

CEI-100

Capillary Electrophoresis Interface for ICP-MS

The CEI-100 interface features a specialized low-flow nebulizer and low-volume spray chamber that maintains the high resolving power of Capillary Electrophoresis while utilizing the high sensitivity and multi-element capability of ICP-MS. The CEI-100 is especially useful for metallomic studies.



The CEI-100 interface maintains the high resolving power of CE while utilizing the high sensitivity and multi-element capability of ICP-MS. Through the calculation of optimal fluid mechanical flow properties the CEI-100 provides the following benefits:

- Stable, high resolution electrophoretic separation
- Independent optimization of electrophoretic and nebulizer flows
- Low dead volume to preserve the high resolution of CE
- Minimal dilution (make-up liquid flow rate of <math><10\ \mu\text{L}/\text{min}</math>)
- Extremely low sample consumption (<math><1\ \mu\text{L}/\text{min}</math>)
- Elimination of detrimental secondary laminar flows within the CE capillary

CEI-100 components include a specialized low-flow micro-concentric nebulizer, spray chamber, connecting cross piece fitting, and mounting stand. The mounting stand includes positions to hold buffer and rinse solutions.

A few applications for the CEI-100 are listed on this page. A complete list of references is available at www.cetac.com/literature/literature_references.asp

APPLICATIONS

- Metals in complex biomolecular systems
- Gold-drug metabolic pathways (Platinum-protein interaction in chemotherapeutic research)
- Metallothioneine studies (e.g. Alzheimer's disease)
- Toxicological studies

Specifications

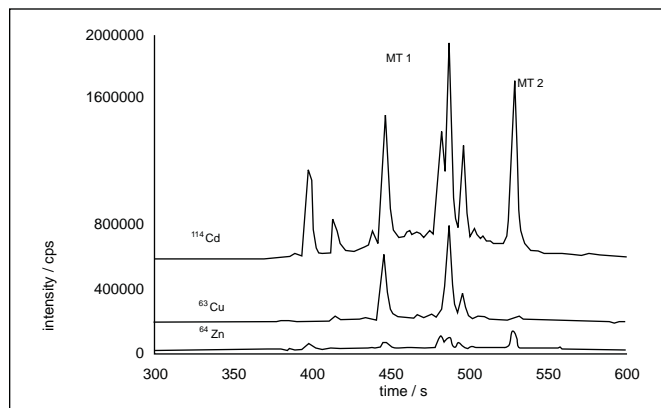
Nebulizer Uptake: 5 to 10 $\mu\text{L}/\text{min}$

Spray Chamber: Quartz, 8 mL volume

Buffer Vials: 5 x 15 mL PP (polypropylene)

Dimensions (W x H x D): 28.9 cm x 55.6 cm x 17.1 cm
(11.4" x 21.9" x 6.7")

Weight: 7.9 kg (17.4 lbs)



Separation of Metallothionein Isoforms by CE-ICP-MS

Conditions

Concentration: 100 mg/L

Injection: 20 mbar/second

Capillary Length: 70 cm

Warranty: 12 month limited