Our children’s future is being shaped now.

Our decisions will have social, economic and environmental consequences on their future. It may be possible to correct the first two kinds of effects, but it’s much harder to reverse those concerning the environment. For obvious reasons of consistency, cohesion and non-discrimination, the 28 member states handed over this crucial competence to the European Union.

Our conference, with its program offering many diverse, shared experiences, aims to bring together ASTEE’s French experts and their European colleagues to review the progress that has been made, and to discuss obstacles and perspectives.

For the first time in ten years, ASTEE has decided to cross borders for this year’s conference. We chose Wallonia for its central position in Europe, at the heart of the international river basin of the Meuse. The city of Liège will welcome you with the warm and festive spirit its inhabitants are known for.

Jean-Michel Compère, Chairman of the conference program committee and Christophe Perrod, ASTEE Chairman

The official application of ASTEE events

astee.eventdrive.com
Association for environment professionals, founded in 1905 and recognized as being in the public interest.

3 800 members  30 000 contacts  +2 000 people attending our events every year  45 working groups  400 volunteers  13 local chapters

**ASTEE Conference**

If you are:

- a locally elected official
- an engineer or a technician working for local authorities
- an environment professional
- a member of the research community
- a student or a young professional...

...come and catch up, exchange views, share and capitalize on this event!

**The City of Liège**

The City of Liège is aware of how important it is to follow a logic of sustainability, of energy efficiency and climate resilience in planning its territorial development, that’s why it has made this a priority of its City Project.

In late 2015, Liège signed the Covenant of Mayors on energy and climate, which aims to draw up and implement an integrated action plan for 2030 for emission reduction and adaptation to climate change.

Water is an integral part of this approach, being so present in forecast scenarios of extended droughts and intense rainfall.

At the request of the Walloon region, Liège is a pilot city for the development of a tool to help formulate plans to reduce the vulnerability of local territories; these plans involve major actors such as inter-municipal water treatment agencies.

At the European level, Liège takes part in two INTERREG projects whose goal is to ensure “energy and climate” issues are taken into account at the level of neighborhoods and condominiums.

At the international level, the city has partnered with the City of Lubumbashi (DR Congo) as part of the new Covenant of Mayors for Sub-Saharan Africa and, along with the AIMF (International Association of French-speaking Mayors), participates in the support for African cities involved in this process.

The City of Liège, which thus shares this desire to “work together to foster environmental transitions” is particularly proud to host on its territory the ASTEE 96th Annual Conference.
The following program committee selected the papers and organized the sessions for this conference:

**Président**:
Jean-Michel Compère, Aquawal - CILE

**Membres**:
Jean Baron, Eau de Paris, Chairman of the Corrosion and Network Protection Commission*

Séverine Dinghem, Veolia Eau France, Chairwoman of the Drinking Water Commission*

Philippe Dupont, French Agency for Biodiversity, Chairman of the Water Resources and Aquatic Environments Commission*

Christine Gandouin, Suez Environnement Consulting, Chairwoman of the Water Sanitation Commission*

Pierre Hirtzberger, Syctom, Vice-Chairman*

Philippe Marest, Nantes Métropole, Vice-Chairman*

Carine Morin-Batut, Executive Director*

Gérard Payen, Vice-Chairman*

Bruno Pellerin, Rhin-Meuse Water Agency, Chairman of the Grand Est local chapter*

Christophe Perrod, Sédif, Chairman*

Dominique Pin, C2P

Marie-Noëlle Pons, CNRS-University of Lorraine, Chairwoman of the Research Committee*

Pierre-Alain Roche, MEEM-CGEDD, Honorary Chairman*

Frédéric Roux, Syctom, Chairman of the Waste Treatment Commission*

Pascal Soukatchoff, Saint Gobain PAM, Treasurer*

Jacques Tcheng, FNCCR, Secretary*

Jean Philippe Torterotot, MEEM, Vice-Chairman*

* from ASTEE
Our official media partner:  
TSM - Techniques Sciences Méthodes

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- Sustainable spatial planning
- Sanitation
- Drinking water
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- Air quality
- Water resources and aquatic environments

