

# Final Program



Tuesday, 20 September, 2022	
8:30 am to 9:30 am	Opening ceremony- Welcome
9:30 am to 10:15 am	Keynote Lecture 1: K. Reddy (University of Illinois, Chicago, USA) "Electrokinetic Remediation of Polluted Heterogeneous Subsurface Environments"
10:15 am to 10:30 am	Coffee break
10:30 to 12:30 Session 1 (Chair: Ahmed Benamar)	Applications of Electrokinetics to: Remediation of soils, sediments and other materials
	10:30-10:55 "Surfactant-enhanced electrokinetic remediation of petroleum-contaminated saline-alkaline soil" Maria Elektorowicz, Elnaz Rajaei
	10:55-11:20 "Limitations of scaling up the electrokinetic remediation process" Mathilde Betremieux
	11:20-11:45 "Remediation of soils contaminated with organic multi-pollutants and mono-pollutants by extraction of soil vapours: Study of the effect of water content and soil nature on SVE" Khaoula Esslimani
	11:45-12:10 "Measuring Electro-osmotic Coefficient in Kaolinite" Nasser Eslami, Lisbeth M. Ottosen, Elisa Franzoni , Juanma Paz Garcia, Jorge Feijoo
12:10-12:30	Closing session
12:30 to 14:00	Lunch
14:00 to 14:45	Keynote Lecture 2: A. Elshawabkeh (Northeastern University, Boston, USA) "Coupling Electrochemical Advanced Oxidation and sorption for water treatment"
14:45 to 16:45 Session 2 (Chair: Mohamed Ammami)	Recovery of metals, organic compounds, phosphorous, etc
	14:45-15:10 "New design for electro-dialytic recovery of phosphorous from sewage sludge ash" Lisbeth M. Ottosen, Pernille, E. Jensen, Ana T. Lima, Gunvor M. Kirkelund
	15:10 -15:35 "Assessing porous media properties using a 2-electrode measuring system" Claire Chassagne
	15:35-16:00 "Large scale electro-kinetic remediation of estuarine sediments: studying the physico-chemical, chemical and mineral properties" H.J. Kanbar, M.T. Ammami, A. Zein Eddin, A. Benamar
	16:00-16:25 "Extraction of chloride and toxic metals from MSWI fly ash by washing and electro-dialytic treatment" Gunvor M. Kirkelund, Benjamin A.r Ebert, Lisbeth M. Ottosen
16:25-16:45	Closing session
16:45 to 17:00	Coffee break

17:00 to 17:45		Keynote Lecture 3: K. Wittle (PhD, retired CTO from EPI, Williamsburg, USA) "Lessons Learned Over 50 Years of Applying DC Technology in the Field"
Posters session	17:45-18:30	Recovery of rare earth elements from mining waste by electrokinetic-assisted phytoextraction Hassay Medina-Diaz, Jacinto Alonso-Azcarate, Francisco Javier Lopez-Bellido, Martín Muñoz-Morales, Luis Rodriguez
		Reconstructing soils from waste: effect of EK remediation of dredged sediments on plant growth H.J. Kanbar, M.T. Ammami, A. Benamar
		Investigation of physico-chemical and mineral properties of dredged sediment during EK remediation A. Zein Eddin, H.J. Kanbar, M.T. Ammami, A. Benamar
		Electrocoagulation coupled to electro-oxidation for the electrochemical treatment of hemodialysis wastewater in the presence of pharmaceutical products V. J. González-Nava, F. J. Bacame-Valenzuela, Y. Reyes-Vidal, J. Manríquez, S. Sepúlveda-Guzmán, and E. Bustos
		Electrochemical degradation of toluene using TiO <sub>2</sub> nanotubes K. V. Bolaños-Romero, A. Sandoval-González, J. C. Zárate-Valdovinos, Goldie Oza, J. Manríquez, and E. Bustos
		Electrochemical degradation of Amoxicillin using different electrode materials in a neutral medium M. J. Yáñez-Ángeles, F. J. Bacame-Valenzuela, Y. Reyes-Vidal, E. Bustos
		"Phytoextraction of chromium by Raphanus sativus L. under exogenous application of Citric Acid" Mohammed Bouhadi, Fatima Zahra Falah, M'hammed El Kouali, Samia Yousefi, Mohammed Talbi, Hassan Fougrach
		"Adsorption of Malachite Green in aqueous solution onto Moroccan green clay: Kinetic, isotherm, and thermodynamic" Fatima-Zahra Falah, Mouna Latifa Bouamrani, Ayoub Lahmidi, Nora Baouahi, Mohammed Bouhadi, Mohammed Talbi, Samia Yousfi
		"Mineral Alterations in Clay Soils under the Influence of Electric Field Application" D. Nesterov, V. Korolev, K. Victoria, S. Zakusin, S. Garanina, M.S. Chernov, V.N. Sokolov
		"Paracetamol Electrochemical Detection on Graphite Nanofilms Prepared by Chemical Vapor Deposition" Monica Cerro-Lopez, Daniela Luna-Gazcon, Jessica Campos-Delgado, Carlos Martinez-Huitle
		"Effectiveness of electroosmotic drying of an unsaturated soils" Salima Bouchemella, Hanene Souli, Jean-Marie Fleureau, Said Taibi, Ammami Tahar
"Cation-exchange membrane and citric acid enhanced electrokinetic remediation of a nitrate- and phosphorus-contaminated green house soil" Cong Zhou, Yue Song, Hui Sun, XiaodongDing, YongCai		
"Simultaneous removal and recovery heavy metals from contaminated soil by coupling EDTA-washing and cathodic reduction" Hui Sun, Yue Song*, Cong Zhou, Yo		
18:30	Welcome Cocktail	

