

PROGRAMME (tentative / subject to change)

Tuesday, 27 November 2018

Room: Max-Buchner-Hörsaal

11:00 WELCOME & INTRODUCTION

PLENARY TALK

11:15 **Water and Waste Water in the Chemical Industry: Management, Challenges and Future Developments**A. Blesgen¹; ¹ Evonik Industries AG, /D

Room: Max-Buchner-Hörsaal

TREATMENT OF PROCESS WATER

12:00 **Water reuse from condensates in the petrochemical industry**J. Veleva¹; M. Vanoppen¹; N. Groot²; A. Verliefde¹; ¹ Ghent University (UGent), Ghent/B;
² Dow Benelux BV, Terneuzen/NL12:25 **Innovative and sustainable solutions for efficient water use in steel industry by desalination with capacitive deionisation**M. Hubrich¹; M. Kozariszczuk¹; B. Padilla Vivas²; E. Piedra Fernandez²; V. Menendez Delmiro²; ¹ VDEh-Betriebsforschungsinstitut GmbH, Düsseldorf/D; ² ArcelorMittal, Global R&D Asturias, Aviles/E12:50 **Lunch break with exhibition & posters**

TREATMENT OF PROCESS WATER

14:20 **Efficient Degradation of Sulfamethazine by Fenton-like Reaction with Sludge Derived Carbon modified with nitric acid**Y. Yu¹; F. Huang²; Y. He²; Y. Zhang²; ¹ Nanjing Tech University, Nanjing, Jiangsu Province/D;
² Nanjing Tech University, Nanjing/CN14:45 **Innovative Membrane Process for Produced Water Treatment**T. Steube¹; L. Wiles²; E. Peirtsegaele²; ¹ MICRODYN-NADIR GmbH, Wiesbaden/D; ² MICRODYN-NADIR US Inc., Goleta, CA/USA15:10 **Application of ceramic membranes for solid liquid separation in a two-stage fermentation with process water recirculation**M. Tuczinski¹; F. Saravia²; H. Horn³; ¹ DVGW-Forschungsstelle am Engler-Bunte-Institut des Karlsruher Instituts für Technologie (KIT), Karlsruhe/D; ² KIT, Engler-Bunte-Institut, Karlsruhe/D; ³ KIT, Engler-Bunte Institut, Karlsruhe/D15:35 **Water recycling and reuse in food industry– Practical examples, technical & economical potentials**K. Dickhoff¹; ¹ EnviroChemie GmbH, Rossdorf/D16:00 **Coffee break with exhibition & posters**

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PLENARY TALK

11:15 **Water and Waste Water in the Chemical Industry: Management, Challenges and Future Developments**A. Blesgen¹; ¹ Evonik Industries AG, /D

Room: Carl-Duisberg-Hörsaal

COOLING WATER MANAGEMENT

12:00 **Cooling tower blow down water reuse – Challenging the status quo**J. Henkel¹; M. Slagt²; ¹ Dow Water & Process Solution, Rheinmuenster/D; ² Dow Water & Process Solution, Terneuzen/NL12:25 **Stay Practical – Reduce Chemical for improving performance of Cooling Water Circuits**J. Koppe¹; G. Battagello¹; ¹ MOL Katalysatortechnik GmbH, Schkopau/D12:50 **Lunch break with exhibition & posters**

COOLING WATER MANAGEMENT

14:20 **Antimicrobial Stabilization of Process and Cooling Water by AGXX®**P. Frania¹; I. Jolk¹; B. Söndgerath¹; ¹ Feindrahtwerk Adolf Edelhoff GmbH & Co. KG, Iserlohn/D14:45 **Possibilities for Use of Reclaimed Water for Cooling at a Thermal Power Plant in Maputo**N. Gulamussen¹; L. Nougues¹; A. André¹; L. Rietveld¹; ¹ Delft University of Technology, Delft/NL15:10 **WaterWatt – Development of the E3 Platform to foster improvement of energy efficiency in industrial water circuits**J. Michels¹; N. Heine¹; T. Track¹; M. Kozariszczuk²; P. Ivashechkin²; M. Iten³; R. Rato³; D. Stroud⁴; M. Weinel⁴; T. Bolognesi⁵; O. Stavset⁶; S. Sannan⁶; ¹ DECHEMA e.V., Frankfurt am Main/D; ² VDEh-Betriebsforschungsinstitut GmbH, Düsseldorf/D; ³ ISQ – Instituto da Soldadura e Qualidade, Porto Salvo/P; ⁴ School of Social Sciences, Cardiff University, Cardiff/UK; ⁵ ISMB – Istituto Superiore Mario Boella, Torino/I; ⁶ SINTEF Energy Research, Trondheim/N15:35 **How can industrials monitor, control and improve their energy efficiency related to process waters?**S. SIAUVE¹; N. AMORSI²; G. NEVEU²; ¹ International Office for Water, Limoges Cedex/F;
² International Office for Water, Limoges/F16:00 **Coffee break with exhibition & posters**