Read back issues of TSM (1906-2006) for free on gallica.bnf.fr

TSM also offers:
- Reporting
- Studies
- State of the art
- Interviews of experts in each domain
- News from our local chapters
13:30-14:00: Arrival of participants

14:00-16:00 [In parallel]

**Session 1** ACHIEVING GOOD STATUS: PROCESSING MICROPOLLUTANTS

*Chairered by Christine Gandouin,*
Chairwoman of the ASTEE Sanitation Commission

- An innovative approach to eliminate emerging pollutants: the synergy between ozonation and biological treatment
  
  *Adriana Gonzalez Ospina, Suez International*

- Applying ecological engineering to discharge areas with vegetation, eliminating micropollutants, biodiversity and social and territorial integration
  
  *Ludovic Perridy, Suez Eau France*

- Treating or replacing: an economic analysis of long-term management strategies for urban micropollutants
  
  *Jean-Marc Brignon, INERIS*

- Chemical performance indicators for the treatment of micropollutants by tertiary ozonation as applied at the water treatment plant in Sophia-Antipolis
  
  *Ywann Penru, Suez Groupe*

**Session 2** REDUCING PRESSURE ON RESOURCES

*Chairered by Bénédicte Augeard,*
French Agency for Biodiversity

- Assessing the effects of a strategy to reduce water losses: a quantitative assessment of water intakes and discharges in a drinking-water supply system
  
  *Eddy Renaud, IRSTEA*

- The MAC Eau project: applying and assessing water-saving measures on different scales, responding to the targets set out in the WFD and adapting to climate change
  
  *Alain Renard, Gironde Department*

- Sound resource management and production of drinking water
  
  *Sébastien Kech, VeRI*

- An example of an industrial site integrated in its environment: managing wastewater at the Hesbaye Frost factory in Geer
  
  *Arnaud Crevits, Hesbaye Frost and Alain Magis, CMI Development Group*
16:30-18:00
OPENING OF THE CONFERENCE

Moderated by David Ascher, Publication Manager, Actu-Environnement.com

Place: Academic room - University of Liège (opposite the theater)

In the presence of
- Willy Demeyer, Mayor of Liège
- Carlo Di Antonio, Walloon Minister for the Environment
- Eric Haubruge, First Rector of the University of Liège
- Christophe Perrod, ASTEE Chairman

Roundtable
Straight from the regions: testimonials about their actions in favor of environmental transitions

- Paul Dewil, Chairman of the International Meuse Commission
- Jean-Luc Martin, Chairman of the Public Water Management Company’s executive committee
- Denis Penouel, Deputy Director General of SIAAP

18:30-20:00
WELCOME COCKTAIL
AT LIÈGE CITY HALL

20:00
Visit
Liège’s local architecture: influences and evolution over time

Led by Jacques Teller, University of Liège

Let yourself be carried by architectural and urban stories!

The city of Liège grew at the bottom of the valley where the Meuse and Ourthe rivers meander and flow together. This configuration was fundamentally altered in the 19th and early 20th centuries, when an engineer named Blonden implemented a Haussmann-style form of urban planning which implied reconfiguring rivers.
9:00-10:30 [In parallel]

Session 3 ASSESSING ENVIRONMENTS: MICROPOLUTANTS

Chaired by Philippe Janneteau, SIAAP

▷ Perchlorate ion contamination in the eastern part of the Beauce aquifer: sources of the pollution, management of the resource and comparison with other polluted areas
Frédéric Barrez, Eau de Paris

▷ How different types of pollution have evolved in the Meuse and what it means for the production of drinking water
Eric Chauveheid, Vivaqua, André Bannink, RIWA-Meuse and Tineke Slootweg and Het Waterlaboratorium

▷ Assessing micropollutant pollution on a metropolitan scale: sources, impact and levers for action
Marion-Justine Capdeville, LyRE-Suez

Roundtable Water scarcity in unexpected places!

