option D"  
10 Included Tickets

Key Note Industry in the Main Programme, your own Panel Session  
VIP-Dinner or VIP-Luncheon or VIP-Pub-Evening  
Company Logo at the first page of the invitation

## Terms and Conditions for Exhibitors

### Exhibition Option A

Exhibitor Space  
490,- Euro per m<sup>2</sup>

#### Option A includes:

- Stand in the Size and Position of your Choice
- 1 Ticket per 6 m<sup>2</sup> booked Space
- 20% Discount for additional "full Tickets"
- 70% Discount for "exhibition only Tickets"
- Security Charge
- Inserts for the Visitor Information
- Electricity (up to two 3-socket Connectors)

### Exhibition Option B

Octanorm-System Booth  
560,- Euro per m<sup>2</sup>

#### Option B includes:

- Option A
- Octanorm System Stand
- Carpet Expo Rips Grey
- Booth Cleaning at Night



### Exhibition Option C

System-Booth, Furniture, Branding  
640,- Euro per m<sup>2</sup>

#### Option C includes:

- Option B
- Illumination of the Booth
- Front-Banner with your Logo 200 x 50 cm
- Furniture as required
- Sideboard, Counter, Brochure Stand
- Lockable Storage Area (if needed)
- Choose the Colour of your Carpet



### Exhibition Option D

Individual Booth Concept  
740,- Euro per m<sup>2</sup>

#### Option D includes:

- Option C
- Premium-Booth Building, i.e.:
  - Wood-Construction
  - Printed Stretchframe-System
  - Traverse Construction
- Presentation Technology (TV, Beamer)
- Graphics at the Booth
- Laminate / Parquet / Carpet



### Exhibition Option E

Outdoor Exhibition / Live Demonstration on September 03<sup>rd</sup>, 2018  
0,- Euro (prerequisite for industries is a booking of a stand / sponsoring)



# 4<sup>th</sup> International Symposium on Development of CBRN Protection Capabilities

03<sup>rd</sup> - 05<sup>th</sup> September 2018, Berlin

**Online-Registration at [www.cbrn-symposium.com](http://www.cbrn-symposium.com) | Fax to: +49-228-41098-19**

I/We take part in the „4<sup>th</sup> International Symposium on Development of CBRN Protection Capabilities“ as mentioned below.

**Registration Deadlines:** Exhibitors: as long as space available but not later then August 24<sup>th</sup>, 2018 / Attendees: August 31<sup>st</sup>, 2018

**Cancellations:** Attendees may cancel free of charge until August 28<sup>th</sup> 2018. Later cancellations will be fully charged. A substitute attendee can be nominated at any time. The conference rates include access to the main and panel programme, the exhibition areas, the Ice-Breaker-Reception, lunch, dinner and refreshments as outlined below.

**Exhibitor Cancellations:** until June 1<sup>st</sup>, 2018: 25% charge / until July 2<sup>nd</sup>, 2018: 50% charge / later July 2<sup>nd</sup>, 2018: full charge.

**The easiest way to register: online at [www.cbrn-symposium.com](http://www.cbrn-symposium.com)**

	Category A Public Services <small>i.e. Armed Forces, Police, Authorities, THW, Diplomatic, Parliament, Fire Brigades</small>	Category B Research <small>Students, Universities, Research Institutes</small>	Category C Industry Attendance <small>Industries</small>
<b>Attendees</b>	<b>Conference Fee</b>	<b>Standard</b>	<b>Standard</b>
	<input type="checkbox"/> Attendance 45,00 €	<input type="checkbox"/> Attendance at the conference 220,00 €	<input type="checkbox"/> Attendance at the conference 1.190,00 €
		<input type="checkbox"/> Attendance only on Sept 04 <sup>th</sup> 150,00 €	<input type="checkbox"/> Attendance only on Sept 04 <sup>th</sup> 770,00 €
		<input type="checkbox"/> Attendance only on Sept 05 <sup>th</sup> 140,00 €	<input type="checkbox"/> Attendance only on Sept 05 <sup>th</sup> 710,00 €
	<b>Discounts</b>	<b>Discounts</b>	<b>Discounts</b>
<input type="checkbox"/> Speaker incl. Catering -100%	<input type="checkbox"/> Speaker -50%	<input type="checkbox"/> Speaker -50%	<input type="checkbox"/> Speaker -50%
<input type="checkbox"/> Embassy incl. Catering -100%	<input type="checkbox"/> Exhibitor additional Ticket -20%	<input type="checkbox"/> Exhibitor additional Ticket -20%	<input type="checkbox"/> Exhibitor additional Ticket -20%
	<input type="checkbox"/> Exhibitor (no access to Lectures) -70%	<input type="checkbox"/> Exhibitor (no access to Lectures) -70%	<input type="checkbox"/> Exhibitor (no access to Lectures) -70%
	<input type="checkbox"/> Exhibitor included Ticket -100%	<input type="checkbox"/> Exhibitor included Ticket -100%	<input type="checkbox"/> Exhibitor included Ticket -100%
	<b>Catering</b>	<b>Catering (included in conference fee)</b>	<b>Catering (included in conference fee)</b>
<input type="checkbox"/> All Caterings + 50,42 €	<input type="checkbox"/> All Caterings	<input type="checkbox"/> All Caterings	<input type="checkbox"/> All Caterings
<input type="checkbox"/> Ice-Breaker 03 <sup>rd</sup> September + 16,81 €	<input type="checkbox"/> Ice-Breaker 03 <sup>rd</sup> September	<input type="checkbox"/> Ice-Breaker 03 <sup>rd</sup> September	<input type="checkbox"/> Ice-Breaker 03 <sup>rd</sup> September
<input type="checkbox"/> Luncheon 04 <sup>th</sup> September + 16,81 €	<input type="checkbox"/> Luncheon 04 <sup>th</sup> September	<input type="checkbox"/> Luncheon 04 <sup>th</sup> September	<input type="checkbox"/> Luncheon 04 <sup>th</sup> September
<input type="checkbox"/> Dinner 04 <sup>th</sup> September + 16,81 €	<input type="checkbox"/> Dinner 04 <sup>th</sup> September	<input type="checkbox"/> Dinner 04 <sup>th</sup> September	<input type="checkbox"/> Dinner 04 <sup>th</sup> September
<input type="checkbox"/> Luncheon 05 <sup>th</sup> September + 16,81 €	<input type="checkbox"/> Luncheon 05 <sup>th</sup> September	<input type="checkbox"/> Luncheon 05 <sup>th</sup> September	<input type="checkbox"/> Luncheon 05 <sup>th</sup> September