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Room: Max-Buchner-Hörsaal

WATER EFFICIENCY

- 16:30 **Innovative treatment scheme for water reuse in the petrochemical industry**
C. Bosch¹; M. Badia¹; J. Ribera¹; I. Jubany¹; X. Martínez¹; V. Gómez²; D. Arias²; E. Taberna³; J. Sanz³; ¹ Fundacio CTM Centre Tecnologic, Manresa/E; ² Dow Water & Process Solution, Tarragona/E; ³ Veolia Water Technologies, Sant Cugat del Vallès/E
- 16:55 **Production of demineralized water with wastewater reuse, energy and resource saving aspects**
S. Lübbecke¹; V. Toussaint²; W. van den Broek³; ¹ Evides Stade Wasserbetriebs GmbH, Stade/D; ² Evides Industrierwater, Rotterdam/NL; ³ Evides Industrierwater, Middelburg/NL
- 17:20 **Optimizing operational expenditure by increasing water sustainability**
C. Schöpfer¹; ¹ Arcadis Germany GmbH, Darmstadt/D
- 17:45 **Exhibition, poster & networking evening with buffet & drinks** (17:45 – 21:50)

PROGRAMME (tentative / subject to change)

Tuesday, 27 November 2018

Room: Carl-Duisberg-Hörsaal

ENERGY EFFICIENCY

- 16:30 **New Solutions for Thermal Water Treatment in Corrosive Conditions with Heat Conductive Polymers**
T. Orth¹; H. Glade²; S. Schilling²; ¹ Technoform Kunststoffprofile GmbH, Lohfelden/D; ² University of Bremen, Bremen/D
- 16:55 **Comparison of CSTR and AnMBR for high-solid digestion of WAS and high shares of float sludge from the dairy processing industry**
R. Lutze¹; M. Engelhart²; J. Rühl²; ¹ TU Darmstadt, Darmstadt/D; ² TU Darmstadt, Darmstadt/D
- 17:20 **Energy Efficiency at Airports Through the Management of Aircraft De-Icing Fluid (ADF) by a High-Rate Anaerobic Treatment Process**
G. Engiz¹; E. Su¹; C. Yangin-Gomec¹; ¹ Istanbul Technical University, Istanbul/TR
- 17:45 **Exhibition, poster & networking evening with buffet & drinks** (17:45 – 21:50)

PROGRAMME (tentative / subject to change)

Wednesday, 28 November 2018

Room: Max-Buchner-Hörsaal

PLENARY TALK

- 09:00 **Industrial Water 4.0 - Perspectives and challenges of digitalisation for industrial water management**
T. Track¹; ¹ DECHEMA e.V., Frankfurt a.M./D

Room: Max-Buchner-Hörsaal

MAINTENANCE

- 09:45 **Digital Solutions for Predictive Maintenance of Progressive Cavity Pumps in Waste Water Treatment Applications**
C. Brehm¹; ¹ SEEPEX GmbH, Bottrop/D

- 10:10 **On-Line Monitoring of Fouling in Membrane Distillation by means of Optical Coherence Tomography**
A. Bauer¹; V. Hilgenfeldt²; S. Bartl²; F. Saravia²; M. Wagner³; H. Horn¹; ¹ DVGW Research Center at the Engler-Bunte Institute, Karlsruhe Institute of Technology (KIT), Karlsruhe/D; ² Karlsruhe Institute of Technology (KIT), Engler-Bunte-Institut, Karlsruhe/D; ³ Karlsruhe Institute of Technology (KIT) / Institute of Functional Interfaces, Karlsruhe/D

- 10:35 Coffee break with exhibition & posters

MAINTENANCE

- 11:05 **Treatment of RO-membranes with chlorine dioxide to prevent biofouling and to rise the quality in performance**
S. Holz¹; ¹ Dr. Küke GmbH, Wedemark/D