Moderated by Arnould Lefébure, International Escuat Commission

Daniel Bernard, Seine Nord Canal - VNF
Pierre Roussel, OIEAU
Pascal Goderniaux, Mons University
Koen Maeghe, Vlaamse Waterweg
Marc Parmentier, BRGM
Dominique Poissonnier, Météo France

11:00-12:00 [In parallel]

Session 4 GOOD ECOLOGICAL STATUS: RESTORING WATERWAYS

Chaired by Gilles Warot, Vice-Chairman of ASTEE’s Water Resources and Aquatic Environments Commission

▷ France’s national center for the restoration of rivers
Josée Peress, French Agency for Biodiversity

▷ Forming a network of demonstration sites for the restoration of waterways: moving towards the common production of monitoring data for knowledge and action
Pierre Mangeot, Rhin-Meuse Water Utility and Anne Vivier, French Agency for Biodiversity

Session 5 SOCIAL TARIFF PRACTICES IN WALLONIA AND IN FRANCE

Chaired by Sophie Maïboroda, Sedif

▷ Current situation of the pricing structure of drinking water and sanitation services in France and evolution since the 2006 law on water and aquatic environments
Marielle Montginoul, IRSTEA

▷ The consequences of a progressive water pricing structure in a context of decreasing consumption and urban sprawl: the Walloon case
Cédric Prevedello, SA AQUAWAL and Bernard Barraqué, CIRED-CNRS

12:00-14:00 Lunch

Sponsored by
14:00-16:00 [ In parallel ]

**Session 6  MONITORING THE QUALITY OF WATER BODIES**

*Chairled by Pascal Duchêne, Rhin-Meuse Water Agency*

- Using Macrobrachium spp. as sentinel organisms to monitor the quality of surface water in Martinique
  
  Fanny Caupos, Asconit Consultants

- Presentation of the results of analytical monitoring and computer simulations of the microbiological quality of the Seine in the Paris area
  
  Jean Bernier, SIAAP

- Mobilizing high-frequency physical and chemical data to characterize the state of a water body
  
  Thierry Polard, LyRE-Suez

- Risk management of "cyanobacteria": example of the buoy of the Jaunay (85) dam
  
  Frédérique Nakache-Danglot, Saur

**Workshop 1 IMPLEMENTING SUSTAINABLE DEVELOPMENT GOALS (SDGs): HOW MUCH PROGRESS HAS BEEN MADE?**

Find the detailed program on page 12.

16.00-16.30

**SPEED-POSTER 1**

(list page 13)

1 minute to convince you: which innovative project will catch your attention?

17:00-18:00 [ In parallel ]

**Session 7  GREENHOUSE GAS EMISSIONS**

*Chairled by Edouard Fourdrin, Ademe*

- Shared good practices to assess greenhouse gas emissions in the field of water and sanitation
  
  ASTEE “Quantifying greenhouse gas emissions and carbon footprint™” working group

- Results of in situ measurement campaigns for nitrous oxide emissions from different wastewater treatment systems
  
  Sylvie Gillot, IRSTEA

**Session 8  MATERIALS AND WATER QUALITY**

*Chairled by Séverine Dinghem, Chairwoman of the ASTEE’s Drinking Water Commission*

- An experimental study of transfer factors for VCM from PVC pipes into water
  
  Joël Rivallan, ASTEE Western chapter: Brittany, Pays de la Loire

- Ongoing work and European perspectives on materials that come into contact with water intended for human consumption
  
  Philippe Vasyngel, French Ministry for Public Health, and Jean Baron, Eau de Paris

**Side-event MICROPOLLUTANTS AND BIOMONITORING: THE SEINE, THE ESCAUT AND THE EXAMPLE OF THE DIADeM PROJECT ON THE MEUSE**

Find the detailed program on page 12.
14:00-16:00

**Workshop 1** IMPLEMENTING SUSTAINABLE DEVELOPMENT GOALS (SDGS): HOW MUCH PROGRESS HAS BEEN MADE?

*Introduction by Gérard Payen, former Advisor to the UN Secretary-General*

**France**

- **The Agenda France 2030**
  Philippe Senna, Commissariat General for Sustainable Development, Ministry of the Environment, Energy and the Sea, France

- **The ASTEE’s work on the actions to be carried out in France to achieve the SDGs targets relating to:**
  - to Water and Sanitation
    Gérard Payen, Vice-Chairman of ASTEE
  - to Waste
    Dominique Pin, Waste and Cleanliness Commission of ASTEE

