

Program

Ensuring Supply Security
in a Changing World

Energetic Materials – From Simulation and Synthesis to Application

**55th International Annual Conference
of the Fraunhofer ICT** combined with the
49th International Pyrotechnics Society Seminar

June 23–26, 2026
Convention Center, Gartenhalle
Karlsruhe, Germany





Introduction

The Fraunhofer ICT International Annual Conference serves as a forum to discuss the current state of the art, to present new methods, ideas, and research results and to further improve scientific understanding in the field of energetic materials. Join our conference to benefit from a platform for lively discussions, detailed exchange of scientific results and – most importantly – for networking with international experts.

In the light of recent global challenges, the advancement of simulation, synthesis, and processing techniques for energetic materials has become crucial. This conference aims to promote innovative research and practical solutions that advance the development of novel energetic materials and formulations while ensuring excellent performance and applicability.

The focus will be on innovative materials, designs and manufacturing concepts for energetic materials. Additionally, the integration of advanced simulation techniques for modeling and predicting the behavior of energetic materials and formulations throughout their lifecycle will be highlighted. Researchers are encouraged to present their findings on cutting-edge synthesis



techniques, formulations and advanced processing methods that optimize both material properties and process efficiencies. The 55th International Annual Conference of Fraunhofer ICT offers an exceptional opportunity for collaboration and knowledge exchange among experts in the field of energetic materials, addressing current challenges in simulation, synthesis, production, and performance.

By fostering innovative solutions and facilitating discussions on new methods and trends, the conference creates a dynamic environment for engagement. In particular, it provides young scientists and early-career researchers with the chance to present their work and expand their international network of professionals.

This year, the renowned International Pyrotechnic Society Seminar, with its Chairman E.C. Koch, will be taking part in the event with its 49th edition. The program also includes a session on the topic of munitions in the sea. Both topics complement the 55th ICT Annual Conference well, and we look forward to a mutually enriching exchange within the communities.

Chairmen of the Conference

Dr. Sebastian Wurster, Dr. Uwe Schaller

Spokesmen for Explosives Technology, Safety and Security
Fraunhofer ICT, Pfinztal, Germany

General Information

Registration

- Register online: www.ict.fraunhofer.de/annualConference
- Registration fee complete conference (incl. proceedings, coffee breaks, lunch): **€ 1050,--**
- Registration fee only part "Munitions in the sea" (incl. proceedings, coffee breaks, lunch Thursday and Friday): **€ 500,--**
- Participation cannot be guaranteed for registrations arriving after June 16th, 2025. The fee has to be paid **upon receipt of the invoice** by bank transfer.

Cancellation Policy

- **€ 500,--** will be charged for cancellations after June 15th, 2026. **No-shows** will be charged the whole fee.

Accommodation

- Online, see www.ict.fraunhofer.de/annualConference

Conference Office

- Foyer of the GARTENHALLE
- Open from Tuesday, June 23, 16.00 h till Friday, June 26, 14.00 h **during the Conference** and may be reached by Phone +49-(0)7 21 / 37 20 - 6000

Check in / Welcome Reception

- Please check in at the Conference Office on **Tuesday, June 23, between 16.00 and 20.00 h.**
- All participants are cordially invited to the **Welcome Reception** on the same day, starting at **18.00 h** in the foyer of the GARTENHALLE.

Conference Language

- English

Get-together (Thursday, June 25)

- The Fraunhofer ICT can be visited on **Thursday, June 25** in the evening. There will be a **Get-together Party** with draught beer, barbecue and live broadcast of the FIFA World Cup match Ecuador vs. Germany (10 p.m.). Please **mark on your registration form** whether you wish to participate.
- Transportation: Bus shuttle Convention Centre Karlsruhe – Fraunhofer ICT and back

Chairmen

- Dr. Sebastian Wurster (Fraunhofer ICT)
- Dr. Uwe Schaller (Fraunhofer ICT)

Program Committee

- Thorsten Kiefer, JPI Oceans, D
- H.S. Udaykumar, University of Iowa, USA
- Magda Rusan, Ludwigs-Maximilian Universität, D
- Ernst-Christian Koch, Lutradyn, D
- Thomas Klapötke, Ludwigs-Maximilian Universität, D

Exhibiting companies

- Dr. Krause GmbH, Potsdam, D
- Resodyn Acoustic Mixers Inc., Butte, USA
- Specialised Imaging UG Deutschland, Fürstenfeldbruck, D
- Teledyne GmbH, Heidelberg, D
- iTecSwiss AG, Zeiningen, CH
- Propex Technologies GmbH & Co. KG /
IKA-Werke GmbH & Co. KG, Staufen, D

How to find the venue

Karlsruhe is located 120 km south of Frankfurt (Main)/Frankfurt International Airport just beside the Autobahn A5, and is also connected to Frankfurt via the Intercity Express Train ICE. Additional airports are: Strasbourg (F) (approx. 100 km) and Stuttgart (D) (approx. 90 km).

