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Addressing Emerging Contaminants in Food and the Environment Through Remediation, Sensing and Replacement Innovations

Location: Room 224 (Ernest N. Morial Convention Center)

Poster Session - March 20, 2024
Time: 12:00 pm – 02:00 pm
Location: Hall C

Organizer, Presiders:

Kalumbu Malekani, Ph.D., Smithers

Silvana Andreescu, Ph.D., Clarkson University

Nirupam Aich, Ph.D., University of Nebraska-Lincoln

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Morning Session - March 17, 2024

08:45 am – 08:50 am – Introductory Remarks

08:50 am – 09:10 am – Novel Conducting Molecularly Imprinted Polymer for Direct Quantification of Perfluorooctanoic acid (PFOA). Presenter: Sumbul Hafeez

09:10 am – 09:30 am – Low-level PFAS monitoring from natural aqueous systems using zeolite sorbents. Presenter: Nathaniel Sheehan

09:30 am – 09:50 am – Withdrawn

09:50 am - 10:10 am – Host-guest inclusion of a fluorescent coumarin-enamine probe with water-soluble macrocycles for the detection of metal ions. Presenter: Meagan Stanley

10:10 am - 10:20 am – Intermission

10:20 am - 10:40 am – Low-cost Portable Electrochemical Sensor for Rapid Detection of Perfluoroalkyl Substances (PFAS). Presenter: Abd Ur Rehman

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Morning Session - March 17, 2024 (Cont.)

10:40 am - 11:00 am – Quantitative insights into the relationship between emerging contaminant adsorption and surface-enhanced Raman scattering intensities. Presenter: Shengdong Liu

11:00 am – 11:20 am – Development and evaluation of a molecularly imprinted polymer-based fluorometric detection system for microcystins in harmful algal blooms… Presenter: Ashvin Fernando

11:20 am - 11:40 am – Water-stable ascorbic acid functionalized metal organic framework for fluorochromic ultra-sensitive detection of pollutant Cr(VI). Presenter: Gurjeet Kaur – NO SHOW

11:40 am - 12:00 pm – **Withdrawn**

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Afternoon Session - March 17, 2024

02:00 pm - 02:05 pm – Introductory Remarks

02:05 pm – 02:25 pm – High-temperature rapid electrothermal remediation of multipollutant soils. Presenter: Yi Cheng

02:25 pm – 02:45 pm – Environmental impact of PFAS on soil bacteria metabolomes. Presenter: Amanda May

02:45 pm - 03:05 pm – Sources and pathways of PFAS occurrence in water sources: Relative contribution of land-applied biosolids. Presenter: Lynda Peter

03:05 pm – 03:25 pm – Metal-Organic Frameworks based magnetically recyclable biosensor for the selective detection of enterotoxigenic S aureus. Presenter: Saloni Sharma

03:25 pm – 03:45 pm – **Withdrawn**

03:45 pm - 03:55 pm – Intermission

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Afternoon Session - March 17, 2024 (Cont.)

03:55 pm - 04:15 pm – Development of plant-derived polymers as non-toxic adjuvants for pesticides to protect pollinator health. Presenter: Dr. Rajani Srinivasan

04:15 pm - 04:35 pm – Use of coumarin-enamine based molecular probes for the selective detection of Ag+ ions. Presenter: Peyton Champion

04:35 pm - 04:55 pm – Using inclusion chemistry to increase the solubility of a para-bis-coumarin-enamine probe. Presenter: Leah Case

04:55 pm – 05:15 pm – Development of supramolecular macrocycle-functionalized SERS substrates for the sensitive and selective detection of PFAS in mixtures and natural water. Presenter: Seo Won Cho

05:15 pm - 05:35 pm – Enhancing Water Security and Defense: Exploring Graphene Nanoplatelet (GnPs) for Efficient Cyanotoxin and Micropollutant Removal. Presenter: Jesse Roberts