## November 3, 2021 (9:00-9:45, CET)



## **VENDOR WEBINAR:**

## **New Concepts to Speed up Pesticides Residue Analysis**

## Low Pressure GC - InLine Sample Preparation - Fast Polar Pesticide Analysis

Jaap de Zeeuw, Restek Netherlands Jan Pschierer, Restek Germany Emanuele Ceccon, Restek Italy

Jaap de Zeeuw from Restek Netherlands is going to report about a new concept for speeding up GC-MS analysis of Pesticides residue analysis, using short 0.53mm capillary columns (directly connected at the MS inlet), connected to a restriction column at the inlet, enabling a high vacuum inside the 0.53mm analytical column. The technique is known as LPGC (Low Pressure Gas Chromatography) or sometimes called "Vacuum GC". Under the conditions created, very fast separations were performed as the optimal carrier gas velocity is a function of the actual pressure inside the capillary, and typically 3x shorter run times are obtained by using this concept in Pesticides residue analysis.

Jan Pschierer from Restek Germany is going to report about Restek Revive ILSP - a new method for an automated removal of matrix components for the analysis of residual pesticides. Revive ILSP selectively retains matrix components from the sample extract and can be utilized as a standalone workflow or integrated into an existing QuEChERS workflow. ILSP was applied to multiple challenging commodities representing a wide range of compositions for the analysis of 61 pesticides.

Emanuele Ceccon from Restek Italy is going to report about a new Hybrid phase, optimized for small screening methods for polar pesticides, without having the disadvantages of HILIC methods. Such a small screening method for ESI negative polar Pesticides was recently added to the QuPPe panel of the European Reference Lab. But the potential of this phase is beyond this, also solving short chain PFAS and underivatized Amino Acid Analysis issues.