By car: Coming from the A5/A8, please take exit no. 45 "Karlsruhe-Mitte" in the direction of Karlsruhe. Leave the B10 in the direction of "Stadtmitte/Zentrum". Coming from the A 65/ or B10, please take exit no. 2 in the direction of "Kongresszentrum". Follow the signs for "Kongresszentrum".

Address:

Congress Center Karlsruhe, Festplatz 9, 76137 Karlsruhe, Germany

Entrance to Gartenhalle

Wardrobe

Lecture Room B

Registration

Lecture Room A

Posters / Poster Session

Lunch

Tuesday, June 23

16.00-20.00 **Check-in**

18.00-20.30 **Welcome Reception**

Wednesday, June 24

LECTURE ROOM A

09.00 **WELCOME AND OPENING**

U. Schaller

Fraunhofer ICT, Pfinztal, D

S. Wilker

BAAINBw, Koblenz, D

KEYNOTE-SESSION I

Chair: U. Schaller, Fraunhofer ICT, D

09.20 **K1** **KEYNOTE I**
tbd

09.50 **K2** **KEYNOTE II**
tbd

10.20 **Coffee break**

LECTURE ROOM B



LECTURE ROOM A

SESSION A1

FLOW AND CRYSTALLIZATION CHEMISTRY

Chair: tbd

-
- 11.00 **A1** **THE APPLICATION OF IN SITU PROCESS ANALYTICAL TOOLS FOR THE DEVELOPMENT AND OPTIMIZATION OF CONTINUOUS FLOW PROCESSES**
E. D. Gauthier, A. J. Paraskos, B. Diallo, J. Laquidara
US Army DEVCOM, Picatinny Arsenal, USA
-
- 11.20 **A2** **CONTINUOUS RESONANTACOUSTIC® REACTOR AND CRYSTALLIZER TECHNOLOGIES FOR ENERGETIC MATERIAL SYNTHESIS AND PARTICLE CONTROL**
J. Mayne
Resodyn Corporation, Butte, USA
-
- 11.40 **A3** **SUBLIMATION-CRYSTALLIZATION: A NOVEL PROCESS FOR RECYCLING OF AMMONIUM DINITRAMIDE (ADN) AND PARTICLE PRODUCTION**
T. Heintz, W. Reinhard
Fraunhofer ICT, Pfinztal, D
-
- 12.00 **A4** **AMORPHOUS SOLID DISPERSIONS (ASDS) OF SMALL MOLECULE ORGANIC ENERGETICS**
M. C. Chandwani, V. Stepanov, R. B. Patel,
C. A. Morrison, C. R. Pulham
US Army DEVCOM, Picatinny Arsenal, USA

12.20 **Lunch break**

LECTURE ROOM B

SESSION B1

THERMITES AND REACTIVE COMPOSITES

Chair: tbd

B1 PARAMETER MODULATION OF ENERGETIC COMPOSITES: FIRST STEPS TOWARDS CONTROLLABLE DETONATING PERFORMANCES

H. Dehlinger
ISL, Saint-Louis, F

B2 PYROTECHNIC TRACERS SHED NEW LIGHT ON THE MITHOLZ-EXPLOSION DESASTER


E.-C. Koch
TU Kaiserslautern / Lutradyn Energetic Materials,
Kaiserslautern, D

B3 TWO-DIMENSIONAL ENGINEERING OF METASTABLE INTERMOLECULAR COMPOSITES: SYNERGISTIC ENHANCEMENT OF MECHANICAL STRENGTH AND STIMULUS-SPECIFIC SENSITIVITY X

Jingwei Li, Yurong Liu, Junhong Chen, Xuwen Liu
State Key Laboratory of Precision Blasting, Jiangnan University,
Wuhan, PRC / Hubei Key Laboratory of Blasting Engineering,
Jiangnan University, Wuhan, PRC
Zhichao Zhao, Yihao Shen, Guangyu Yin, Zhangbo Ming
State Key Laboratory of Precision Blasting, Jiangnan University,
Wuhan, PRC

