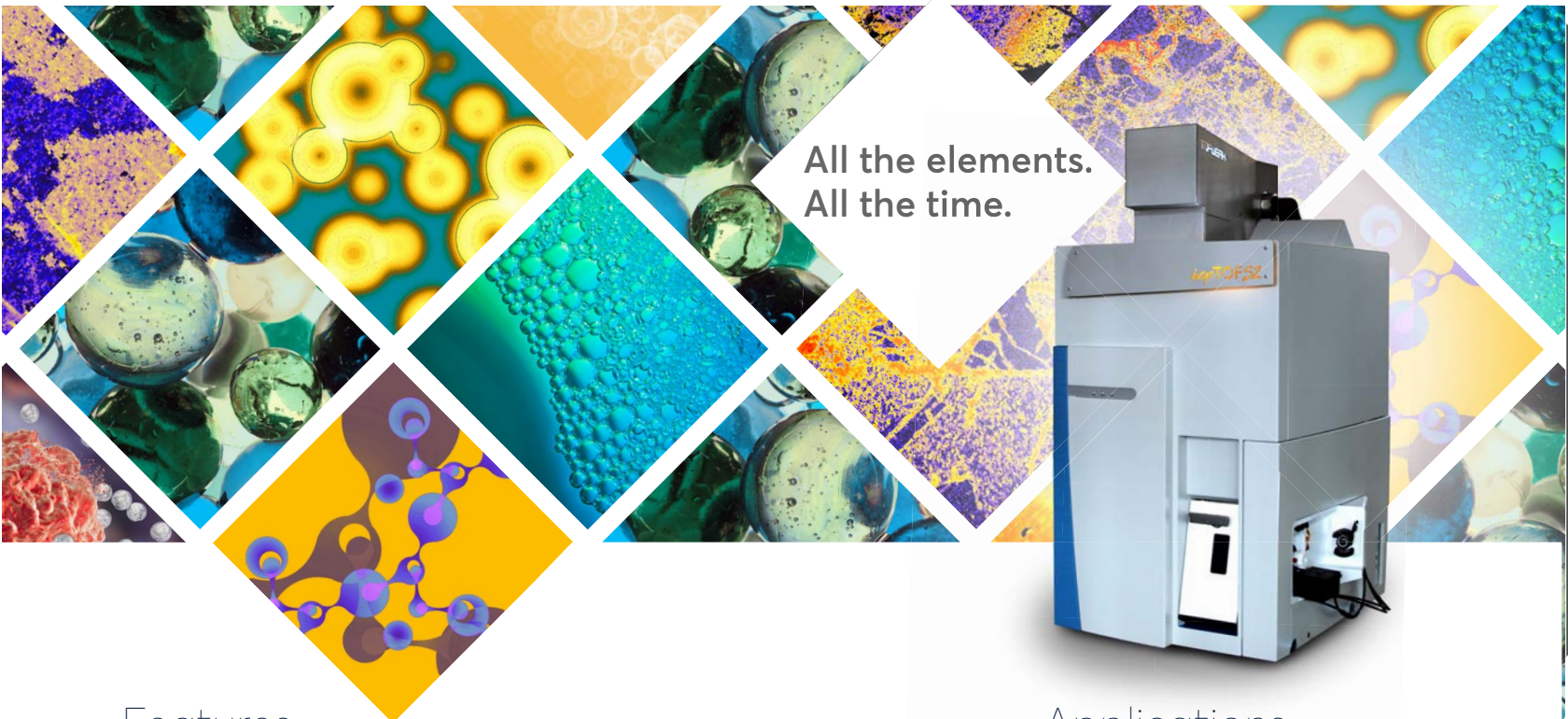




icpTOF S2

Maximum sensitivity for particles, cells, and bioimaging



All the elements.
All the time.



