



DELIVERABLE 8.3.2



Dissemination strategic plan

Dissemination level: **PUBLIC**



WP8

Dissemination, exploitation and transfer



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REVISIONS V2.

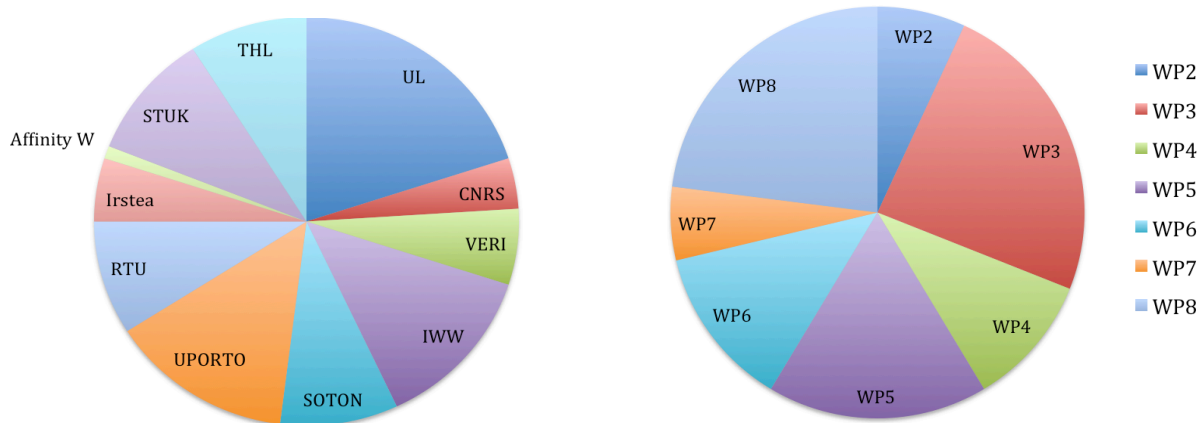
Parts 3, 4, 6, 8, 9 updated, as well as annexes [20 Sept 2013].

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Dissemination activities have been recognised as a key aspect in the SecurEau programme. A strong dissemination activity has mobilised the overall SecurEau partners (Figure 1, left and Annex 1 for the consortium composition), both for oral and written communications, with traditional (conferences) and modern (website) media.

Information was done regarding all workpackages (Figure 1, right and Annex 2 for the workpackages meaning), to the scientific community, to the SME, to classified people, to technical committees as well as end-users, local governments... depending of the nature of the information to be transferred.



Such dissemination has been organised into twelve main axes:

- European and national level conferences
- Poster presentation
- Peer review and technical papers
- Workshop, seminars, technical meetings
- Forum participation and workshop organisation
- Masters – PhD thesis – Post doctoral
- Website
- Industrial and final products
- Press releases, interviews
- Methodological guide for end-users
- Classified results
- Deliverables produced (complete list in Annex 3)

1 European and national level conferences

The partners involved in SecurEau have demonstrated a strong participation in conferences, both nationally and internationally by 42 oral presentations (Annex 4).

All workpackages topics were exposed in these conferences (Table 1a) which demonstrate a communication concerning all SecurEau fields of activity. Moreover all partners have been involved in the communication work (Table 1b) which show also an intense collaborative work between the participants. A strong effort has been done by SecurEau partners to communicate efficiently, outside their country, mainly in Europe (9 countries, 37 conferences) even if four conferences were done outside Europe, one in Russia and three in USA (Table 1c).

Table 1a: Conferences by workpackage

Main WP	Number of conferences	
	Done	Planned in the DoW
WP2	5	1
WP3	8	0
WP4	5	1
WP5	6	2
WP6	4	2
WP7	1	1
WP8	13	2

Table 1b: Conferences by partner (the number is higher than the total number of conferences as some of them have been co-signed by several different partners)

Partner	Number of conferences
UL	12
CNRS	2
VERI	6
IWW	8
SOTON	3
UPORTO	8
RTU	6
Irstea	5
Affinity W	1
STUK	7
THL	3

Table 1c: Country where the conference was presented

Country	Number of conferences
Belgium	1
Finland	3
France	12
Germany	16
Island	2
Italy	1
Portugal	1
Russia	1
Sweden	1
UK	1
USA	3

2 Poster presentation

A total of 22 posters were presented (Annex 4), mainly during two conferences: the 4th Water Contamination Emergencies (WCEC4) held in 2010 and the 5th Water Contamination Emergencies (WCEC5) held in 2012, both in Mulheim an der Ruhr (Germany).

These twenty three posters are mainly related to four WP (Table 1) and to 7 partners (Table 1b). Due to the collaborative work and the strong interaction between the partners, more than one partner participate to the poster presentation.

Table 1a: Posters presented by workpackage

Main WP	Number of posters	
	Done	Planned in the DoW
WP3	9	0
WP5	4	0
WP6	7	0
WP7	2	0

Table 1b: Posters presented by partner (the number is higher than the total number of conferences as some of them have been co-signed by several different partners)

Main WP	Number of posters
UL	4
CNRS	2
IWW	5
SOTON	5
UPORTO	6
RTU	1
THL	4

Three posters have been recognised as the best scientific poster presentation and received the *Poster Award 2010* (in the WCEC4 conference, first price for Sandra Wilks and Bill Keevil, SOTON, UK and second price for Martin Strathmann, IWW, Germany) and the *Poster Award 2012* (in the WCEC5 conference, for Florence Gosselin UL, F – Luis Miguel Madeira, Uporto, P – Talis Juhna, RTU, LV)

3 Peer review and technical papers

A total of 26 peer review and technical papers were submitted (2) or published (23) or in press (1) in journals or part of books (Annex 4). This number is lower than planned at the beginning of the programme (Table 3a).

Table 3a: Distribution of papers by workpackages

Main WP	Number of papers	
	Done	Planned in the DoW
WP2	1	4
WP3	7	8
WP4	4	5
WP5	7	5
WP6	3	4
WP7	3	1
WP8	1	1

4 Workshop, seminars, technical meetings

Six partners have participated to oral presentations during 16 technical manifestations (Annex 4), both linked to specific WP or more generally concerned the overall SecurEau project (Tables 4a and 4b).