- **Successful SDGs: the actions of a French territorial community**
  Denis Guilbert, Nantes Métropole

**International**

- **The actions carried out in Wallonia to achieve the SDGs targets related to Water, Sanitation and Waste**
  Michel Amand, Wallonia Public Service

- **First tests of reporting of water indicators in a European country organized by UN-Water: the example of the Netherlands in 2016**
  A representative of the Ministry of Infrastructure and Environment of the Netherlands*

*Conclusion by Jean Launay, Chairman of the PFE (French Water Partnership)*

14:00-18:00

**Side-event** MICROPOLLUTANTS AND BIOMONITORING: THE SEINE, THE ESCAUT AND THE EXAMPLE OF THE DIADeM PROJECT ON THE MEUSE

*Organized by*

- **Opening**
  Morgane Pitel, Chairwoman of the Territorial Public Building of the Meuse Basin and Brice Lalonde, Chairman of the Water Academy

- **Micropollutants: large families, effects and monitoring tools, regulations**
  Pierre Roussel, OIEAU

- **The cross-border project DIADeM: development of an integrated approach for the diagnosis of water quality in the Meuse**
  Alain Geffard and Marc Bonnard, DIADeM, SEBIO; Rémy Beaudouin, Ineris, METO; Robert Christelle, CER Group

- **Micropollutants on the Escaut Basin**
  Isabelle Saunier, work group RHME, International Scheldt Commission

- **Seine basin: impregnation in historical and emerging micropollutants of a highly urbanized watershed**
  Johnny Gasperi, ARCEAU IdF, LEESU

- **Roundtable Exchange of experience and perspectives**
  *Moderated by Jean-Marie Wauthier, Water Academy*
  Arnould Lefèbure, International Escaut Commission; Jean-Louis Oliver, Water Academy; Pascal Duchêne, Rhin-Meuse Water Agency and François Darchambeau, International Meuse Commission

*Conclusion*

19:00 - Gala evening in Hotel Bocholtz. The ASTEE Award will be awarded.

*LIMITED PLACES!*
**Micropollutants**
- In situ biotests to detect the presence of bioavailable micropollutants and toxic impact of aquatic environments
  - Guillaume Jubeaux, BIOMAE

**Quantitative management**
- Spatial optimization of water withdrawals for irrigation to reduce negative effects on the environment
  - Séverine Charrière, Agrosolutions
- From project to reality: recovering wash water from biological denitrification in a water treatment plant
  - Marc Gerlache, CILE

**Good status**
- Integrated management of the Parisian RA / STEP / Rivière sanitation system: issues of metrology and treatment of measured data
  - Sabrina Guérin, SIAAP
- A multi-stakeholder strategy to manage industrial wastewater discharges impacting a vulnerable water body and assessment of the efficiency of measures made using biotests
  - Yves Marneffe, ISSeP

**Customer satisfaction**
- Effect of water softening for users and the environment: the case of the Presqu’île de Gennevilliers Water Authority
  - Pierre Pieronne, Suez Eau France
- Purer water, free of calcium and chlorine
  - Anne-Laure Colon, Sedif

**Social tariffs**
- Towards social tariffs for water: the Sedif’s Eau Solidaire scheme
  - Olivier Chesneau, Sedif

**Asset management**
- 3D modeling to increase reliability and decrease costs of self-monitoring: the examples of RUNG 186/187 in the Val-de-Marne department and Vichy Val d’Allier spillways
  - Méliassandre Oget, Val-de-Marne department, Marlène Chopin, Vichy Val d’Allier and Jonathan Wertel, 3D EAU

**Wet-weather management: alternative solutions**
- De-polluting efficiency of percolating water in road drainage structures: the “DPOP” and “DPODRAIN” research projects
  - Sylvie Smets, BRRC
- A new system for rainwater management: de-polluting inlets
  - Christian Salic, Veolia
- Setting up an experimental observatory for alternative techniques in the greater Bordeaux Métropole
  - Anne-Cécile Michaud, LyRE-Suez
- Modular cement coatings for rainwater infiltration: technical reference framework, environmental performance and perspectives for digital modeling
  - Jennifer Faleyeux, CERIB

**Flood risk**
- Water drainage around Liège: a story of water and men
  - Jean-Pierre Silan, A.I.D.E.

**Data systems**
- New Web Interperability Services for Global Environmental Monitoring Data Management and Sharing
  - Franck Schlaeger, Kisters
9:00-12:00

Visit 1  DRINKING WATER TREATMENT PLANT AND WATER CATCHMENT TUNNELS

Discover innovative processes for biological denitrification, to reduce the volume of pesticides and to recirculate wash water at the start of treatment. Then climb down into the network of catchment tunnels 30 meters below ground level (45 km).