Features

- **All the elements. All the time.**
Never miss an analyte or interference signal with complete, full-resolution mass spectra.
- **Highest available sensitivity.**
Increase spatial resolution and detect smaller particles with high SNR.
- **Linear dynamic range.**
Simultaneously quantify trace and high abundance elements.
- **Maximum time resolution.**
Easily resolve transient laser pulses and particle signals.
- **Notch filter.**
Attenuate plasma and sample matrix ions.
- **Reaction collision cell.**
Suppress interferences with QCell™ collision/reaction technology.
- **Tofpilot acquisition software.**
Utilize single particle and integrated laser ablation workflows with live image preview.

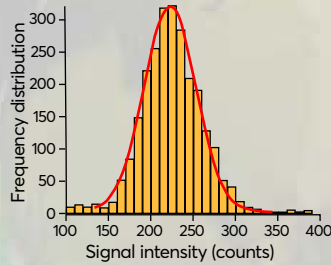
Applications

- **High Resolution Bioimaging**
- **Single Cell Analysis**
- **Single Particle Analysis**

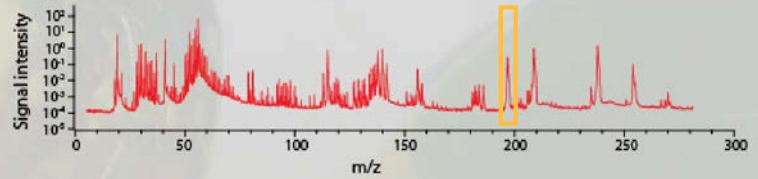
TOFWERK
www.tofwerk.com
icp@tofwerk.com

icpTOFS2

High Sensitivity for Single Particle Analysis



50 nm Au nanoparticles: 225 counts

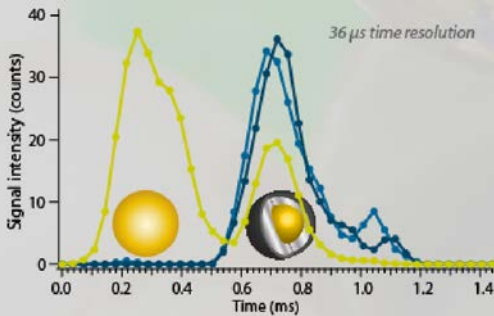


The sensitivity and speed of the icpTOF S2 bring great advantage to the analysis of nanoparticles or single cells.

Above: 225 counts are recorded for a 50 nm diameter Au nanoparticle*. This high sensitivity is achieved while measuring all elements.

Left: A mixture of pure Au NPs and AgAu coreshells is measured with 36 μ s time resolution.

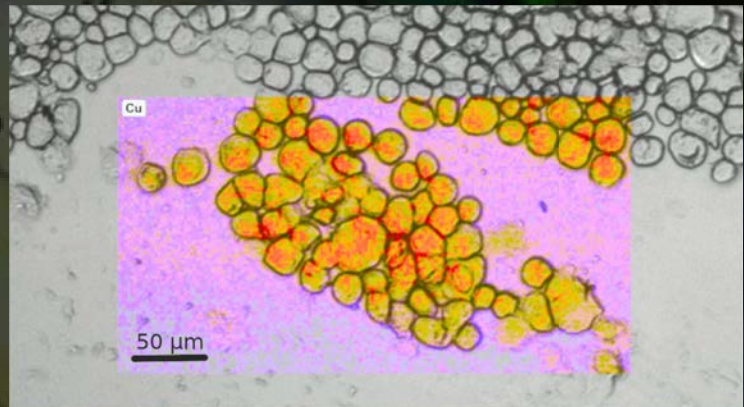
*equivalent to 390 counts for 60 nm particles



Laser Ablation Imaging of Single Cells

The high sensitivity of the icpTOF S2 enables bioimaging with increased spatial resolution and high SNR.

Right: Skeletal muscle cells with natural element concentrations imaged with 1 μ m spatial resolution.



Mass Resolving Power

>900 $\Delta M/M$ at FWHM

Sensitivity

300000 cps/ppb for ^{238}U (He CCT)
390 counts for 60 nm Au particle