**Programme**

Programme 03. September:  Outdoor Demonstration at Castle Diedersdorf (13:30 - 18:00)  Ice-Breaker Reception at Castle Diedersdorf (18:00 - 22:15)

Programme 04. September:  Plenary Programme (08:30 - 22:15)  Panel Session: \_\_\_\_\_

Programme 05. September:  Plenary Programme (08:30 - 16:10)  Panel Session: \_\_\_\_\_

**Transfers**

Shuttle Bus 03. September:  Conference Hotel => Castle Diedersdorf (13:00 | 13:30 | ... | 18:30)  Hotel VanderValk => Castle Diedersdorf (17:40)

Shuttle Bus 03. September:  Castle Diedersdorf => Conference Hotel (15:30 | 16:30 | 21:15 | 21:25 | ... | 22:25)  Castle Diedersdorf => Hotel VanderValk (22:00)

Shuttle Bus 04. September:  Castle Diedersdorf => Conference (Start: 06:45, Return: 22:00)  Hotel VanderValk => Conference (Start: 07:00, Return: 22:10)

Shuttle Bus 05. September:  Castle Diedersdorf => Conference (Start: 06:45, no return)  Hotel VanderValk => Conference (Start: 07:00, no return)

	Option A	Option B	Option C	Option D	
<b>6 m<sup>2</sup> Stand</b>	<input type="checkbox"/> 2.940,- €	<input type="checkbox"/> 3.360,- €	<input type="checkbox"/> 3.840,- €	<input type="checkbox"/> 4.440,- €	<input type="checkbox"/> <b>Bronze-Sponsoring</b>
<b>12 m<sup>2</sup> Stand</b>	<input type="checkbox"/> 5.880,- €	<input type="checkbox"/> 6.720,- €	<input type="checkbox"/> 7.680,- €	<input type="checkbox"/> 8.880,- €	<input type="checkbox"/> <b>Silver-Sponsoring</b>
<b>20 m<sup>2</sup> Stand</b>	<input type="checkbox"/> 9.800,- €	<input type="checkbox"/> 11.200,- €	<input type="checkbox"/> 12.800,- €	<input type="checkbox"/> 14.800,- €	<input type="checkbox"/> <b>Gold-Sponsoring</b>
<b>_____ m<sup>2</sup> Stand</b>	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____	
<b>Outdoor Stand with _____ m<sup>2</sup></b>					<input type="checkbox"/> Authority / Research -15%

**All prices subject to 19% German VAT**  
**Discounts are not combinable**

Rank / Title / Name / Surname

Company / Institution

Invoice Address

Phone / E-Mail

City / Date / Signature

**Important notes:** With your registration you agree to the storage of your personal data as well as the publication of photos taken at the conference. You will receive an entrance card 3 weeks prior to the conference in case your registration has been successful and accepted. Participation might be rejected on individual basis. **Liability:** In case of cancellation for any reasons, registered participants and exhibitors will be notified immediately and participation and exhibition fees will be reimbursed. In this regard, the liability of SGW is limited to the participation and exhibition fees.

This Conference is organised by: German Association for Defence Technology - Centre for Studies and Conferences Ltd., Hochstadtenring 50, D-53119 Bonn, www.dwt-sgw.de  
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