



# 4<sup>th</sup> CWO Poster Session

Commission for Scientific Research (CWO)

Royal Military Academy

Technical program

15 May 2019 – 1330 Hr - 1530 Hr – Room: VIP 2

	Poster title	Authors
1	Influence of the Synthesis Process of TATP and HMTD on their Sublimation Rate	L. Jeunieu, B. Simoens and M.H. Lefebvre
2	Experimental Investigation of the influence of an Axial Oxidizer Injector Geometry on a 1-kN Paraffin-Fueled Hybrid Rocket Motor	M. Bouziane, A. E. M. Bertoldi, P. Milovac, P. Hendrickx and M. H. Lefebvre
3	A novel energetic material based on nanoporous carbon	R. Van Riet, P. Lodewyckx, C. O. Ania and M. H. Lefebvre
4	Impregnation of activated carbon for retention of toxic gases (HCN, H <sub>2</sub> S and SO <sub>2</sub> )	Y. Boutillara, P. Lodewyckx and G. De Weireld
5	What has water to do with CBRN protection?	L. F. Velasco and P. Lodewyckx
6	CBRN Dispersion Modeling in the Atmosphere	Y. Nishio, B. Janssens, K. Limam and J. van Beeck
7	CFD modeling of CBRN-type attacks in confined spaces	L. Faugier, W. Bosschaerts and B. G. Marinus
8	Tailored High-Altitude Propeller	B. G. Marinus and A. Malim
9	Outdoor Sound Propagation from Firearms: Standardization	B. G. Marinus and K. Harri
10	Galileo: Europe's Global Navigation Satellite System	A. Muls and P. De Kimpe
11	SafeShore - System for the detection of threat agents in maritime border environments	G. De Cubber
12	Detection and localization of commercial drones based on RF signals	S. Basak and B. Scheers
13	DAP17-01: Multi Band Efficient Networks for Ad Hoc Communications	V. Le Nir and B. Scheers
14	Indoor Positioning, Navigation, and Timing (iPoint) System	H. M. Chaudhary and B. Scheers
15	Indoor Tracking System of firefighters	R. Lahouli and B. Scheers
16	An Optimized and Integrated Design of Antennas for the Future Jamming System	T. M. D. Tran and M. Piette
17	Development and Evaluation of a New Command Wire Detector	Y. Yvinec and P. Druyts
18	Enabling operations with multiple heterogeneous unmanned maritime assets	G. De Cubber and R. Haelterman
19	Underwater threat recognition: Are automatic target recognition algorithms going to replace expert human operators in the near future?	O. Lopera and Y. Dupont

20	Study of cryptographic techniques with focus on symmetric key algorithms and hash functions	F. Lafitte, A. Neyt and H. Bruyninckx
21	Research on Digital Image Steganalysis	D. Borghys and H. Bruyninckx
22	On Quantum Key Recycling Schemes	H. Bruyninckx, D. Van Heule and Y. Roggeman
23	The analysis of combustion plumes through hyperspectral imaging	M. Shimoni, R. Haelterman, J. Gallant and V. Van Haesendonck
24	In-band laser damage to an uncooled thermal infrared imager	G. D. Lewis, S. Chretien, C. N. Santos, M. Vandewal and B. Hackens
25	Estimation of Laser Dazzle Effects on Shooting Performance	M. Vandewal, M. Eeckhout, D. Budin, L. Merella, C. Perneel, C. A. Williamson and C. N. Santos
26	Laser dazzling of CCD and CMOS cameras	C. N. Santos, L. Merella, G. Lewis and M. Vandewal
27	Passive harbour protection against UAVs	A. Borghgraef, A. Van de Bruane and M. Vandewal
28	Early Warnings in Aerial Videos	C. Beumier and X. Neyt
29	Machine Learning applied to the detection of IED indicators	M. Idrissa and X. Neyt
30	A Change Detection Method for the Analysis of Sentinel-1 Radar Images Time Series	M. Stasolla and X. Neyt
31	Analysis of random phase noise effects on bistatic SAR images in the context of the ESA BeISAR campaign of acquisitions	F. Bettens and X. Neyt
32	Artificial Intelligence for Battlefield Awareness	K. Boeckx and X. Neyt
33	Automatic training of multi-criteria cyber-security decision systems	A. Croix, T. Debatty and W. Mees
34	Cyber range	T. Debatty and W. Mees
35	Graph based APT detection	T. Debatty, W. Mees and T. Gilon
36	Random walk on very large graphs via graphons	J. Petit, B. Lauwens and T. Carletti
37	Social media data collection with automated trend detection	B. De Clerck, F. Van Utterbeeck and W. Mees
38	Experimental assessment of concrete with bonded FRP under contact explosions	R. Mourão, A. Caçoilo and D. Lecompte
39	Experimentation of the behavior of a vehicle at small scale subjected to an explosion	A. Jonet, L. Pyl and D. Lecompte
40	Study of the dynamic behavior of protective structures subjected to the combined effect of blast wave and the impact of fragments	O. Atoui, L. Pyl and D. Lecompte
41	Evaluation of a compound survival container	A. Caçoilo and D. Lecompte
42	A new framework to evaluate the ballistic resistance of combat vehicles	A. Chabotier and J. Gallant
43	Investigation of best parameters' combinations for coordinate measuring machine and its application on measuring the gun barrel erosion	M. Dhouibi, B. Stirbu, A. Chabotier and M. Pirlot
44	Visualization of muzzle flow using Background Oriented Schlieren technique	A. Moumen, J. Grossen, I. Ndindabahizi and J. Gallant
45	Development of a new ballistic helmet concept	A. Azevedo, A. Miranda-Vicario and F. Coghe

