

Dear customer, please enjoy reading our actual newsletter !

Frontier Laboratories' Europe Newsletter 04/2017 Merry Christmas Version



Meet us at upcoming conferences & exhibitions

We would be glad to meet you at upcoming conferences in 2017. Feel invited to listen our presentations on various applications and meet us at our booth.

Pyro 2018, 3.-8. June 2018, Kyoto, Japan: The most important conference on Analytical and Applied Pyrolysis

In Europe, you can meet us here:

EUBCE 2018, 14.-17. May 2018, Copenhagen: European Biomass Conference and Exhibition

SKZ Netzwerktag, 21. June 2018, Würzburg

Compounding World Expo, 27.-28. June, Essen



Featured Product

Frontier Laboratories is offering a broad range of innovative products around Analytical Pyrolyzer or μ -Reactor to increase the performance and flexibility of your PY-GC/MS system.

In this Newsletter we like to introduce the [Selective Sampler \(SS-1010E\)](#):

With this device installed, any set of peaks in the Evolved Gas Analysis curve obtained by Multi-Shot Pyrolyzer or Thermogravimetry (TG) can be heart-cut, and solvent peaks and high-boiling species can also be removed. The technique also eliminates flow path contaminations with polar species, and tars on the metal surfaces which are the problems of conventional rotary valve systems, resulting in reduced analysis time and easy maintenance of separation column and detector.

This new software controlled flow switching system what can be easily installed on all supported GCs and can be added to your PY-GC/MS system to enable automated heart-cuts !

New Technical Notes Available !

The applicability of your GC/MS system greatly expands using Frontier Lab's pyrolyzer and μ -Reactors. We always look for new applications and transfer these into easy-to-read technical notes. Currently, we have more than 100 technical notes downloadable for you in our searchable database - and it is growing continuously. Recently, some new technical notes have been added:



1. (PYA4-009E) : Effect of hydrogen carrier gas on Py-GC/MS analysis of polymers Part 3: Library search using existing database
2. (MCA-004E) : Components analysis using "Magic Chemisorber®" 3. Flavor Components in Peach/Strawberry Flavored Drink
3. (MCA-005E) : Components analysis using "Magic Chemisorber®" 4. Canned Beer
4. (PYA1-090E) : Sampling of micro-samples using Micro Sample Collector (2) - Qualitative analysis of unknown powders on table cloths –

[click here to download technical notes](#)



New Literature Available !

Our customers and collaboration partners are successfully working with Frontier Lab Pyrolyzer and μ -Reactors in Research and Development. Please find some brand new publications below:

On-line Analysis of Catalytic Reaction Products Using a High- Pressure Tandem Micro-reactor GC/MS

(A. Watanabe et al., Anal. Sci. 33 (2017) 1085-1089) 966-973

Tandem μ -reactor-GC/MS for online monitoring of aromatic hydrocarbon production via CaO-catalysed PET pyrolysis

(S. Kumagai et al., React. Chem. Eng. 2 (2017) 776-784)

Catalytic co-pyrolysis of biomass carbohydrates with LLDPE over Al-SBA-15 and mesoporous ZSM-5

(Y.-M. Kim et al., Catal. Today 298 (2017) 46-52)

Catalytic hydrodeoxygenation of Geodae-Uksae pyrolysis oil over Ni/desilicated HZSM-5

(H. Lee et al., J. Clean. Prod. 174 (2018) 763-770)

Aromatic hydrocarbon selectivity as a function of CaO basicity and aging during CaO-catalyzed PET pyrolysis using tandem μ - reactor-GC/MS

(S. Kumagai et al., Chem. Eng. J. 332 (2018) 169– 173)

Catalytic copyrolysis of cork oak and bio-oil distillation residue

(Y. Lee et al., Appl. Surf. Sci. 429 (2018) 95–101)

• many more publications are available !

[click here to download publications](#)

New Video Tutorials !

Please visit our website and watch our newest video tutorials which explain installation, operation and maintenance of Frontier Lab products in detail.

We have recently added video clips to demonstrate how to work with **F-SEARCH 3.5 Pyrolyzate-** and **EGA-** library.

Also, **2D Mass Chromatogram Display** and creation of User Defined Libraries (**EGA**, **Pyrogram**, **Pyrolyzate**) will be explained.



Click on each link to watch these videos on youtube !

[Please follow this link to see all available video tutorials !](#)



Merry Christmas

**Frontier Laboratories is wishing you
and your families a wonderful and
peaceful Christmas and a Happy New
Year 2018**

IMPRESSUM

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