A hand-portable digital linear ion trap mass spectrometer

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Electronic Supplementary Information

Figure S1 Appearance of the DLIT-MS.

Table S1 The parameters used for the DLIT-MS

Voltage for different parts		**value**
Cell		**4.8 V**
Ion optics	**Lens1**	**-8 V**
	Lens2	**0 V**
	Lens3	**-55 V**
EC1(injection)		**4 V**
EC1 (cooling)		**16 V**
EC2		**20 V**
Digital rectangular wave frequency		**0.44-2.1 MHz**
Digital rectangular wave voltage		**±100 V**
Digital excitation wave frequency		**0.15-0.7 MHz**
Digital excitation wave voltage		**0-10 V**
VUV Lamp voltage		**-1100 V**
Detector voltage		**-1100 V**

Table S2 Mass drift for four observed compounds (48 h)

Molecular test	**benzene**	**toluene**	**monochlorobenzene**	**xylene**
Molecular mass	**78**	**92**	**106**	**112**
Δm (Th)	**±0.0315**	**±0.0215**	**±0.0405**	**±0.0320**