B4 DEVELOPMENT OF NOVEL EXTRUDABLE IGNITING COMPOSITION FOR SOLID PROPELLANTS

A. Ujjwal, S. A. Phatak, B. Kumari, S. Rawal
HEMRL, Pune, IND



LECTURE ROOM A

SESSION A2

SYNTHESIS

Chair: T. Klapötke, Ludwigs-Maximilian Universität, D

- 14.00 **A5** **INVESTIGATION OF ARENE AND HETEROARENE NITRATION SUPPORTED BY HIGH-THROUGHPUT EXPERIMENTATION AND MACHIEEN LEARNING**
T. Kerackian, E. Romero
Universite Paris Saclay DMTS, Gif-sur-Yvette, F
C. Wespiser, M. Daniel, E. Pasquinet
CEA DAM, Monts, F
-
- 14.20 **A6** **A NOVEL ENERGETIC PLASTICIZER BASED ON A TRIOL BACKBONE: SYNTHESIS AND CHARACTERIZATION**
J. T. Lechner
Fraunhofer ICT, Pfinztal, D
-
- 14.40 **A7** **HIGH-SELECTIVITY SYNTHESIS OF HMX VIA A BIMETALLIC COOPERATIVE CATALYTIC BECHMANN PROCESS**
Meng Tang, Yin Wei, Zihao Wang, Long Chen,
Jiaxin Liu, Min Shi, Jun Yang
Shanghai Institute of Organic Chemistry CAS,
Shanghai, PRC
-
- 15.00 **A8** **SYNTHESIS, CHARACTERIZATION AND EVALUATION OF ENERGETIC PROPERTIES OF NOVEL 1,3,4-OXADIAZOLE BRIDGED DIFLUOROAMINOFURAZANS**
Yuehui Wang, Yang Chen, Lin Ling, Lele Wen,
Long Lu
Shanghai Institute of Organic Chemistry CAS,
Shanghai, PRC
-
- 15.20 **Coffee break**
-

LECTURE ROOM B

SESSION B2

PROPELLANTS

Chair: tbd

B5 EVALUATION OF MECHANICAL, RHEOLOGICAL, THERMAL AND BALLISTIC PROPERTIES OF GAP BASED COMPOSITE SOLID PROPELLANTS
B. Karakaya Yalcin, N. Cagici, E. Cetin, H. Eren Caka,
U. Genc, H. E. Can Yolcu
Mechanical and Chemical Industry Corporation, Ankara, TR

B6 ENERGETIC ADDITIVES FOR PROPELLANTS WITH REDUCED ADIABATIC FLAME TEMPERATURES
A. Dejeaifve, R. Dobson
Eurenco Clermont, Engis, B

B7 IGNITION DELAY PREDICTION OF ADN-BASED ENERGETIC IONIC LIQUID PROPELLANT UNDER APPLIED VOLTAGE
R. Omori, T. Harada
Yokohama National University, Yokohama, JAP
N. Itouyama
Nagoya University, Nagoya, JAP
K. Shiota
Fukuoka University, Fukuoka, JAP
H. Habu, Y.-I. Izato
Japan Aerospace Exploration Agency, Sagamihara, JAP

B8 SIMULATION OF MICROSCALE COMBUSTION OF A COMPOSITE ROCKET PROPELLANT
P. Pietrek, M. Moroff
Fraunhofer ICT, Pfinztal, D



LECTURE ROOM A

SESSION A3

ADVANCED PROCESSING TECHNOLOGIES

Chair: tbd

-
- 16.00 **A9** **TAILORING MICROSTRUCTURE AND FOAM STABILITY IN ENERGETIC MONOMER VIA CONTROLLED VAT PHOTOPOLYMERIZATION**
E. Caravaca, C. Houthuysen, D. Bird, J. Laquidara, D. Wong
US Army DEVCOM, Picatinny, USA
F. Berisha
Leidos, Dover, USA
-
- 16.20 **A10** **3D PRINTING OF LOW EXPLOSIVE MIXTURES THROUGH VAT PHOTOPOLYMERIZATION OF POTASSIUM PERCHLORATE/STRONTIUM NITRATE-BASED MIXTURE PASTES**
S. Date, M. Ishikawa
National Defense Academy, Yokosuka, JAP
-
- 16.40 **A11** **ADDITIVE MANUFACTURING OF SOLID PROPELLANT GRAINS USING UV-CURABLE COMPOSITE PROPELLANTS**
H. M. Chabalala, D. Steyn
Rheinmetall Denel Munition, Somerset West, RSA
H. Knoetze, J. Cripwell
Stellenbosch University, Stellenbosch, RSA
-
- 17.00 **A12** **NITRATION SPENT ACID RECOVERY: EFFICIENT AND EFFECTIVE EFFLUENT RECOVERY IN THE PRODUCTION OF ENERGETIC MATERIALS**
K. Seibert
Kellogg Brown & Root GmbH, Bad Homburg, D
-