⚠ Access requirements apply for the descent into the catchment tunnels. Anyone suffering from claustrophobia is strongly advised against this visit, which requires climbing up and down 3 near-vertical 10-meter-long metal ladders. Participants will be equipped with appropriate overclothes (including boots/waders); wear casual clothing.

14:00-18:00

Visit 2  EXPERIMENTAL WATER MANAGEMENT FACILITIES

Discover three laboratories at the University of Liège at Sart Tilman:

- **Engineering hydraulics laboratory, HECE**
  - Physical and digital modeling of hydraulic structures
  - A test area covering more than 1000 m²:
    - Re-oxygenation of turbined waters downstream of a large dam,
    - Spillways,
    - Scouring downstream of a mobile dam,
    - Vibration of thin slats
    - Flood risk analysis,
    - Modeling of distribution and sanitation networks
    - Sizing of retention basins...

- **Cebedeau Water research and expertise center**
  - Laboratory of tests and analyzes for the design and development of new biotechnologies for the treatment of liquid and gaseous effluents with a particular focus on microbial ecology.
  - Models of laboratories
    - Granular sludge and biofilm processes,
    - Incubators,
    - Digesters...

- **Chemical engineering laboratory PEPs (Product Environment and Processes)**
  - Hall of chemical engineering of 1000 m², equipped with pilot units and characterization tools
  - Treatment of sewage sludge:
    - Conditioning and dehydration,
    - Thermal drying
    - Recovery of phosphorus...
  - Treatment of gaseous effluents
    - Adsorption of volatile organic compounds on activated carbon,
    - Capture and reuse of CO2 (modeling, seaweed culture ...)
  - Intensification of processes
    - Design and modeling,
    - Dynamic simulation and optimization,
    - Energy integration...
9:00-10:30 [In parallel]

**Session 9**  
**ECONOMIC ASPECTS OF ASSET MANAGEMENT**
*Chaired by Jean-Baptiste Butlen, Eau de Paris*

- Financial strategy and cost analysis for drinking-water and sanitation networks asset management  
  Caty Werey, IRSTEA and ASTEE “Sanitation asset management-cost analysis” working group
- Saint-Gobain TCO: water network efficiency  
  Vincent Saal, Saint Gobain Construction Products Belgium nv
- Self-monitoring and asset management of sanitation networks. Feedback from the Seine-Normandie basin  
  René-Claude Fouilloux and Pauline Chabanel-Durrand, Seine-Normandie Water Agency

**Session 10**  
**METHANATION IN WALLONIA AND FRANCE**
*Chaired by Frédéric Roux, Chairman of the ASTEE’s Waste Treatment Commission*

- Methanation: vision for 2050 and research, development and innovation priorities  
  Erwan Autret, French Environnement and Energy Management Agency (ADEME)
- Biomethanation of household organic waste  
  Luc Joine, Intradel
- A concerted action for a collective methanisation project  
  Céline Veit, Adéan Pays d’Alsace du Nord

11:00-12:30

**Workshop 2**  
**REVISION OF BREFS**

Upcoming changes for facilities managers and how to prepare for them  
*Moderated by Hubert de Chefdebien, coordinator of the ASTEE “BREF” working group*

- Context and legal framework  
  Johanna Flajolet-Millan, Syndicate for Renewable Energy
- An example: Large combustion plants BREF  
  Patrick Clerens, European Suppliers of Waste-to-Energy Technology
- Waste treatment BREF  
  Isabelle Conche, SYVED
- Waste incineration BREF  
  Maxime Pernal, Confederation of European Waste-to-Energy Plants
- A crucial point: performance characteristics of measurement instruments - Ineris study  
  Hubert de Chefdebien, ASTEE