46	The development of a Bullet Simulating Projectile	G. Kechagiadakis and F. Coghe
47	Stochastic simulations in ballistics	I. Ndindabahizi, J. Gallant and B. Lauwens
48	Military manpower simulation/planning in Julia	J. Van Kerckhoven and F. Van Utterbeeck
49	Exploring Open Innovation Adoption in Public Administration	B. De Coninck, S. Viaene and J. Leysen
50	The future of internal staffing in government	Ph. Rogiers, S. Viaene and J. Leysen
51	The Deployment of Performance Measurement Systems within the Belgian Defense	J. Soares, J. Raemdonck, N. Vallet, G. Letens and W. Van Bockhaeven
52	Network structures and lobbies in the EU	F. Ruiz
53	Manning the equipment or equipping the man	F. Vanderstraeten and D. Resteigne
54	Human factors for drone operations	D. Doroftei
55	The multiple shades of hypoxia: Speech as a window into different stages of acute hypobaric hypoxia	M. Van Puyvelde, X. Neyt, E. Dessy, W. Vanderlinden, K. Vicsi and N. Pattyn
56	PERFOFEEDBACK or the boundaries of the flow	E. Dessy, O. Mairesse, M. Van Puyvelde, F. De kuiper, X. Neyt and N. Pattyn
57	Making blood available Far Forward: Walking blood bank	J. Degueldre, E. Dessy, N. Pattyn, V. Deneyts and F. T'Sas
58	Three cases of resuscitative endovascular balloon occlusion of the aorta (REBOA) in austere pre-hospital environment: technical and methodological aspects	J.C. de Schoutheete, S. Nijs, I. Fourneau, F. Waroquier, M. O'Connor, K. Van Cleynenbreugel, J.C. Ceccaldi and W. Weuts
59	Decellularized Human Dermal Matrices for the Treatment of Burn Injury	T. Rose, J.-P. Draye, M.A. Boone, G. Verween, G. Verbeken, S. De Soir, P. De Corte, B. Pascual and J.-P. Pirnay
60	The Magistral Phage : Phage Therapy at the Queen Astrid Military Hospital	J.-P. Pirnay, S. Djebarah, S. De Soir, M. Merabishvili, G. Verbeken, D.De Vos, P. De Leenheer, C. Maussen, I. Strachinaru, P. Soentjens, T. Rose, J.-P. Draye, G. Steurs and S. Jennes
61	HFM-18.05 Monitoring and modelling physical function and performances in military rehabilitation	S. Scataglini, R. Haelterman and D. Van Tiggelen
62	Effect of the harmonic oscillator on Spatiotemporal Parameters in Overground and Treadmill Walking	S. Scataglini, F. Barouche, E. Roosens, E. Bernard and D. Van Tiggelen
63	A New Quantitative Kinesiophobia Assessment	S. Scataglini, T. Ghenimi, E. Roosens, V. Stevens and D. Van Tiggelen
64	Motivation@RMA	A. Lepinoy
65	Eavesdropping Video Display Systems Exploiting Multiple Electromagnetic Leakage Channels	P. De Meulemeester, B. Scheers, G.A.E. Vandenbosch
66	An Ion Cyclotron Resonance Heating system for Wendelstein 7-X, the largest stellarator in the world (Max-Planck institut for Plasma Physics in Greifswald, Germany)	J.Ongena, Ye.O.Kazakov, M.Vergote, M.Van Schoor et al.
67	Three-dimensional RF and circuit modelling of the revised ITER ICRF launcher design.	F. Louche, F. Durodié, W. Helou, P.U. Lamalle and F. Calarco
68	FIRST RESULTS: HBP guidelines for successful psychological adaptation to Isolated and Confined Environments	T. Van Caelenberg, L. Bessone, X. Neyt and N. Pattyn