Table 4a: Technical manifestations by workpackage

Main WP	Number of technical manifestations	
	Done	Planned in the DoW
WP3	2	1
WP4	1	1
WP5	1	1
WP7	2	1
WP8	10	1

Table 4b: Technical manifestations by partner (the number is higher than the total number of conferences as some of them have been co-signed by several different partners)

Partner	Number of technical manifestations
UL	7
IWW	1
SOTON	1
RTU	2
STUK	3
THL	3

Participation to such events permits both to diffuse information to selected public, as explained below through few examples:

- Meetings occurred at *Ministère de l'écologie* and *Ministère de la Santé et du Développement Durable* in France (two meetings in 2011 and two in 2012) to transfer specific, classified results to national French security agencies. One meeting was also done with the "*détachement central interministériel d'intervention technique DCI-IT*" in 2012. The same strategy was applied in Finland, with a specific seminar organised by STUK (December 2012) and one organised by SecurEau in Germany, during the WCEC5 meeting;
- Results and contacts were also taken during meetings held by ASTEE (Association Scientifique et Technique pour l'Eau et l'Environnement, France), mainly with industrial partners;
- Presentation devoted mainly to SME was done, for example under the *Pôle de compétitivité Alsace/Lorraine sur la qualité et la gestion de l'eau* Hydreos (conference held by October in Metz, France);
- Cluster meetings with other European projects / coordinators also occurred, for example during

meeting held in Stockholm (SRC'09 conference, Sept 2009), in Ispra (ERNICIP conference, Dec 2012), by direct contacts (for example phone meeting with W-SMART / BIO-COM project);

- Presentation to Technical committees was done during WCEC conferences (Mulheim, Germany) and ERNCIP conference (Ispra, Italy)...

Such actions, sometimes difficult to report easily (because no oral presentation or poster were done) were important (i) to feed the network of contacts and competences, (ii) to diffuse selected information to specific target identified (national authorities; SME; stakeholders; (iii) and to fulfil SecurEau obligation written in the DoW.

5 Participation in forum and organisation of workshop

5.1 World forum for security and fire prevention (Essen, Germany)

SecurEau was present at the "World forum for security and fire prevention" (Essen, Germany, Sept 2012) on the European Commission stand. It was the opportunity to have contacts with:

- the other European projects on the EC stand (8 projects),
- the EC colleagues
- industrial visitors, regarding technical SecurEau solutions exposed.

Many tools were presented at this occasion : sensors developed by VERI (Endetec) and IWW, coupon sentinels, models developed by UPORTO (slides were presented continuously on a 42" flat screen), Propella™ reactors...

Around 10 to 20 contacts or visits per day came in the SecurEau area, including visit of M. Ralf Jäger (Minister of Municipal Affairs of Nordrhein-Westfalen), Paul Weissenberg (Deputy Director-General of the Enterprise and Industry Directorate-General), Marco Malacarne (Head of Unit for "Security Research and Development" in Directorate-General for Enterprise and Industry of the European Commission)... A 15 minutes conference on SecurEau was also presented during this forum.

5.2 5th Water Contamination Emergencies: managing the threats

SecurEau has co-organised with the WCEC5 the "5th Water Contamination Emergencies: managing the threats". During this conference, SecurEau group has organised a specific workshop (restricted to people with security clearance). The organisation was mandatory (planned in the DoW), equivalent to the Deliverable 8.5. It was a very successful meeting: 150 participants from 26 countries. Around 25 participants were affiliated to Universities, around 25 to national or international health centres and around 100 to the industry. More than 50 people attended the session 8 "Security SecurEau session" devoted only to the presentation of classified results. See Deliverable 8.5 (on-line on the SecurEau web site) for more information regarding this workshop.

6 Masters – PhD thesis – Post doctoral

Five master thesis were already presented, one in 2010 (Cátia Sofia Feliz Oliveira, UPORTO, P), one in 2011 (Saara Hakala, STUK, FIN) and three in 2012 (Juha-Pekka Hieta, STUK, FIN; Ruben Lopes Casal Ribeiro and Vera Teixeira, both from UPORTO, P).

Seven PhD should be presented in 2013, 2014 and 2015 by Aaron Dye (SOTON, UK), Diogo Costa [08 May 2013], Dina Martins [28 June 2013], Mónica Freitas dos Santos [29 Nov 2013] and Raquel Gomes de Sousa (UPORTO, P), Kamila Gruskevica (RTU) and Hervé Ung (Irstea, F).

One post-doctoral formation occurred for Ms Erell Le Guen (CNRS, F).

So a total of 13 young researchers were supported throughout SecurEau budget (Annex 4), which is higher with the expectations (5 were planned in the DoW).

7 Website

The website (<http://www.secureau.eu>), registered with the .eu extension as requested by the European Commission is a tool used for many purposes:

- Dissemination of non-confidential information (scientific objectives, expected impacts, structure of the consortium, public deliverables, main events with SecurEau members participation),
- Document storage area devoted only for SecurEau members (login + password needed) for

scientific documents (e.g. deliverables not public, meeting reports, DoW, slides presented during the meetings...) as well as administrative documents (e.g. financial guide, audit and certification guidelines, project reporting guide, Grant agreement, consortium agreement...);

- Dissemination of scientific communications, conference and abstracts of publications. The scientific community is the main target of this action.

The latest update of the web site is January 2013 (addition of public deliverables).

8 Industrial and final products

Two main items has been developed or improved during SecurEau: sensors and mathematical models and are reported below.

8.1 Sensors

One sensor is already present on the market and sell to industrial groups (Kapta™ 3000 AC4).

A second one is under industrialization phase (Kapta™ 3000 OT3) and would be commercialised by 2014. The third one (Kapta™ 3000 RAD1) needs latest improvements before the beginning of the industrialization phase (Table 5).

Table 5: General information on water quality sensors (prototypes and commercial products)

Sensor	Manufacturer	Status	Price in € (*)	Application
Kapta™ 3000 AC4	Endetec (http://www.endetec.com/en/)	Commercial	3,500	Water
Kapta™ 3000 OT3	Endetec (http://www.endetec.com/en/)	Industrialization phase	Not defined	Water
Kapta™ 3000 RAD1	Endetec & CEA	Prototype	Not defined	Water

(*) Prices are approximate for 2012 and are subject to change. Prices are for the sensors only, and do not include the cost of installation and consumables.

Throughout SecurEau, two large networks in Europe (one rural and one urban) were equipped with 80 Kapta™ 3000 AC4 / OT3 sensors each and monitor continuously the water quality.

