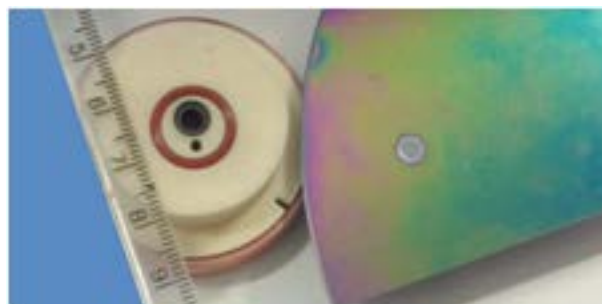


Revealing structures and embedded interfaces with pulsed RF GDOES

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Pulsed RF GDOES is a fast elemental depth profile technique capable to measure all elements (including H, D, O, C etc) with easy sample mounting (Image 1). With the recent introduction of DIP – an online differential interferometer - it also allows to accurately measure erosion rates and layer thickness with nanometric precision. The specificities of the GD plasma (high density, low average energy of the sputtering particles) make it in addition a very interesting tool to reveal structures for SEM observation and EBSD measurements. Some examples will be shown on flat surfaces and on cross sections. Changing the plasma gas from the classical Ar to a gas mixing with O addition offers Ultra-Fast Sputtering (UFS) of polymeric layers with excellent depth resolution and permits to access to embedded interfaces below organic coatings. The mechanisms of sputtering with “UFS” will be discussed and multiple applications ranging from PV to packaging or Li batteries will be presented.



Biography

Patrick Chapon is working as products Manager at Horiba Company, France. He started his employment duration 20 yrs at Longjumeau, France. He received his graduation from IFP graduate engineering school in the field of laser.

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