



Press Release:

Oxygen Atom Beam Source OBS

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Germany – Weil der Stadt, MBE Komponenten, a manufacturer of ultra high vacuum (UHV) and molecular beam epitaxy (MBE) components and systems announces the availability of the Oxygen Atom Beam Source OBS, an oxygen resistant thermal gas cracker for various applications in UHV, MBE and ALD technology.

The new Oxygen Atom Beam Source OBS produces an ion-free Oxygen gas beam. It has been developed and characterized in collaboration with Dr. K.G. Tschersich at the Institute of Bio- and Nanosystems (the former Institute of Thin Films and Interfaces), Research Centre Jülich.

The OBS is based on thermal dissociation within a DC-heated cracking tube. It provides a narrow angle distributed atomic Oxygen beam. Very efficient cracking of O₂ molecules with a degree of dissociation of more than 80% are achievable depending on operating conditions. Therefore, the O₂ background pressure in the chamber is very low as compared to other sources. A high Oxygen flux of up to 10¹⁶ atoms/s can be obtained. The OBS is a very reliable and highly efficient source for atomic Oxygen. It exhibits a very compact design and is easy to install and operate. Therefore, it is an ideal source for many applications which need atomic Oxygen, as for example: oxide layer deposition, surface oxidation or surface science.

About MBE Komponenten GmbH:

MBE Komponenten based in Weil der Stadt, close to Stuttgart, Germany is specialized in MBE equipment. The product range includes various evaporation sources like effusion cells, gas sources, valved crackers, e-beam evaporators and substrate manipulators, as well as MBE systems.

For more information please visit your web site at www.mbe-components.com

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