8.2 Softwares

Different mathematic model were developed in SecurEau and are available to users (scientific community, operators...) for free. These models concern the "Optimal location of water quality sensors and sentinel coupons" and the "Identification of the sources of contamination and the contaminated areas" (see Deliverable 8.4 for more information).

9 Press releases, interviews

Few actions related to press release or interview occurred within SecurEau project.

An article entitled " SecurEau : faire face à une attaque terroriste sur les réseaux d'eau potable " was published (<http://eureka.lorraine.eu/jahia/Jahia/cache/bypass/pid/1968?actu=20643>) on the French Lorraine web site.

Two video interviews were realised, one for the European Commission (2009) followed by a DVD freely distributed (Video illustration on the Security Research Theme) and one done by the Latvian National TV Chanel, dedicated in general to RTU research and in particular to SecurEau project.

SecurEau is also referenced (<http://ticri.inpl-nancy.fr/wicri-lor.fr/index.php/SECUREAU>) on the Wicri/Lorraine web site, which refers all research activity in which one partner (industrial, research organisation, SME...) came from Lorraine (France).

Last, a press release written by VERI entiteled "The RAID and Veolia ensure security for the water supply network " was published. It concerns an exceptional set of water quality surveillance and security measures deployed in Nice (France) for the Jeux de la Francophonie (Francophone Games) held from September 7 to 15, 2013.

10 Methodological guide for end-users

The Methodological guide for end users (Deliverable 8.4, public document available on the SecurEau

web site) aims to highlight, along with Deliverable 6.8 (*Decision tool Suitable for Assessment to Approval of Successful decontamination*), some of the methods selected in SecurEau for pre-crisis, crisis and post-crisis phases. Their main interests or novelty and their limits are also discussed in the document.

11 Classified results

Special attention has been paid to the secured dissemination of classified results.

First, preconisations given both by the European Commission and by the national security agencies were strictly respected: no classified information on the Web site, even on a restricted area; no diffusion of this information on the EC *Participant Portal*); hand delivery distribution of the classified documents, under a double-envelope packaging; ...

Specific meetings were organised to diffuse this classified information, already described above in the Chapter 4: Workshop, seminars, technical meetings and chapter 5: Forum participation and workshop organisation.

The four classified deliverables planned and described in the DoW were delivered to the European Commission.

12 Deliverables produced

The complete list of Deliverables produced is given in Annex 3, sorted by (i) public deliverables (available freely on the SecurEau web site), (ii) restricted and confidential deliverables, *i.e.* not public documents, not available, and (iii) classified deliverables.

Systematically these documents were reviewed by the steering committee and by the dual use advisory board for classified deliverables.

For 70 % of the documents, they were also revised by external experts during two scientific reviews (one held for 2009-2010 period and the second one for the 2011 period).

Annex 1 – List of partners involved in SecurEau

Beneficiary n°	Beneficiary name	Short name	Country
1(coordinator)	Université de Lorraine	UL	F
2	Centre National de la Recherche Scientifique	CNRS	F
3	Veolia Environment Recherche et Innovation	VERI	F
4	IWW Rheinisch-Westfälisches Institut für Wasserforschung gemeinnützige GmbH	IWW	G
5	University of Southampton	SOTON	UK
7	University of Porto	FEUP	P
8	Riga Technical University	RTU	LV
9	Institut national de recherche en sciences et technologies pour l'environnement et l'agriculture	Irstea	F
11	CEA Saclay	CEA	F
12	Affinity Water	AW	UK
14	STUK-Radiation and Nuclear Safety Authority	STUK	Fin
15	National Institute for Health and Welfare	THL	Fin

Annex 2 – List of workpackages

WP n°	WP title
1	Project management
2	Early warning systems for rapid detection of deliberated intrusion
3	Off-line rapid detection methods in water and biofilms/deposits
4	Modelling contaminant accumulation
5	Decontamination procedures of water distribution systems
6	Controlling the efficacy of decontamination of deposits
7	Case studies and data support analysis
8	Dissemination, exploitation and, transfer

Annex 3 – List of deliverables

Public deliverables on the SecurEau Web site

- Deliverable 2.1.1 "State of the art report on chemical sensors for early warning systems" [corrected version]
- Deliverable 4.1 " Short report on existing software with confirmed or potential application in modelling contamination in drinking water networks " [corrected version]
- Deliverable 5.1 "State-of-art report about decontamination of deliberately contaminated drinking water networks with CBRN agents and disposal of decontamination wastes" [corrected version]
- Deliverable 5.3.3 "Advancement in application and advanced oxidation methods for cleaning of decontamination waste water"
- Deliverable 6.1 "Protocol to establish a laboratory system, run with drinking water and additives and generating defined deposits"
- Deliverable 8.4 " Methodological guide for end-user, final version"
- Deliverable 8.5 " European Workshop organised in 2011 – 2012"