- 11:30 **Scale Formation on Polymer Composite Tubes in Falling Film Heat Exchangers for Water Treatment Applications**
S. Schilling¹; H. Glade¹; D. Moses²; T. Orth²; ¹ University of Bremen, Bremen/D; ² Technoform Kunststoffprofile GmbH, Lohfelden/D

- 11:55 **Struvite management in wastewater treatment plants with innovative chemicals**
K. ODJOT¹; S. Nied¹; H. KONDARDI¹; ¹ BASF SE, LUDWIGSHAFEN/D

- 12:20 Lunch break with exhibition & posters

PROGRAMME (tentative / subject to change)

Wednesday, 28 November 2018

PLENARY TALK

- 09:00 **Industrial Water 4.0 - Perspectives and challenges of digitalisation for industrial water management**
T. Track¹; ¹ DECHEMA e.V., Frankfurt a.M./D

Room: Carl-Duisberg-Hörsaal

DIGITALIZATION IN INDUSTRIAL WATER MANAGEMENT

- 09:45 **The Value of Industry Water: Integrated multiple waters, Digitally Connected and Smartly Managed**
H. Pool¹; D. Krol²; A. Rubini²; ¹ CEFIC, Brussels/B; ² WssTP, Brussels/B

- 10:10 **Waste Water Management 4.0 by business process digitalization**
A. Gahr¹; ¹ Endress+Hauser Conducta GmbH+Co.KG, Gerlingen/D

- 10:35 Coffee break with exhibition & posters

DIGITALIZATION IN INDUSTRIAL WATER MANAGEMENT

- 11:05 **Resource Efficient Quality Optimisation**
S. Filipsson¹; ¹ IVL Swedish Environmental Research Institute, Stockholm/S

- 11:30 **Optimization of RO Systems through Digitalization, Connectivity and SMART Algorithms**
V. Yangali-Quintanilla¹; M. Witte²; C. Persner²; ¹ Grundfos Holding A/S, Bjerringbro/DK; ² Grundfos Water Treatment GmbH, Pfinztal/D

- 11:55 **Water Management 4.0**
W. Schiettecatte¹; P. Quinart²; ¹ Vito NV, Mol/B; ² Calculus, Zutendaal/B

- 12:20 Lunch break with exhibition & posters

PROGRAMME (tentative / subject to change)

Wednesday, 28 November 2018

Room: Max-Buchner-Hörsaal

WASTEWATER TREATMENT TECHNOLOGIES

- 13:50 **Direct- and indirect-discharge of waste-water from milk-industry**
T. Hackner¹; ¹ HUBER SE, Berching/D
- 14:15 **BOOMERANG® Wastewater Recycling: Examples from Food Industry**
M. Dr. Brockmann¹; ¹ WATERLEAU Deutschland GmbH, Bremen/D
- 14:40 **Sulfide precipitation for the treatment of acidic washing waters**
J. Schumacher¹; V. Schulte¹; ¹ Eisenmann Anlagenbau GmbH & Co.KG, Böblingen/D
- 15:05 **Water Treatment Agent ('WTA') – a new, plant-enhanced material for more effective treatment of industrial wastewater**
M. Hajek¹; R. Shimada²; H. Buno²; ¹ Dexerials Europe BV, Lijnden/NL; ² Dexerials Corporation, Tokyo/J

15:30 Coffee break with exhibition & posters

WASTEWATER TREATMENT TECHNOLOGIES

- 16:00 **Hybrid oxidation for advanced treatment of water in oil production**
S. BAIG¹; ¹ SUEZ, RUEIL-MALMAISON/F
- 16:25 **Case Study: cost-effective industrial wastewater reuse by means of akvoFloat™ – a flotation-filtration technology based on novel ceramic membranes**
J. Schulz¹; ¹ akvola Technologies GmbH, Berlin/D
- 16:50 **Demonstration of a decision support system for a novel integrated solution aimed at water reuse in the Oil&Gas industry.**
C. Sanroma¹; J. Malfeito¹; A. Jiménez¹; C. Koch¹; C. Bayona¹; ¹ Acciona Agua, Barcelona/E
- 19:30 **Conference Dinner in the city of Frankfurt** (19:30 – 23:00)

PROGRAMME (tentative / subject to change)