LECTURE ROOM B

SESSION B3

CHARACTERIZATION

Chair: L. Glascoe, Lawrence Livermore National Laboratory, US

**B9 EXPERIMENTAL INVESTIGATION ON DINA
DECOMPOSITION PRODUCTS**

J. Ehrhardt, J. Glorian, B. Baschung
ISL, Saint-Louis, F

B10 CYCLED DSC-ANALYSIS OF HNS IN ENERGETIC MELTS

P. Schultz
Fraunhofer ICT, Pfinztal, D

**B11 HIGH ENERGY COMPOSITE ROCKET PROPELLANT
ACCELERATED AGING STUDY**

T. G. Manning, H. A. Grau, A. Y. Gandzelko, S. Swaszek,
E. T. Wrobel, D. R. Alonso, N. A. Matlick, N. M. Peabody,
P. J. Samuels
US Army DEVCOM, Picatinny Arsenal, USA
C. E. Owens
Leidos, Reston, USA

**B12 FROM SCREENING TO QUANTITATIVE ANALYSIS: AN
EVALUATION AND REPLACEMENT OF BROWN FUME
TEST**

Y. Salamanca, K. Skanberg
FOI, NORRA SORUNDA, SE

Thursday, June 25

LECTURE ROOM A

KEYNOTE SESSION II

Chair: S. Wurster, Fraunhofer ICT, D

09.00 **K3** **AN ORGANIKER POACHING IN PNICTOGEN TERRITORY**

P. R. Schreiner

Justus-Liebig-University, Giessen, D

09.30 **K4** **PROJECT OVERVIEW EU AND NATIONAL**

J. Greinert

GEOMAR, Kiel, D

10.00 **Coffee break**

SESSION A4

AI AND MACHINE LEARNING

Chair: tbd

10:40 **A13** **PREDICTING THE SENSITIVITY OF ENERGETIC COMPOUNDS THROUGH MACHINE LEARNING: FOR DISCOVERING INSENSITIVE ENERGETIC MATERIALS**

Yu-Cong Chen, Wenbin Yi

Nanjing University of Science and Technology,
Nanjing, PRC

11.00 **A14** **FROM SCARCE SIMULATIONS TO INSIGHT: CLOSED-LOOP AI FOR EXPLORING MICROSTRUCTURE-PERFORMANCE RELATIONSHIPS**

J. B. Choi, S. Baek

University of Virginia, USA

Y. T. Nguyen, H. S. Udaykumar

University of Iowa, USA

LECTURE ROOM B

SESSION B4

MUNITION IN THE SEA – DISPOSAL TECHNOLOGIES

Chair: S. Wurster, Fraunhofer ICT, D

B13 A LONG WAY TO GO FOR OFFSHORE UXO CLEARANCE OPERATIONS IN GERMAN TERRITORIAL WATERS – SOME INSIGHTS OF THE DEVELOPMENT OF UXO CLEARANCE OPERATIONS ONSHORE/OFFSHORE TILL THE SO CALLED “SOFORTPROGRAMM” IN 2024

D. Guldin

SeaTerra GmbH, Wandlitz, D

B14 SCALING THE SAFE DISPOSAL OF CONVENTIONAL MUNITIONS: FROM OPTIMISATION TO TRANSFORMATION

B. Niemeyer

GEKA mbH, Munster, D

LECTURE ROOM A

11.20 **A15** **TOWARDS FOUNDATION MODELS FOR SHOCK COMPRESSION OF SOLID REACTIVE MATERIALS**

J. B. Choi, X. Cheng, H. Morsy, S. Baek
University of Virginia, USA
Y. T. Nguyen, H. S. Udaykumar
University of Iowa, USA