Restricted or confidential deliverables

- Deliverable 1.2.1 "Annual report"
- Deliverable 1.2.2 "Annual report"
- Deliverable 1.2.3 "Annual report"
- Deliverable 1.2.4 "Final report"
- Deliverable 2.1.2 "Prototypes of chemical sensors adapted for EWS (low maintenance and calibration requirements, sensitivity, possibility of miniaturisation and large scale production) including specifications (sensitivity, detection limit etc...)"
- Deliverable 2.1.3 "Prototype for radioactivity sensor and report on specifications"
- Deliverable 2.1.5 "Report on application studies on lab reactors"
- Deliverable 2.2.1 "Report on the definition of parameters for optimisation: elaboration of scenario and definition of objective functions"
- Deliverable 2.2.2 "Report on modelisation of the optimal location of sensors for the 2 selected sites"
- Deliverable 3.1 "Report on Off-line rapid analytical procedures for CBRN in water"
- Deliverable 3.2 "Off-line sensitive, specific procedures for pathogens in water"
- Deliverable 3.3 "Off-line sensitive, specific procedures for pathogens in biofilms/deposits"
- Deliverable 3.4 "Off-line rapid analytical procedures for chemicals in water"
- Deliverable 3.5 "Off-line rapid analytical procedures for chemicals in biofilms/deposits"
- Deliverable 3.6 "Off-line sensitive, specific procedures for radionuclides in water"
- Deliverable 3.7 "Off-line sensitive, specific procedures for radionuclides in biofilms/deposits"
- Deliverable 4.4 "Improved software to simulate contaminant transport along the drinking water networks"
- Deliverable 4.5 "Software tools to identify the location of the contamination source"
- Deliverable 5.2 "Potential application of cavitation for decontamination of drinking water system from corrosion products and bacterial agents"
- Deliverable 5.3.1 "Chemical and air-water scouring methods for decontamination of drinking water system from CBRN agents"
- Deliverable 5.3.2 "Novel release agent to aid pathogen disinfection in biofilms"
- Deliverable 5.5 "Modern methods for treatment of water distribution systems decontamination wastes"
- Deliverable 6.2 "Robust coupon device for use in drinking water systems"
- Deliverable 6.3 "Simplified functional version of the SpectroQuad and a robust version of the MSS and adjust the sensors to the system"
- Deliverable 6.4 "Protocol for successful application of devices in laboratory systems"
- Deliverable 6.5 "Concept for positioning the coupon systems and sensors at representative locations in the system"
- Deliverable 6.6 "Report on implementation of the coupon systems and sensors into an experimental loop system, generation of deposits and challenge with contaminants, optimization and verification of decontamination efficacy"
- Deliverable 6.7 "Report on verification of disinfection of deposits and biofilms by fluorescence analysis"
- Deliverable 6.8 "Decision tool suitable to assess approval of successful decontamination"
- Deliverable 7.2 "Report on risk assessment of selected contaminants before and after decontamination"
- Deliverable 8.1 "Creation of a web site"
- Deliverable 8.2.1 "Written communications (scientific publications, etc.)"
- Deliverable 8.2.2 "Oral presentations in symposia and conferences (national and international)"
- Deliverable 8.3.1 "Preliminary methodological guide for end-user"
- Deliverable 8.3.2 "Dissemination strategic plan"

Classified deliverables

- Deliverable 4.2
- Deliverable 7.1.1
- Deliverable 7.1.2
- Deliverable 7.3

Annex 4 List of communications (peer reviewed articles, oral communication)

Peer Reviewed Articles:

Authors	Date	Title	Journal	Reference
M. H. Phe, M. Hajj Chehade, H. Guilloteau, C. Merlin, and J. C. Block	2009	Assessment of damage to nucleic acids and repair machinery in <i>Salmonella typhimurium</i> exposed to chlorine	International Journal of Microbiology	doi:10.1155/2009/201868
M. Propato, F. Sarrazy and M. Tryby	2010	Linear algebra and minimum relative entropy to investigate contamination events in drinking water systems	ASCE Journal of Water Resources Planning and Management	July/August 2010, 136(4), 483-492
K. Tihomirova, M. Gavare, L. Mežule, M. Grube and T. Juhna	2011	Application of FT-IR for characterization of biomass isolated from surface and drinking water with high concentration of natural organic matter	Proceedings The 8th International Conference, May 19–20, 2011, Vilnius, Lithuania Environmental Engineering, ISBN 978-9955-28-828-2 (2 Vol) - ISBN 978-9955-28-827-5 (3 Vol)	672-678
C.W. Keevil and S.A. Wilks	2013	Rapid confirmation of microbiological alerts using off-line molecular methods	In Water Contamination Emergencies IV: Monitoring, Understanding, Acting, ed. K.C. Thompson and U. Borchers. Cambridge: Royal Society of Chemistry	10.1039/9781849733199-00048 pp 48-58
M. S. F. Santos, A. Alves, L. M. Madeira	2011	Paraquat Removal from Water by Oxidation with Fenton's Reagent	Chemical Engineering Journal	10.1016/j.cej.2011.09.106 Vol. 175, 2011, 279–290
Sergejs Nazarovs, Talis Juhna, Andrey A. Kolyshkin	2011	Experimental Detection of an Unauthorized Connection to a Pipeline	Scientific Journal of Riga Technical University	50, 26-29
A. Kauppinen, J. Ikonen, A. Pursiainen, T. Pitkänen and I.T. Miettinen	2012	Removal of adenovirus and <i>Escherichia coli</i> from contaminated drinking water pipeline system utilizing PAA and chlorine disinfection	Journal of Water and Health	doi: 10.2166/wh.2012.00310(3), 406-418
Raquel Sousa, José Luís Moreira, Luis M. Madeira, Arminda Alves	submitted	Dispersive liquid–liquid microextraction for simultaneous determination of carbamate and organophosphorus pesticides in water	International Journal of Environmental Analytical Chemistry	
S. Nazarovs, S. Dejus and T. Juhna	2012	Modelling water quality in drinking water distribution networks from real-time direction data	Drink. Water Eng. Sci, 2012	doi:10.5194/dwes-5-39-2012 Vol. 5, 39-45
Cátia Oliveira, Mónica S. F. Santos, F.J. Maldonado-Hódar, Gabriela Schaule, Arminda Alves, Luis M. Madeira	2012	Use of pipe deposits from water networks as catalysts in paraquat peroxidation	Chemical Engineering Journal	10.1016/j.cej.2012.09.001 210, 339-349.
Diogo Costa, Luis Melo and Fernando Martins	2013	Localization of Contamination Sources in Drinking Water Distribution Systems: A Method based on Successive Positive Readings of Sensors	Water Resources Management	10.1007/s11269-013-0431-z 27(13) pp4623-4635
E. Le Guen and J.-C. Block	2013	High chlorination effects on drinking water biofilms and deposits on plastic plumbing materials		10.1039/9781849737890-00314 pp 314-324
M. Strathmann, O. Piller, H.-C. Flemming	2013	Monitoring of pipe wall deposits in drinking water distribution system		10.1039/9781849737890-00116 pp116-131
P.S. Räsänen, J. Ikonen, A.-M. Hokajärvi and I.T. Miettinen	2013	The molecular detection for the viability of <i>Yersinia</i> cells during shock chlorination – a pilot scale study	In: Water Contamination Emergencies: managing the threats. Proceedings of the WCEC5 conference in Muhleim and der Rhur, Nov 2012, editors U. Borchers, J. Gray, K C. Thompson, RSC Publishing,	10.1039/9781849737890-00276 pp 276-279
S. A. Wilks, M. S. Gião, C. W. Keevil	2013	Comparison of methods for the detection of culturable and VBNC <i>Escherichia Coli</i> O157:H7 in complex drinking water biofilms		10.1039/9781849737890-00243 pp 243-249
S. Galandrin-Castagnet, V. Raymond, M. Maurel, A. Monsorez and C. Lemoine	2013	Early warning systems for rapid detection of deliberate intrusion in drinking water systems		10.1039/9781849737890-00100 pp 100-115
F. Gosselin, L.M. Madeira, T. Juhna and	2013	Heterogeneous Fenton's Reaction: a promising way for drinking water		10.1039/9781849