Wednesday, 28 November 2018

Room: Carl-Duisberg-Hörsaal

INTEGRATED INDUSTRIAL WATER MANAGEMENT

- 13:50 **Future-oriented Technologies and Concepts to Increase Water Availability by Water Reuse and Desalination – WavE**
C. Jungfer¹; T. Track¹; D. Becker¹; ¹ DECHEMA e.V., Frankfurt am Main/D
- 14:15 **Water-Reuse concepts for industrial parks (in South-East-Asia)**
H. Linke¹; M. Wagner²; S. Bauer¹; A. Dell¹; J. Behnisch²; ¹ TU Darmstadt Department of Landmanagement, Darmstadt/D; ² TU Darmstadt Department of Wastewater Technology, Darmstadt/D
- 14:40 **Application-Oriented Software Tool for Optimization of Resource Efficiency in Apple Juice Production**
S. Breitenkamp¹; K. Rosenwinkel²; ¹ Ingenieurbüro Dr. Breitenkamp, Bünde/D; ² Leibniz Universität Hannover, Institut für Siedlungswasserwirtschaft und Abfalltechnik, Hannover/D
- 15:05 **Industry water production & circular business modeling**
D. Xevgenos¹; B. BALDASSARE²; N. BOCKEN³; G. CALABRETTA²; ¹ SEALEAU B.V., Delft/NL; ² TU Delft, Delft/NL; ³ Lund University, Lund/S

15:30 Coffee break with exhibition & posters

INTEGRATED INDUSTRIAL WATER MANAGEMENT

- 16:00 **A holistic approach to industrial water management: turning a business treat into an opportunity**
N. La Rocca¹; ¹ Arcadis Germany GmbH, Berlin/D
- 16:25 **Wastewater and incident management on the Chemiepark Marl**
J. Gisselmann¹; ¹ Evonik Technology & Infrastructure GmbH, marl/D
- 16:50 **Development of an Industrial Water Risk Management Framework through Practical Based Action Research**
S. Merritt¹; K. Stockil¹; J. Harrington²; ¹ Central Solutions Ltd., Limerick/IRL; ² Cork Institute of Technology, Cork/IRL
- 19:30 **Conference Dinner in the city of Frankfurt** (19:30 – 23:00)

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Thursday, 29 November 2018

Room: Max-Buchner-Hörsaal

PLENARY TALK

- 09:00 **Water management perspectives in steel industry**
K. Peters¹; ¹ European Steel Technology Platform, Brussels/B

Room: Max-Buchner-Hörsaal

WASTEWATER TREATMENT TECHNOLOGIES

- 09:45 **Challenges of modular plant design in industrial wastewater treatment – increasing flexibility, reduction of project complexity**
G. Sagawe¹; ¹ EnviroChemie GmbH, Rossdorf/D
- 10:10 **Controllable Bioreactors with Aerobic Sludge Stabilization for Industrial Applications**
N. Müller-Blanke¹; A. Blanke¹; ¹ TIA Technologien zur Industrie-Abwasser-Behandlung GmbH, Breitenfelde/D
- 10:35 Coffee break with exhibition & posters

WASTEWATER TREATMENT TECHNOLOGIES

- 11:05 **Reduced nitrous oxide emissions during high nitrogen loading in wastewater treatment**
C. Lindenblatt¹; J. Drewes¹; ¹ Technische Universität München, Garching/D
- 11:30 **Recent developments in industrial wastewater treatment by Anaerobic Membrane Bioreactors (AnMBRs)**
M. Betz¹; L. Papendorf¹; S. Steinhauser¹; F. Rögner¹; ¹ TH Köln, Cologne/D
- 11:55 **Integration of reverse osmosis and electrochemical advanced oxidation process for petrochemical wastewater treatment**
S. da Silva¹; C. Venzke²; J. Welter¹; D. Schneider¹; M. Siqueira Rodrigues²; A. Bernardes¹; ¹ UFRGS (Universidade Federal do Rio Grande do Sul), Porto Alegre/BR; ² FEEVALE, Novo Hamburgo/BR
- 12:20 Lunch break with exhibition & posters

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- 09:00 **Water management perspectives in steel industry**
K. Peters¹; ¹ European Steel Technology Platform, Brussels/B