11.40 **A16** **TOWARDS AN AI FRAMEWORK FOR PROCESS-STRUCTURE-PROPERTIES-PERFORMANCE RELATIONSHIPS IN HETEROGENEOUS ENERGETIC MATERIALS**

H. K. Springer, Y. Choi, C. M. Miller, S. W. Chung,
K. T. Sullivan
Lawrence Livermore National Laboratory,
Livermore, USA
H. S. Udaykumar, I. Fang
University of Iowa, Iowa City, USA
S. Baek, Z. Gray
University of Virginia, Charlottesville, USA

12.00 **A17** **AI AND MACHINE LEARNING FOR PREDICTING QUANTUM TUNNELING EFFECTS IN ENERGETIC MATERIALS**

Zihao Guo
Nanjing University of Science and Technology,
Nanjing, PRC

12.20 **Lunch break**

POSTER SESSION

Chair: R. Doherty, Energetics Technology Center, US

14.00 Poster Session (Foyer)

14.20 Poster Session (Foyer)

LECTURE ROOM B

B15 THERMAL DESTRUCTION OF EXPLOSIVE SUSPENSIONS FROM WASHOUTS FROM LARGE-CALIBRE SEA-DUMPED AMMUNITIONS – DESIGN AND BUILDING A DEMONSTRATOR

H. Weigel
Dynasafe, Langenselbold, D

PANEL DISCUSSION

PANEL DISCUSSION

Session B5

MUNITIONS IN THE SEA – INTERNATIONAL CASE STUDIES

Chair: tbd

B16 COMPETITION OF IDEAS TO RECOVER AMMUNITION FROM SWISS LAKES AND RECENT INVESTIGATIONS

A.-L. Gassner
armasuisse, Thun, CH

B17 REMEDIATION OF MUNITIONS IN THE WESTERN BALTIC SEA

W. Sichertmann
Seascope GmbH, Hamburg, D

LECTURE ROOM A

14.40 Poster Session (Foyer)

15.00 Poster Session (Foyer)

15.20 **Coffee break**

16.00 **Short Introduction of exhibiting companies
(16.00 – 16.45)**

16.20 **Short Introduction of exhibiting companies
(16.00 – 16.45)**

17.30 **Bus Departure from Conference Hall
to Fraunhofer ICT**

18.00 **Get-together**
Barbeque Party, offering wine, draught beer

00.00 **Last bus**

LECTURE ROOM B

B18 MUNITIONS RESPONSE PROGRAM

D. Kolodrubetz
Institute for Defense Analyses, USA

**B19 BUILDING A COMMUNITY ON MUNITIONS IN THE SEA
AROUND NATIONAL EXPERIENCE AND EUROPEAN AND
GLOBAL ACTION**

P. Trautendorfer
JPI Oceans, Brussels, B

Session B6

**MUNITIONS IN THE SEA – COMBUSTION AND DETONATION
METHODS**

Chair: tbd

**B20 THE ROAD FROM REGULATION TO RESEARCH:
INVESTIGATING UNEXPLODED MUNITIONS FROM THE
BALTIC SEA**

A. Battig, G. Dudek
BAM, Berlin, D

**B21 INVESTIGATIONS INTO PROCESS-ENGINEERING
PECULIARITIES OF THE THERMAL DISPOSAL OF
AMMUNITION AT SEA AS A SUSPENSION IN WATER**

V. Weiser, E. Roth, P. Pietrek, A. Raab, A. Kessler
Fraunhofer ICT, Pfinztal, D

**Bus transfer to hotels, Karlsruhe City and
Main Station will be available
(starting 19.00 h during the whole evening).**

Friday, June 26

LECTURE ROOM A

Session A6

SIMULATION

Chair: H.S. Udaykumar, University of Iowa, US

09.00 **A18** **COMPARISON OF METHODS FOR CALCULATING THE ENTHALPY OF FORMATION USING DENSITY FUNCTIONAL THEORY CALCULATIONS**