J. C. Block.		biofilm disinfection.		737890-00325 pp 325-329
F. Gosselin, P. Pollmann, E. Colon and J.C. Block	2013	Particle counting for early detection of contaminants in drinking water		10.1039/9781849 737890-00340 pp 340-345
G. Schaule, D. Christen, D. Nottarp Heim, C. Sorge and H.G. Hammann	2013	Restoration of Drinking Water Distribution Systems by Removing Contaminated Biofilms with Different Pipe Cleaning Methods		10.1039/9781849 737890-00280 pp 280-286
Warwick P.E. & Croudace I.W.	2013	Rapid radionuclide identification and quantification in contaminated drinking waters and pipeline deposits	Analytical Chemistry	10.1021/ac40113 1t 85 , 8166 - 8172.
Martin Strathmann, Klaus-Henrik Mittenzwey, Gert Sinn, Wassilios Papadakis and Hans-Curt Flemming	2013	Simultaneous monitoring of biofilm growth, microbial activity and inorganic deposits on surfaces with an optical deposit sensor <i>in-situ</i> , on-line, in real time and non-destructively	Biofouling	10.1080/0892701 4.2013.791287 pp 1-11
Mónica S. F. Santos, José Luís Moreira , Luís Miguel Madeira, Arminda Alves	submitted	Nanogram per liter level determination of PBDEs in water by a simple DLLME- GC-(EI)MS method	Journal of Separation Science	
R.Sousa, V. Homem, J.L. Moreira, L.M. Madeira, A. Alves	2013	Optimisation and application of dispersive liquid-liquid microextraction for simultaneous determination of carbamates and organophosphorus pesticides in water	Analytical Methods	10.1039/C3AY260 32A. 5 , pp 2736-2745
S. Fass and J.-C. Block	In press	SecurEau : security and decontamination of a drinking distribution network	Techniques, Sciences, Méthodes	
Mónica S. F. Santos, Gabriela Schaule, Arminda Alves, Luís Miguel Madeira	2013	Adsorption of paraquat herbicide over inorganic deposits from drinking water networks	Chemical Engineering Journal	10.1016/j.cej.201 3.06.008 Vol 229, 324-333
Florence Gosselin, Luis Miguel Madeira; Talis Juhna and Jean-Claude Block.	2013	Drinking water and biofilm disinfection by Fenton-like reaction.	Water Research	10.1016/j.watres. 2013.06.036 ---- 47 pp5631-5638

Non refereed literature:

Authors / Editors	Date	Title	Event	Reference	Type
S. Fass and J.-C. Block	2009	SecuEau: a European demonstration project for restoring distribution systems after deliberate CBRN attack	SRC'09 conference	Stockholm, 29-30 September 2009	Conference
M. Propato	2010	Sécurité et décontamination des systèmes de distribution d'eau potable suite à une contamination intentionnelle	Workshop Interdisciplinaire sur la Sécurité Globale (WISG 2010)	Troyes, F, 26-27 January 2010	Conference
J.-C. Block and S. Fass	2010	Security, monitoring and decontamination of drinking water distribution systems	Water Framework Directive (WFD), Conference on Integrated River Basin Management under the Water Framework Directive	Lille, F, 26-28 April 2010	Conference
D. Nottarp,, N. Pilz and G. Schaule	2010	Development and validation of off-line analytical methods used for detection of radionuclides in deposits occurring in water distribution networks	Wasser 2010 Annual meeting of the Water Chemistry Society	Bayreuth, 10 - 12 May 2010, Germany	Conference
S. Fass and J.-C. Block	2010	Sensors and monitoring, FP7: SecurEau	Stakeholders event of the WssTP	Brussels, 1 st June 2010	Conference
Block J.-C.	2010	Biofilms en réseaux d'eaux potables	Services publics locaux de l'environnement : réussir la mutation des metiers, 89e Congrès ASTEE	Strasbourg, F, 1-3 June 2010	Conference
K. Gruskevica and T. Juhna	2010	Separation of bacteria from loose deposits of drinking water distribution systems	Ecwatech, International water forum	Moscow, 2-4 June 2010	Conference
P. Vesterbacka and R. Pöllänen	2010	Rapid off-line detection method for Alpha-particle emitting radionuclides in water samples	Third European IRPA congress	Helsinki 14-18 June 2010	Conference
J. Ekberg, T. Turtiainen and M. Muikku	2010	Adsorption of ⁹⁰ Sr on biofilms and materials found in water distribution systems	Third European IRPA congress	Helsinki 14-18 June 2010	Conference
Cátia Sofia Feliz Oliveira	2010	Chlorofenylphos-containing water treatment with Fenton's reagent oxidation	Master's thesis for the degree of Master of Chemical Engineering	FEUP, University of Porto, 24 July 2010	Master's thesis
G. Schaule, C. Kassen and S. Schulte	2010	Verification of disinfection of biofilms by fluorescence analysis	Biofilms 4 International Conference	Winchester, UK, 1st – 3rd September 2010	Conference
M. S. F. Santos, L. M. Madeira, A. Alves	2010	Interactions of micropollutants with water distribution systems materials – Paraquat as a case study	6th European Conference on Pesticides and Related Organic Micropollutants in the Environment and the 12th Symposium on Chemistry and Fate of Modern Pesticides	Matera (Italy) September 7th -10th, 2010	Poster
R. Sousa, J. L. Moreira, L. M. Madeira, A. Alves	2010	Comparative study of extraction methodologies for carbamate and organophosphorous pesticides in water at ppb levels	6th European Conference on Pesticides and Related Organic Micropollutants in the Environment and the 12th Symposium on Chemistry and Fate of Modern Pesticides	Matera (Italy) September 7th -10th, 2010	Poster
M.H. Phe, H. Guilloteau, M. Dossot, E. Le Guen and J.-C. Block	2010	Cytométrie en flux pour le contrôle rapide de la désinfection par le chlore : application à la filière eau potable	Journées Information Eau, Poitiers	Poitiers 28-30 September 2010	Conference
T. Juhna	2010	Decontamination procedures of water distribution systems	Water Contamination Emergencies (WCEC4)	Mulheim, G, 11-13 Oct 2010	Conference
A. Monsorez	2010	On-line chemical sensors for an early warning system	Water Contamination Emergencies (WCEC4)	Mulheim, G, 11-13 Oct 2010	Conference
I. Miettinen	2010	A Scandinavian emergency for drinking water network contamination: the Nokia case study	Water Contamination Emergencies (WCEC4)	Mulheim, G, 11-13 Oct 2010	Conference
L. Melo	2010	Modelling contaminant accumulation	Water Contamination Emergencies (WCEC4)	Mulheim, G, 11-13 Oct 2010	Conference
B. Keevil	2010	Rapid confirmation of microbiological alerts using off-line molecular methods	Water Contamination Emergencies (WCEC4)	Mulheim, G, 11-13 Oct 2010	Conference
H.-C. Flemming	2010	Monitoring of biofilms and other deposits	Water Contamination Emergencies (WCEC4)	Mulheim, G, 11-13 Oct 2010	Conference

