



Written on 24 February 2024



3 minutes of reading



Events

IFPEN

Environmental monitoring

Soil analysis and characterization

Biofuels and e-fuels



24 February - 03 March 2024

IFPEN is taking part in the annual French Agricultural Show, the must-attend event for all the sector's players... as well as an avant-garde research community of players who convert agricultural and forestry waste into biofuels, evaluate soils health and their carbon storage capacity, analyze soil respiration and air quality, etc. IFPEN's teams will be at stand E120, hall 4, to explain its latest innovations designed to address environment, energy and agronomy challenges of today and tomorrow.

### Analyzing carbon in soils: knowledge with numerous benefits

Plants **fix the carbon contained in CO<sub>2</sub>** to grow. But they also exchange some of it with fungi, bacteria and other microorganisms present in soils, which in turn consume it or use it to protect themselves.

It is this territory that IFPEN's researchers are exploring using a **soil quality analysis tool** (Rock-Eval®).

>> [Find out more about Rock-Eval®](#)

Rock-Eval® is used to qualify the organic matter present in soil. This knowledge is required from both an agronomic and climate point of view: the data acquired is used to estimate **soil fertility and its capacity to act as a carbon sink**.

[>> Soils, carbon sinks and climate player](#)

## **Making biofuels from agricultural and forestry waste**

Second-generation, or advanced biofuels are produced **without using the food component of plants** and their environmental footprints demonstrate greenhouse gas emission savings of between 80 and 90% compared to fossil references.

IFPEN has developed various biofuel production pathways based on the use of agricultural and silvicultural waste: incorporated directly into gasoline, kerosene or diesel, they offer a route towards the **immediate decarbonization of the transport sector!**

[>> Biofuels and e-fuels: renewable fuels of the future](#)

## **Analyzing soil respiration and air quality using Flair Box**

Finally, other major issues for the agricultural sector are soil/air exchanges, especially natural emissions resulting from soil respiration. Accordingly, IFPEN has developed Flair box, a tool capable of **measuring a wide range of gases in the atmosphere**, particularly nitrogenous molecules, at very low concentrations and in real-time.

[>> Read about the Flair Suite](#)

**We look forward to meeting you from 24 February to March 2024 at Paris Expo Porte de Versailles!**

Waste with a bright future: IFPEN presents its innovations at the Agricultural Show  
24 February 2024

Link to the web page :