Room: Carl-Duisberg-Hörsaal

RECOVERY OF VALUABLES

- 09:45 **Recycling of water and valuables in steel production**
P. Brücher¹; J. Wentzel²; J. Kiessling-Romanus¹; L. Piezanowski³; M. Sjoestrom⁴; A. Ante¹; ¹ SMS group GmbH, Hilchenbach/D; ² SMS group GmbH, Düsseldorf/D; ³ Paul Wurth S. A., Luxembourg/L; ⁴ Fontaine Engineering und Maschinen GmbH, Langenfeld/D
- 10:10 **Cyanide recovery from thiocyanate in mining effluent by ozonation**
L. DE FRANCESCHI¹; ¹ SUEZ, Dübendorf/CH
- 10:35 Coffee break with exhibition & posters

TOWARDS WATER LOOP CLOSURE

- 11:05 **The concept of zero liquid discharge and the performance of existing plants**
H. Schoenberger¹; ¹ University of Stuttgart, Stuttgart/D
- 11:30 **Sodium chloride recovery from brine for reuse purposes in zero liquid discharge**
N. van Linden¹; R. Shang¹; H. Spanjers¹; ¹ Delft University of Technology, Delft/NL
- 11:55 **Brine releases and salt consumption from process industries: the case of the Netherlands**
E. SKOURTANIOTI¹; D. BAKOGIANNI²; M. MORTOU³; M. Loizidou²; D. Xevgenos⁴; ¹ National Technical University of Athens, Greece, Athens/GR; ² National Technical University of Athens, Athens/GR; ³ SEALEAU B.V., Delft/NL; ⁴ SEALEAU B.V., Delft, the Netherlands/NL
- 12:20 Lunch break with exhibition & posters

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WASTEWATER TREATMENT TECHNOLOGIES

- 13:50 **Microbial fuel cell integration in paper mill wastewater treatment – Experiences with a two-stage pilot plant**
H. Klasen¹; D. Bastian¹; J. Pinnekamp¹; ¹ RWTH Aachen University - Institut für Siedlungswasserwirtschaft, Aachen/D
- 14:15 **Electrosorption for Recovery of Wastewater: Challenges and Limits**
A. Steinkamp¹; C. Abt¹; K. Mangold¹; S. Hild¹; ¹ DECHEMA-Forschungsinstitut, Frankfurt am Main/D
- 14:40 **Catalytic aqueous-phase reforming to treat wastewater fractions derived from biorefineries**
I. Coronado¹; ¹ VTT Technical Research Centre of Finland Ltd., Espoo/FIN
- 15:05 **UV-Vis nanocomposite photocatalysts for phenolic compounds-contaminated water treatment**
A. Abdullah¹; ¹ Qatar University, Doha/Q

Poster Programme will follow shortly...

Friday, 30 November 2018

- 08:30 **ADDITIONAL WORKSHOP**
Increasing water and energy efficiency in process industry – tools, technologies and concepts
(08:30 – 14:00)
More information available at:
https://dechema.de/industrialwater_additional_workshop.html

PROGRAMME (tentative / subject to change)

Thursday, 29 November 2018

Room: Carl-Duisberg-Hörsaal

TOWARDS WATER LOOP CLOSURE

- 13:50 **Technology Advances and Economic Optimization of Brine Concentration and Zero Liquid Discharge - Membrane and Thermal Systems**
A. Ebsary¹; M. Man¹; B. Sparrow¹; ¹ Saltworks Technologies, Richmond/CDN
- 14:15 **SUEZ Water Technologies & Solutions helps Bashneft to meet strict regulation limits and allows water reuse**
F. Milz¹; ¹ SUEZ WTS Deutschland GmbH, Ratingen/D
- 14:40 **Wastewater reclamation in the chemical industry by membrane technologies**
M. Pastur Romay¹; L. Barberà²; R. Wünsch³; J. Kochan⁴; C. Kazner³; C. Niewersch²; C. Pătruț⁵; L. van Dijk⁵; F. Zorn⁴; J. Palacín¹; J. Koppe⁶; ¹ Clariant Ibérica Producción, Tarragona/E; ² Dow Water & Process Solution, Tarragona/E; ³ University of Applied Sciences and Arts Northwestern Switzerland FHNW, School of Life Sciences, Basel/CH; ⁴ Clariant Produkte (Deutschland) GmbH, Frankfurt/D; ⁵ Blue-Tec, Renkum/NL; ⁶ MOL Katalysatortechnik GmbH, Schkopau/D
- 15:05 **Design and Operation of ZLD Installations for F&B and Metal Processing**
E. Döpkins¹; ¹ REMONDIS Aqua Industrie GmbH Co KG, Hannover/D

Poster Programme will follow shortly...