C. Oliveira, M. Santos, A. Alves, M. Madeira	2010	Degradation of chlorfenvinphos in contaminated drinking water systems by Fenton's oxidation	Water Contamination Emergencies (WCEC4)	Mulheim, G, 11-13 Oct 2010	Poster
M. Santos, C. Oliveira, R. Sousa, A. Alves, M. Madeira	2010	Pesticides Decontamination of Drinking Water Networks using Fenton and photo-Fenton Advanced Oxidation Processes	Water Contamination Emergencies (WCEC4)	Mulheim, G, 11-13 Oct 2010	Poster
E. Le Guen, Quilès F., Grausem J., and Block J.-C.	2010	Rapid assessment of the effect of chlorination on drinking water biofilm by measuring fluorescence of Sybr-II stained surfaces	Water Contamination Emergencies (WCEC4)	Mulheim, G, 11-13 Oct 2010	Poster
P. Rantakokko, I. Miettinen, A.-M. Hokajärvi and H. Kiviranta	2010	Removal of mercury from biofilms after deliberate contamination of drinking water	Water Contamination Emergencies (WCEC4)	Mulheim, G, 11-13 Oct 2010	Poster
M. Strathmann, D. PütZ, D. Moschnitschka, K.-H. Mittenzwey, H.-C. Flemming	2010	Online sensor for monitoring of surface deposits in drinking water system	Water Contamination Emergencies (WCEC4)	Mulheim, G, 11-13 Oct 2010	Poster
M. Strathmann, D. PütZ, D. Moschnitschka, H.-C. Flemming	2010	Coupon monitoring devices for monitoring of surface deposits in drinking water system	Water Contamination Emergencies (WCEC4)	Mulheim, G, 11-13 Oct 2010	Poster
Sandra A. Wilks, C. William Keevil	2010	Improved methods show survival of E. coli O157:H7 in potable water biofilms following treatment with high chlorine concentrations	Water Contamination Emergencies (WCEC4)	Mulheim, G, 11-13 Oct 2010	Poster
Grobe, S., Schaule, G., Flemming, H.-C., Wingender, J.	2010	Biofilm-mediated Pseudomonas aeruginosa contamination of a drinking water distribution system	Water Contamination Emergencies (WCEC4)	Mulheim, G, 11-13 Oct 2010	Poster
M. S. F. Santos, A. Alves and L. M. Madeira	2010	Paraquat degradation by Fenton's reagent: parametric and kinetic analysis	16th International Conference on Advanced Oxidation Technologies for Treatment of Water, Air and Soil	San Diego, California, 15-18 November, USA	Conference
Block J.-C.	2010	Security and decontamination of drinking water distribution systems following a deliberate contamination	Journées Ecotechnologies 2010	Nancy, F, 21 et 22 octobre 2010	Conference
M. Strathmann, D. PütZ, D. Moschnitschka, K.-H. Mittenzwey, G. Sinn, H.-C. Flemming	2010	Online sensor for monitoring of surface deposits in drinking water system	International Workshop "Online sensors for fouling monitoring"	29.11.2010 - 30.11.2010, Frankfurt am Main (G)	Poster
Hakala Saara	2011	Chemical decontamination of polonium-210 and americium-241 from pipe materials used in water distribution system	Master's thesis for the degree of Master of Science in Technology	Aalto University, School of Science and Technology	Master's thesis
Sylvain Fass	2011	Sécurité et décontamination des systèmes de distribution d'eau potable suite à une contamination intentionnelle	Estelle Sturtzer, service du Haut fonctionnaire de défense et de sécurité du Ministère de l'écologie	Nancy, F, 14 avril 2011	Workshop
Sylvain Fass	2011	Sécurité et décontamination des systèmes de distribution d'eau potable suite à une contamination intentionnelle	COPIL PERS + SGDSN	Paris la Défense, France, 24 juin 2011	Workshop
Turtiainen T., Hakala S., Vesterbacka P. & Muikku M.	2011	SecurEau—Security and decontamination of drinking water distribution systems following a deliberate contamination	NSFS Conference	Reykjavík, Iceland, August 22nd – 25th 2011	Conference
Turtiainen T., Hakala S., Hieta J-P., Ekberg J., Vesterbacka P. & Muikku M.	2011	Restoration of drinking water distribution systems following a deliberate contamination by radionuclides	NSFS Conference	Reykjavík, Iceland, August 22nd – 25th 2011	Conference
Diogo Costa, Fernando Martins and Luis Melo	2011	Localization of Contamination Sources in a Drinking Water Distribution System: A Method Based on the Residence Time of Water in Pipes	Chempor 2011: The 11th International Chemical and Biological Engineering Conference	Caparica, Portugal, September 5th and 7th, 2011	Conference
S. Nazarovs	2011	Modeling water quality in drinking water distribution networks.	Baltic Water Research conference,	14-Oct-2011, Riga Technical University, Riga, Latvia	Seminar
Turtiainen T., Hakala S., Vesterbacka P. & Muikku M.	2012	SecurEau—Security and decontamination of drinking water distribution systems following a deliberate contamination	8th symposium on CBRNE threats: How does society cope?	11 - 14 June, 2012, Turku, Finland	Conference
Sylvain Fass	2012	Sécurité et décontamination des systèmes de distribution d'eau potable suite à une contamination intentionnelle	Journée de travail "protection des réseaux de distribution et de consommation de l'eau"	Ministère de la Santé et du Développement Durable, Paris, F, 26 juin 2012	Workshop
S. A. Wilks, M. S. Gião, and C. W. Keevil	2012	Comparison of Methods for the Detection of Culturable and VBNC <i>E. coli</i> O157:H7 in Complex Drinking Water	ASM, 112th General Meeting	San Francisco, California, June 16-19, 2012	Poster