A. Omlor
Fraunhofer ICT, Pfinztal, D
J. Glorian
ISL, Saint-Louis, F

09.20 **A19** **DEFLAGRATION-TO-DETONATION TRANSITION MODELING AND SENSITIVITY STUDIES**

H. K. Springer, J. E. Reaugh, C. M. Miller, B. W. White
Lawrence Livermore National Laboratory, Livermore, USA

09.40 **A20** **A COUPLED PHASE-FIELD AND LAGRANGIAN FRAMEWORK FOR SIMULATING FOAMED PROPELLANT COMBUSTION**

C. Houthuysen, E. Caravaca
US Army DEVCOM, Picatinny, USA
J. Heylmun
Synthetic Applied Technologies, Austin, USA

10.00 **A21** **HIERARCHICAL MODELING OF PRESSED HIGH EXPLOSIVES: USING MICROSTRUCTURE-RESOLVED MESOSCALE SIMULATIONS TO INFORM CONTINUUM REACTIVE FLOW RESPONSE**

C. M. Miller, M. G. Malenda, M. A. Homel,
D. K. Amondson, H. K. Springer, K. T. Sullivan
Lawrence Livermore National Laboratory, Livermore, USA

10.20 **Coffee Break**

LECTURE ROOM B

Session B7

MUNITIONS IN THE SEA – NEUTRALIZATION METHODS

Chair: tbd

**B22 ENVIRONMENTAL IMPACTS OF LOW AND HIGH ORDER
DETONATION IN WATER**

B. Sharma, J. Wardrop, F. Persico, T. Temple
Cranfield University, Cranfield Defence & Security,
Shrivenham, UK
F. Coulon
Cranfield University, Cranfield Water Science Institute,
Shrivenham, UK

**B23 PRESSURE SIMULATION ON LOD AND HOD AND
MITIGATION MEASURES FOR UNDERWATER MUNITIONS
DISPOSAL IN THE MMINE-SWEEPER PROJECT**

L. Wachter
Fraunhofer ICT, D

**B24 MUNIREM®'S INTEGRATED APPROACH TO CHEMICAL
NEUTRALIZATION OF UNDERWATER MUNITIONS**

V. Nzungung
University of Georgia / MuniRem Environmental LLC, Georgia,
USA

B25 DE-BOMBING THE FUZE

K. Godfrey
Helix Robotics Solutions, Chichester, UK



LECTURE ROOM A

Session A7

HIGH EXPLOSIVES

Chair: tbd

-
- 11.00 **A22** **EXPERIMENTAL DATA REQUIRED FOR CALIBRATION OF REACTIVE BURN MODELS IN PREDICTIVE EXPLOSIVE SIMULATIONS**
J. D. Olles, R. T. Ichiyama, A. F. Haslam,
C. D. Woodruff, J. R. White
NSWC, Indian Head, USA
-
- 11.20 **A23** **EXPERIMENTAL STUDY ON THE REACTION EVOLUTION OF PRESSED PBX CHARGE UNDER STRONG CONFINEMENT WITH DIFFERENT GAP CONDITIONS**
Xiaoyuan Yang, Chuanyu Pan, Hailin Shang, Tao Li,
Haibo Hu, Hua Fu
Institute of Fluid Physics CAEP, Mianyang, PRC
-
- 11.40 **A24** **DETONATION VELOCITY MEASUREMENT OF PETN/SILICONE MIXTURE AND ESTIMATION OF DETONATION PROPERTIES** S. Kubota, Y. Sugiyama,
T. Tamba, K. Nomura, T. Matsumura, K. Okada
National Institute of Advanced Industrial Science and
Technology AIST, Tsukuba, JAP
-
- 12.00 **A25** **OBSERVATIONS AND PERSPECTIVES ON HEXANITROGEN C₂H-N₆**
E.-C. Koch
TU Kaiserslautern / Lutradyn Energetic Materials,
Kaiserslautern, D
G. Hoss, F. Kraus
Universität Bonn, D
-
- 12.20 **Closing Remarks and Award Ceremony**
-
- 12.40 **Lunch**
-
- 13.45 **End of Conference**
-

