Mixed Waste Plastic Pyrolysis: Connecting the Dots Between Feedstock Quality and Oil Quality

Itero is a pyrolysis technology provider converting hard-to-recycle waste plastic back into a chemical feedstock for brand new circular plastics products. Working closely with commercial partners, we conduct extensive research and development to better understand how mixed plastic waste composition impacts pyrolysis oil quality on a real world scale.

Using data from our West London pilot plant, we've looked into feedstock contaminants, such as silicon, phosphorus, chlorine and sulphur, and their effects on oil yield and composition. We have developed specific post-treatment strategies to manage feedstock variability, with case study examples. These insights are critical for scaling reliable, high-quality output at our upcoming demonstration facility in the Netherlands, and contribute to building a truly circular plastics economy.

Presented by Geoff Smith, Chief Technology Officer

Geoff leads the engineering function, focusing on technology design and development. He has nine years' experience in pyrolysis plant development and operation, in addition to experience developing novel cleantech solutions. Prior to Itero, Geoff held the position of Research Scientist at the National Physical Laboratory. He holds the CEng, MIChemE designation, as well as an MSci in Physical Natural Sciences from University College London.