12:30-14:00 :  
**Lunch**

Sponsored by

**14:00-14:30**  
**Presentation of the ASTEE Award**
14:30-16:00 [In parallel]

Session 12  PARTNERSHIPS
Chaired by Jean Philippe Torterotot, ASTEE Vice-Chairman

GISREAUX: increased collaboration between Walloon public laboratories in the water sector
Christophe Frippiat, ISSeP

Lessons learned from a partnership between the University and water agencies to manage the quality of surface water (WFD, ...)
Jean-François Deliège, Aquapôle - ULg

Cross-border work on hydrological hazards on the Meuse basin
Benjamin Dewals, University of Liège

Session 13  WATER SAFETY PLANS
Chaired by Jean-Michel Compère, CILE

The Belgian authorities' view
Francis Delloye, Wallonia Public Service

A collaborative perspective on the methodology of sanitation safety management plans in Belgium and its adaptation to France: the examples of Chartres Métropole
Patrick Peigner, Regional Health Agency (49), François Bordeaux, Chartres Métropole and Marc Ruelle, Société Wallonne des Eaux

Managing risks associated with private facilities (after water meters) - setting up a “Home Water Passport”
Marc Gerlache, CILE

16:30-18:00 [In parallel]

Session 14  INTEGRATING ACTIONS INTO GEOGRAPHICAL FRAMEWORKS
Chaired by Denis Guilbert, Nantes Métropole

Economic footprint: assessing the local and national economic impact of Sedif’s investment plan in the Ile-de-France region
Olivier Chesneau, Sedif

Sanitation 2030: shaping a strategic vision for sanitation in Bordeaux, a European Metropolis
Mathieu Ahyerre, Rémi Croizet et Nicolas Gendreau, Bordeaux Métropole

Wallonia’s regional master plan for drinking-water production. An ambitious agreement to increase synergy between the two major Walloon producers, CILE and the Société Wallonne des Eaux
Marc Closset, Société Wallonne des Eaux and Bernard Michaux, CILE

Session 15  NITROGEN POLLUTION
Chaired by Juan Ochoa, Veolia Eau

Restoring water quality in the catchment of Arquennes: results after 12 years of actions and monitoring
Christophe Vandenberghe, Gembloux Agro-Bio Tech (University of Liège)

Environmental issues linked to nitrite in the Paris area: origin and possible technical solutions
Vincent Rocher, SIAAP

In Wallonia, association of the sectors of water and agriculture for the implementation of good practices. From consulting to a catchment contract: the case of Hesbaye near Liège
Nicolas Triolet, SPGE and Jacques Schlitz, CILE

18.30-20.00 SPEEDNETWORKING

If you are under 35 and:
- studying
- looking for a job
- already working...
... register, this event is organized specially for you! Receive advice from experts, expand your network and discuss your career plans.

Have you got at least ten years of experience in the environment sector?
We need you for this Speednetworking event! Share your experience, encourage and guide tomorrow’s professionals.
**Partnerships**

- EMAS certification: a dynamic tool for sanitation assessment
  Christian Didy, SPGE and Clémentine Prouteau, INASEP

**Users at the center of services**

- Sanitation plans per river sub-basin (PASH): much more than a spatial planning tool for sanitation
  Hélène Lebeau, SPGE

- The Garonne’s cross-border dimension, a driver of innovation for projects concerning lands near the Garonne: the example of the “European River Territories” project
  Fabienne Sans, SMEAG

- Implementing a semi-automatic classification of water users: results and recommendations
  Selda Bulbul, Veolia Eau

- A center of expertise in the water sector: lessons learned and considerations on relevant sectorial strategies
  Pénélope Clotuche, FOREM

- Putting users back at the center of services
  Armelle Bernard, Eau de Paris

- Drinking water: supporting behavior changes
  Olivier Chesneau, Sedif

**Effects of health activities on water quality**

- Pharmaceutical residues and detergents in urban sludge: quality of end-of-pipe sludge and evolution within treatment systems
  Johnny Gasperi, LEESU - Paris-Est University