		Biofilms			
Ruben Lopes Casal Ribeiro	2012	Detection of byproducts resulting from degradation of pesticide Paraquat by chemical oxidation	Master's thesis for the degree of Master of Chemical Engineering	FEUP, University of Porto, 20 July 2012	Master's thesis
Cátia Oliveira, Mónica S.F.Santos, F.J.Maldonado-Hódar, Gabriela Schaule, Arminda Alves and, Luís M.Madeira.	2012	Use of Water Networks Pipe Deposits as Catalysts in Fenton-like Oxidation of Paraquat Pesticide	7th edition of the International Conference on Environmental Catalysis.	Lyon – France, 2 - 6 September 2012	Conference
Juha-Pekka Hieta	2012	Adsorption of Po-210, Am-241 & Sr-90 on mineral deposits formed in drinking water distribution networks	Master's thesis for the degree of Master of Science in Technology	Aalto University, School of Chemical Technology	Master's thesis
	2012	SecurEau	The World Forum for security and fire protection	Essen, Germany, 25-28 September 2012	Forum
Sylvain Fass	2012	SecurEau—Security and decontamination of drinking water distribution systems following a deliberate contamination	The World Forum for security and fire protection	Essen, Germany, 27 September 2012	Conference
Räsänen, P.S., Hokajärvi, A.-M., and Miettinen, I.T	2012	The detection of viable <i>Yersinia</i> bacteria cells from water and biofilms samples with PMA-PCR and DVC-FISH applications	Annual seminar of SYTYKE Doctoral programme in Environmental Health	Kuopio, 1-2 October 2010	Poster
Sylvain Fass	2012	La sécurité et la décontamination des réseaux d'eau potable à la suite d'une contamination délibérée, projet SECUREAU	Forum annuel de HYDREOS	Metz, France, 5 octobre 2012	Conference
Cyrille Lemoine	2012	SecurEau - Le concept de « Smart Water Grid » appliqué à la sécurité des réseaux d'eau potable	Journées d'Automne ASTEE	Colombes, France, 9-10 octobre 2012	Conférence
Vera Teixeira	2012	Degradation of PBDEs present in water by oxidation with Fenton's reagent	Master's thesis for the degree of Master of Environmental Engineering	FEUP, University of Porto, 11 October 2012	Master's thesis
Gosselin F., Madeira L.M., Juhna T., Block J.C	2012	Heterogeneous Fenton's reaction: a promising way for drinking water biofilm disinfection	5th Water Contamination Emergencies (WCEC5): managing the threats	Mulheim, G, 19-21 Nov 2012	Poster
Gosselin F., Pollmann P., Colon E., Block J.C	2012	Particle counting for early detection of contaminant intrusion in drinking water distribution systems	5th Water Contamination Emergencies (WCEC5): managing the threats	Mulheim, G, 19-21 Nov 2012	Poster
Le Guen E. and Block J.C.	2012	Shock chlorination in emergency situations for cleaning drinking water pipes.	5th Water Contamination Emergencies (WCEC5): managing the threats	Mulheim, G, 19-21 Nov 2012	Poster
G Schaule, Thomas Christen, H. Hammann, Christian Sorge	2012	Remediation of drinking water distribution systems by removing contaminated biofilms with new cleaning regimes	5th Water Contamination Emergencies (WCEC5): managing the threats	Mulheim, G, 19-21 Nov 2012	Poster
S. A. Wilks, M. S. Gião, and C. W. Keevil	2012	Comparison of Methods for the Detection of Culturable and VBNC <i>E. coli</i> O157:H7 in Complex Drinking Water Biofilms	5th Water Contamination Emergencies (WCEC5): managing the threats	Mulheim, G, 19-21 Nov 2012	Poster
Räsänen, P.S., Ikonen, J., Hokajärvi, A.-M., and Miettinen, I.T	2012	The molecular detection for the viability of <i>Yersinia</i> cells during shock chlorination – a pilot scale study	5th Water Contamination Emergencies (WCEC5): managing the threats	Mulheim, G, 19-21 Nov 2012	Poster
Croudace Ian	2012	Rapid screening of drinking waters and pipeline deposits for radionuclide decontamination	5th Water Contamination Emergencies (WCEC5): managing the threats	Mulheim, G, 19-21 Nov 2012	Poster
Aaron Dye, S.A.Wilks I.W.Croudace and K.W.Keevil	2012	Nitric Oxide – A potential novel release agent to aid disinfection in drinking water network biofilms	5th Water Contamination Emergencies (WCEC5): managing the threats	Mulheim, G, 19-21 Nov 2012	Poster
Lemoine Cyrille	2012	Smart sensors network for water quality monitoring - a way to re-invent water supply management?	5th Water Contamination Emergencies (WCEC5): managing the threats	Mulheim, G, 19-21 Nov 2012	Conference
Sandrine Galandrin	2012	Early warning systems for rapid detection of deliberate intrusion	5th Water Contamination Emergencies (WCEC5): managing the threats	Mulheim, G, 19-21 Nov 2012	Conference
Martin Strathmann	2012	Monitoring of pipe wall deposits in drinking water distribution systems	5th Water Contamination Emergencies (WCEC5): managing the threats	Mulheim, G, 19-21 Nov 2012	Conference
Talis Juhna	2012	Decontamination of drinking water systems after deliberate attack: developments and challenges	5th Water Contamination Emergencies (WCEC5): managing the threats	Mulheim, G, 19-21 Nov 2012	Conference
Hans-Curt Fleming, Talis Juhna, Luis Melo, Jean-Claude Block	2012	The significance of the internal surface of mains pipes in drinking water distribution networks: a SecurEau perspective	5th Water Contamination Emergencies (WCEC5): managing the threats – Session 8 "SecurEau Security Workshop"	Mulheim, G, 19-21 Nov 2012	Conference
Diogo Costa, Luis Melo, Olivier Pillier, Fernando Martins, Talis Juhna	2012	Contamination source and spread issues	5th Water Contamination Emergencies (WCEC5): managing the threats – Session	Mulheim, G, 19-21 Nov 2012	Conference