LECTURE ROOM B

Session B8

MUNITIONS IN THE SEA – RISK ASSESSMENT

Chair: tbd

B26 THE IMPACT OF AGEING ON UNDERWATER DUMPED MUNITIONS

A. S. Cumming

University of Edinburgh, Edinburgh, UK

B27 ASPECTS OF THE RISK ASSESSMENT LINKED TO OLD MUNITIONS BURIED IN THE SEABED

B. Simoens

Royal Military Academy, Brussels, B

B28 PHYSICAL RISK ASSESSMENT OF WW2 DMM/UXO-FILLERS FROM LONG TERM SAMPLE STORAGE TRIALS

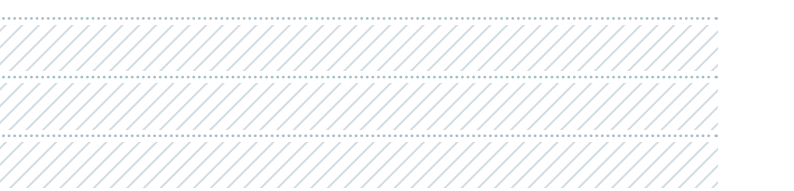
F. Pfeiffer

Office for Environmental Geology & Security Research BfUS, D

CLOSING REMARKS MUNITION IN THE SEA

T. Kiefer

JPI-Oceans, Brussels, B



Poster Program

Posters will be presented during the whole Conference.

A special **Poster Session** will take place on **Thursday, June 25, 14.00 – 15.00 h**. During this time authors should be present for discussion at their posters in the foyer of the Conference Hall.

P1 THERMAL AND ENERGETIC BEHAVIOR OF AMMONIUM NITRATE MODIFIED WITH NITROCELLULOSE-COATED AIMG-NGO@NFE₂O₃ NANOTHERMITE

F. Gahfif, M. K. Boulkadid, S. Toudjine, E. Louafi, M. Nourine, S. Belkhir

Ecole Militaire Polytechnique EMP, Algiers, ALG

P2 EFFICIENT AND SCALABLE SYNTHESIS OF OXAMIDE VIA CONTINUOUS FLOW TECHNOLOGY

O. Karakurt, O. Bilen, N. Ozer Ucar, B. E. Celik Fidanci, M. Öztürk, K. Aydinca

Roketsan Missile Industries Inc., Ankara, TR

P3 THERMODYNAMIC CALCULATION OF THE THEORETICAL PERFORMANCES OF ALICE PROPELLANT

B. Raouf

Ecole Militaire Polytechnique EMP, Algiers, ALG

P4 SUBSCALE COMBUSTION TESTING AND MODELING OF ENCAPSULATED NITRATE ESTERS AS IGNITERS

D. T. Bird, C. A. Houthuysen, N. Peabody

US Army DEVCOM, Picatinny Arsenal, USA

P5 DETONATION SIMULANT OF TATP AS DONOR CHARGE OF TERTIARY EXPLOSIVES

D. Belmehdi, M.K. Boulkadid

Ecole Militaire Polytechnique, Algiers, ALG

M. H. Lefebvre, R. van Riet

Royal Military Academy, Brussels, B

P6 PREPARATION OF ELECTROSTATICALLY SAFE COPPER AZIDE/CARBON COMPOSITES WITH CORE-SHELL STRUCTURE BY HYDROTHERMAL CARBONIZATION METHOD

Lipeng Zhan, Yan Hu, Lizhi Wu, Yinghua Ye, Ruiqi Shen

Nanjing University of Science and Technology, Nanjing, PRC /

Micro-Nano Energetic Devices Key Laboratory of MIIT, Nanjing, PRC

- P7 DESIGN AND CHARACTERIZATION OF NEW ECO-FRIENDLY NITROBENZOXAZINE POLYMERS WITH ENERGETIC POTENTIAL**
T. Gouasmia, O. Mehelli, M. Derradji, A. Habes
Ecole Militaire Polytechnique, Algiers, ALG
- P8 DESIGN AND CHARACTERIZATION OF A PROMISING CHITIN-BASED ENERGETIC POLYSACCHARIDE**
S. Ouahioune, A. F. Tarchoun, D. Trache, F. Benaliouche
Ecole Militaire Polytechnique, Algiers, ALG
T. Klapötke
Ludwig-Maximilians-University, München, D
- P9 STUDY ON RELAXATION BEHAVIOR AND AGING MECHANISM OF HTPB PROPELLANT UNDER THERMAL AGING**
Qingxin Cui, Xiangyang Liu, Jiangtao Wang, Yingjun Chen, Xu Zhang
Beijing Institute of Technology, Beijing, PRC
- P10 SYNERGISTIC EFFECTS OF FE₂O₃-BAO-MWCNT-IL ON THE THERMAL BEHAVIOR AND STABILITY OF DOUBLE-BASE PROPELLANTS**
H. Hassam, S. Belkhiri, M. K. Boulkadid
Ecole Militaire Polytechnique, Algiers, ALG
- P11 ELECTROLYTIC L OXIDATION FOR ENERGETIC MATERIALS**
M. Kumasaki
Yokohama National University, JAP
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