- MEDIX: biological treatment of hospital wastewater
  Alain Magis, CMI Developement Group

- Developing a method to monitor medicine residues in Walloon waters
  Katherine Nott, Société Wallonne des Eaux - Laboratoire Central

- Multi-matrix screening of endocrine disrupters in Walloon waters
  Christophe Frippiat, ISSeP

**Diffuse pollution**

- Methods to restore/preserve the quality of underground water near catchment areas threatened by nitrates in Wallonia
  Marine Pommier, SPGE

- Suggesting a method based on contributing areas to assess the efficiency of catchment protection programs against diffuse pollution
  Laetitia Chegard, Suez Consulting

**Wastewater: metrology and processes**

- An innovative method to characterize OM using 3D fluorescence spectroscopy: relevance for managing water treatment systems
  Angélique Goffin, LEESU - Paris-Est University

- Using fuzzy logic to create statistical models of fouling in membrane bioreactors for wastewater treatment
  Elodie Suard, IRSTEA

- Interface measurements to anticipate foaming in wastewater treatment plants
  Manel Larachiche, University of Technology of Compiègne

- Diagnosing and finding solutions for the chronic problem of settling in a wastewater treatment plant
  Laurence Gauthier, Suez Consulting
9:00-12:30
Visit 3 DRAINAGE IN THE LIÈGE REGION, A STORY OF WATER AND MEN

Discover the protection system against indirect flooding (water drainage) which was made necessary by land subsidence caused by underground mining in the previous century.

14:30-18:00
Visit 4 BIOMETHANATION OF HOUSEHOLD ORGANIC WASTE IN AN URBAN ENVIRONMENT

You will begin the visit with the communication pavilion, which is at the heart of didactic and pedagogical teaching about the circular economy: tools, projects, results and what waste becomes. Then you will visit the Unité de Valorisation Energétique (Uvélia), going behind the scenes at a waste incinerator that produces electricity (roughly the equivalent of the annual consumption of 55,000 households) in the middle of the city. You will then visit the site where a biogas plant is being built.

⚠️ Each participant will be provided with a hardhat and safety jacket; avoid wearing high heels.
8:30-10:30 [In parallel]

Session 16 TOOLS TO BETTER MANAGE DIFFUSE POLLUTION
Chairled by Philippe Dupont,
Chairman of ASTEE’s Water Resources and Aquatic Environments Commission

- PollDiff’Eau 2016: lessons learned and levers for action
  Philippe Dupont, Chairman of ASTEE’s Water Resources and Aquatic Environments Commission

- Protecting water quality in drinking-water catchment areas in forested watersheds
  Michel Lafforgue, Suez Consulting

- Treating underground water: results after 4 years of applying a decree on soil protection in Wallonia
  Vincent Lebrun, Wallonia Public Service

- The National Bank of Water Withdrawals: challenges for a unifying tool for quantitative pressures on water resources
  Julie Chataigner, French Agency for Biodiversity

- How about if the Seine Normandie Water Agency supported agricultural activities with a low impact on water resources?
  Dikran Zakeossian, Epices and Delphine Jacono, Seine Normandie Water Agency

Session 17 ENERGY EFFICIENCY
Chairled by Pascal Juif, Veolia Eau

- Building tomorrow’s campus today. Lessons learned from the results and action plans induced by the Water & Energy master plan on campuses in Bordeaux
  Julia Barrault, LrRE-Suez and Matthieu Bugnon, EXPLICIT, Suez Consulting

- Measuring and modeling energy costs at water treatment plants: finding an optimization tool
  Sylvie Gillot, IRSTEA

- Using the ISO 14 414 Pump system energy assessment standard to lastingly improve the energy performance of drinking-water production
  Jean-Christophe Boclet, IRH Ingénieur Conseil and Frédéric Morand, Greater Lyon Water Authority

- Solar and geothermal tools to dry sludge from Wasmuel water treatment plant and produce heat and electricity
  Bernard Lallemand, IDEA and Christian Didy, SPGE

11:00-12:30 [In parallel]

Session 18 WASTEWATER: METROLOGY AND PROCESSES
Chairled by Philippe Janneteau, SIAAP

