

# New research facilities for atomic mass spectrometry and ion beam analysis at IFIN-HH

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In this paper we present two new Cockroft-Walton tandem accelerators which were installed at IFIN-HH. The 1 MV HVE Tandetron accelerator is dedicated to atomic mass spectrometry (AMS) measurements, especially for  $^{14}\text{C}$  dating, while the 3 MV HVE Tandetron accelerator has the reaction chambers and detection system prepared for ion beam analysis (IBA) measurements, microprobe experiments and ion implantation [1, 2]. Both machines, manufactured by High Voltage Engineering in Netherlands, were commissioned at the beginning of 2012 and the preliminary tests results have been reported. The opportunities opened by these facilities are also presented.

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[1] <http://www.nipne.ro/facilities/facilities/tandetron1mv.php>

[2] <http://www.nipne.ro/facilities/facilities/tandetron3mv.php>