

Press Release

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**New: TD-20 thermal desorption system
Enhanced capabilities – new sample introduction system
for GC and GCMS**

**High recovery rates of high-boiling-point compounds with
minimal sample carry-over /
Analysis of volatile and semi-volatile compounds /
Straightforward operation through electronic cooling**

Shimadzu, one of the world leaders in analytical instrumentation, is introducing its new TD-20 thermal desorption system. Thermal desorption is an efficient technique for trace-enrichment and sample introduction of volatile and semi-volatile compounds and it is used in many GC and GCMS applications. Typical applications are the determination of organic pollutants in air, vapors from synthetic materials or fragrance and flavor compounds in foods.

The new TD-20 offers high recovery rates and only minimal carry-over, even for relatively high-boiling components, as the tubings that come into contact with the sample are inert and do not contain any cold spots. The gas flows within the TD-20 are regulated via electronic pressure and flow control (Advanced Flow Control, AFC-2010) in order to guarantee the highest reproducibility.

Focussing using packed cold traps

During the first desorption stage, the sample components are thermally desorbed from a sample tube. The second stage, used for sample focussing, consists of leading the desorbed components over a cold trap filled with an adsorbent. In this way, very narrow peaks can be achieved. A Peltier element enables electronic cooling, eliminating the need for a cooling agent such as liquid nitrogen. Electronic cooling simplifies operation of the TD-20 and there is no need for continuous checking of coolant levels.

Easy operation

Maintenance of the TD-20 is remarkably simple, and one can exchange specifically the parts which become contaminated over time. For complete automation of the analysis, the TD-20 is equipped with an autosampler that can process up to 48 sample tubes. The TD-20 thermal desorber is directly controlled via the GCMSsolution/GCsolution software in combination with the TD control software.



Caption: TD-20 thermal desorption system

For further editorial questions, please contact: Uta Steeger
Shimadzu Europa GmbH, Albert-Hahn-Str. 6-10, 47269 Duisburg, Germany
Tel.: +49 (0) 203-7687410, E-mail: us@shimadzu.de

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