- Metrological innovation for regulatory water analysis: feedback on 5-day Biochemical Oxygen Demand
  Mathieu Muller, AMS Envolure

- Managing the membrane stock in wastewater treatment plants: from monitoring operational data to diagnostics of membrane integrity
  Romain Mailler, SIAAP

- Improving performance and reducing energy consumption at an industrial water treatment plant as the first step of a strategy to fight filamentous bacteria
  Christophe Meunier, CEBEDEAU

Session 19 IMPACT OF HEALTH-RELATED ACTIVITIES ON WATER QUALITY
Chairled by Fabrice Nauleau, Saur

- Levels of endocrine disrupters in Wallonia: assessing the relevance of biotests as a screening tool or as an alternative to chemical analyses
  Carole Chalon, ISSeP

- Relevance of bio-indicators to monitor water treatment plants performance
  David Du Pasquier, WatchFrog

- An inventory of medicinal substances found in Walloon waters
  Katherine Nott, Société Wallonne des Eaux-Laboratoire Central
**Technical conditions**

- High-definition picture
- 5Mb minimum
- Format .jpeg
- Orientation portrait
- Color photo
- 1 photo per participant

**Art in our metier**

**Photo contest**

Share your most beautiful photo to illustrate the technical aspects of our metiers «environment, waste, water and sanitation» Then vote at the conference!

**Deadline for receipt of photos:** May 20, 2017. To be transmitted to geraldine.izambart@astee.org

Find TSM on its stand throughout the congress, surprises await you...

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**Automnales 2017**

**Development of sludge and bio-waste: from source to resource**

14 and 15 NOVEMBER
LE CREF, Colmar

SAVE THE DATE
**Welcome of participants**
Participants will be welcomed Tuesday 6 June 2017 starting 13:30, then every day before the sessions at Liège Theater.

**Registration fees for ASTEE include**
- **for members and non-members:** include admission to all sessions and technical visits, access to the digital toolkit and admission to the receptions and the gala evening.
- **for students:** include admission to all sessions and technical visits, access to the digital toolkit and coffee-break. They do not give access to the lunches or to the gala evening.

<table>
<thead>
<tr>
<th></th>
<th>Member</th>
<th>Non member</th>
</tr>
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<tbody>
<tr>
<td>Half-day</td>
<td>130 € HT</td>
<td>175 € HT</td>
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<tr>
<td>1 day</td>
<td>260 € HT</td>
<td>350 € HT</td>
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<tr>
<td>2 days</td>
<td>400 € HT</td>
<td>525 € HT</td>
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<tr>
<td>Conference package</td>
<td>510 € HT</td>
<td>700 € HT</td>
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- Young professional members (under 35), retirees and people looking for work: -50% on registration fees upon presentation of proof
- Student: 20€ per day upon presentation of proof

**Register before May, 24**
Download the registration form on [www.astee.org](http://www.astee.org)

**Payment and cancellation**
The appropriate fees must be paid upon registration by cheque in Euros made out to the ASTEE, by bank transfer or credit card.
Any bank transfer fees and charge are the responsibility of the delegate.
Any cancellation must be notified in writing. We will not accept cancellations over the phone.
For cancellations received between May 1st and May 24, 50% of the registration fee will be refunded. There will be no refund for cancellations received after May 24.

**ASTEE**
51 rue Salvador Allende
92 027 Nanterre Cedex
France
Tél. : 33 (0) 1 41 20 17 61
Fax : 33 (0) 1 49 67 63 03
The conference will be held at:
Théâtre de Liège - Place du 20 août
4000 Liège - Belgique

Transport:
By train from Liège-Guillemins station (approx. 15 minutes by bus)

By air:
• from Brussels airport (national airport):
  www.brusselsairport.be/fr/
• from Brussels South Charleroi:
  www.charleroi-airport.com/
• from Liège airport:
  www.liegeairport.com/home

The ASTEE does not cover transport and accommodation expenses for participants.

To secure your accommodation, book directly on
www.atibooking.com

Be careful the number of rooms near the Théâtre de Liège being limited, we advise you to book quickly.

Contacts

About the conference
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Accommodation
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