			8 "SecurEau Security Workshop"		
Talis Juhna, Gabriela Schaule, Ilkka Miettinen, Luis M Madeira, Tuukka Turtiainen	2012	Limitations of remediation techniques for decontaminating drinking water networks	5th Water Contamination Emergencies (WCEC5): managing the threats – Session 8 "SecurEau Security Workshop"	Mulheim, G, 19-21 Nov 2012	Conference
Cyrille Lemoine	2012	How to balance CAPEX/OPEX against safety, costs and time constraints	5th Water Contamination Emergencies (WCEC5): managing the threats – Session 8 "SecurEau Security Workshop"	Mulheim, G, 19-21 Nov 2012	Conference
Bill Keevil, Jean-Claude Block, Fanny Buvens, Arnaud David, Sylvain Fass, Hans-Curt Flemming, Talis Juhna, Luis Melo, Ilkka Miettinen, Albin Monsorez, Olivier Piller, Tuukka Turtiainen	2012	Final summing up	5th Water Contamination Emergencies (WCEC5): managing the threats – Session 8 "SecurEau Security Workshop"	Mulheim, G, 19-21 Nov 2012	Conference
Warwick P.E. & Croudace I.W.	2012	Rapid screening of drinking waters and pipeline deposits for radionuclide contamination using LSC combined with intrinsic spectral parameter corrections		ITU (Transuranium Institute) Karlsruhe, Germany, 21 Nov 2012	Technical seminar
Sylvain Fass	2012	SecurEau : faire face à une attaque terroriste sur les réseaux d'eau potable	http://eureka.lorraine.eu/jahia/Jahia/cache/bypass/pid/1968?actu=20643	Web site http://eureka.lorraine.eu	Interview
Tarja K. Ikäheimonen	2012	STUK's role in emergency preparedness	Research and Environmental Surveillance, Dissemination seminar	STUK, Helsinki, Finland, 3 Dec 2012	Workshop
Tuukka Turtiainen	2012	CBRN threats and SecurEau Chemical threats in DW network	Research and Environmental Surveillance, Dissemination seminar	STUK, Helsinki, Finland, 3 Dec 2012	Workshop
Panu Rantakokko	2012	Chemical threats in DW network	Research and Environmental Surveillance, Dissemination seminar	STUK, Helsinki, Finland, 3 Dec 2012	Workshop
Ilkka Miettinen	2012	Microbial threats in DW network – fate and monitoring	Research and Environmental Surveillance, Dissemination seminar	STUK, Helsinki, Finland, 3 Dec 2012	Workshop
Tuukka Turtiainen	2012	Measurement of radionuclides, behaviour in the DW network	Research and Environmental Surveillance, Dissemination seminar	STUK, Helsinki, Finland, 3 Dec 2012	Workshop
Hannu Komulainen	2012	Risk assessment	Research and Environmental Surveillance, Dissemination seminar	STUK, Helsinki, Finland, 3 Dec 2012	Workshop
Talis Juhna	2012	On-line monitoring, modelling of contamination and decontamination	Research and Environmental Surveillance, Dissemination seminar	STUK, Helsinki, Finland, 3 Dec 2012	Workshop
Block J.-C.	2012	Drinking water biofilms	Biofilms 5 - 5th International Conference	Paris, France, 10-12 december 2012	Conference
Keevil B. and S. Wilks	2012	An alternative view of the 3D heterogeneous mosaic structure of mono and polymicrobial species biofilms	Biofilms 5 - 5th International Conference	Paris, France, 10-12 december 2012	Conference
Sylvain Fass	2012	SecurEau—Security and decontamination of drinking water distribution systems following a deliberate contamination	1st ERNCIP Conference, "good practices, better solutions"	Ispra, Italy, 12-13 December 2012	Conference
Diogo Costa	2013	Localization of contamination sources in drinking water distribution systems: Application of knowledge-based expert systems and artificial neural networks	Doctoral Program in Chemical and Biological Engineering	Porto, P, submitted by 08 May 2013	PhD defense
Dina Martins	2013	Interaction of chemical contaminants with suspended particles and attached inorganic deposits in drinking water systems	Doctoral Program in Chemical and Biological Engineering	Porto, P, submitted by 28 June 2013	PhD defense
Aaron Dye	2013			Southampton, UK, submission planned by end of 2013	PhD defense
Olivier Piller, Denis Gilbert, Luis Melo, Martin Strathmann, Hans-Curt Flemming	2013	A new concept for placing coupons and sensors for decontamination verification	World Environmental & Water Resources Congress, EWRI 2013 conference	Cincinnati, USA, 19-23 May	Oral conference
Hervé Ung, Olivier Piller, Denis Gilbert, Iraj Mortazavi	2013	Inverse transport method for determination of potential contamination sources with a stochastic framework	World Environmental & Water Resources Congress, EWRI 2013 conference	Cincinnati, USA, 19-23 May	Oral conference
S. Fass	2013	SecurEau presentation	ERNCIP TA Water Meeting	Ispra, Italy, 23rd & 24th May 2013	Workshop
S. Fass and J.-C. Block	2013	SecurEau : security and decontamination of a drinking distribution network	92eme Congrès de l'ASTEE "au service de villes durables et responsables"	Nantes, F, 4 au 7 juin 2013	Oral conference

I. Miettinen	2013		FISH Workshop (Fundamentals and Applications)	Porto, Portugal, 18 July 2013	Poster
S. Fass	2013	SecurEau presentation	ERNICIP TA Water Meeting	Ispra, Italy, 4th&5th October 2013	Workshop
Mónica Freitas dos Santos	2013	Chemical safety of drinking water networks	Doctoral Program in Chemical and Biological Engineering	Porto, P, submission planned by 29 November 2013	PhD running
Kamila Gruskevica	2013-2014	Drinking water distribution system decontamination after deliberate contamination with Bacillus spores		Riga, LV, submission planned by end of 2013 – beginning of 2014	PhD running
Raquel Gomes de Sousa	2014	Deliberate chemical contamination of water supply systems - detection and treatment	Doctoral Program in Chemical and Biological Engineering	Porto, P, submission planned in 2014	PhD running