Wednesday, 21 September, 2022	
8:45 am to 9:30 am	Keynote Lecture 4: M. Electrowicz (Concordia University, Montreal, Canada) "Recent achievements in the application of electrokinetics in Canada in view of sustainable development principles"
9:30 am to 9:45 am	Coffee break
9:45 am to 11:45 pm Session 3 (Chair: Claire Chassagne)	Applications of Electrokinetics to: Remediation of soils, sediments and other materials
	9:45 -10:10 "Potentialities of the electrokinetic technology to remove As from very different soil horizons from an accidentally contaminated soil" Florence Portet-Koltalo, Ahmed Benamar, Mohamed-Tahar Ammami
	10:10-10:35 "Electro-supported aerobic TCE degradation" Steffen Hertle, Andreas Tiehm
	10:35 -11:00 "The application of electroosmotic dewatering - as part of the necessary processes for transforming lake sediments into valuable products" Huilin Li, Lisbeth M. Ottosen
	11:00-11:25 "Discussion on Recovery of Phosphorus and Removal of Heavy Metals from Lake Sediments using Electrodialysis" Aishwarya Paradkar, Pernille E. Jensen, Lisbeth M. Ottosen
	11:25 -11:45 Closing session
11:45 to 13:15	Lunch
13:15 to 14:00	Keynote Lecture 5: K. Baek (Jeonbuk National University, Jeollabuk-do, Rep. of Korea) "Green remediation of Groundwater by Combining Electrochemical Oxidation and Metal Sulfide"
14:00 to 15:30 Session 4 (Chair: Florence Koltalo)	Electrokinetic combined techniques (Electro-Fenton, Bioelectro, phytoelectro, etc)
	14:00-14:25 "Coupling of Biobleaching and Electrokinetics for the removal of heavy metals from mine tailings" Irene Acosta Hernández, Matín Muñoz Morales, Francisco J Fernández Morales, Luis Rodríguez Romero, Jose Villaseñor Camacho
	14:25-14:50 "Adsorption and Electrochemical Oxidation of Sulfamethazine on Charcoal" Su-Min Lee, Jong-Gook Kim, Kitae Baek, Won-Gune Jeong
	14:50-15:15 "CaO <sub>2</sub> -based Electro-Fenton-Oxidation of 1,2-dichloroethane in Groundwater" Won-Gune Jeong, Jong-Gook Kim, Kitae Baek
15:15-15:30	Closing session
15:30 to 15:45	Coffee break

15:45 - 16:30	Key note Lecture 6: L. Ottosen (Technical University of Denmark) "Recovery of resources from particulate materials by electro dialysis".	
16:30 to 18:00 Session 5 (Chair: Krishna Reddy)	Water, wastewater, and sludge treatment	
	16:30-16:55	"Diclofenac Water Removal through Electrocatalytic and Photoelectrocatalytic Processes Based on Mesostructured Lead Dioxide Grown on Titania Nanotubes" Monica Cerro-Lopez, Jessica Campos-Delgado, Lucila Castro-Pastrana, Erika Bustos, Carlos Martinez-Huitle
	16:55-17:20	"Electrokinetic stabilisation of peat using a biobased ground improvement technique" Wilson Mwandira, Maria Mavroulidou, M.J. Gunn, M.U. Safdar, Jonathan Garelick, Hemda Garelick, Diane Purchase
	17:20-17:45	Investigation of physico-chemical and mineral properties of dredged sediment during EK remediation A. Zein Eddin, H.J. Kanbar, M.T. Ammami, A. Benamar
	17:45-18:00	Closing session
18:00 to 18:45	Closing symposium	
18:45 to 20:00	Transfer to the restaurant - free time	
20:00	Gala dinner	

Thursday, 22 September, 2022	
8:45 to 10:00	Visit of Le Havre City (UNESCO World Heritage) <a href="https://www.lehavre-etretat-tourisme.com/en/">https://www.lehavre-etretat-tourisme.com/en/</a> <a href="https://youtu.be/ZFs2HUuB4ic">https://youtu.be/ZFs2HUuB4ic</a> <a href="https://youtu.be/xcvdcEBO5kw">https://youtu.be/xcvdcEBO5kw</a>
10:00 to 11:00	Technical visit
11:15	Packed Lunch (delivery)
11:30	Departure of excursion: Le Mont Saint Michel <a href="https://youtu.be/oh88PbMydGk">https://youtu.be/oh88PbMydGk</a> <a href="https://bienvenueaumontsaintmichel.com/en">https://bienvenueaumontsaintmichel.com/en</a>
20:30 (arrival time)	Back to Le Havre university