Atom Probe Tomography			
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	Summary		
	Atom probe tomography (APT) has become a key tool in materials science including nanoscience and microelectronics. APT is the only analytical microscope able to map out the 3D distribution of chemical species at the atomic scale. The analyzed volume is typically 50x50x500 nm3. Because of its ultimate spatial resolution, 0.1 nm in depth and a fraction of a nm at the sample surface, APT has a key position in physical metallurgy. It makes its possible to determine the chemical composition in a small region on the nm scale. It is particularly well suited for the investigation of the early stages of decomposition in alloys as well as to investigate interfaces and solute segregation to crystal defects. New specimen preparation techniques using focused ion beam techniques (FIB) have now opened the instrument to nanosciences including spin valve multilayers, nanopowders, ultrathin layers, quantum wells… Furthermore, laser pulsing of specimens has opened up a host of new possibilities for analysis of materials with low electrical conductivity including semiconductors or oxides that are key materials for microelectronics (ultra-shallow junctions, nanowires, magnetic semiconductors for spintronic). The last few years have been the witness of many breakthroughs and of impressive results at the forefront of ultimate performance of the instrument. In addition, synergistic developments in the complementary use of transmission electron microscopy including tomography and atom probe tomography are very promising. This symposium is focused on the latest applications and developments of APT in all fields of material science. Papers oriented towards methodology or even related on instrumentation improvements are also welcome.		