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Tutorial SC3 SIMS for Inorganic Analysis

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It is now clear for any materials or surface analyst that Secondary Ion Mass Spectrometry (SIMS) is a powerful technique for inorganic analysis, offering unparalleled sensitivity, both depth and lateral resolution, and elemental specificity. This course will provide a comprehensive overview of SIMS methodology, encompassing both fundamental principles and advanced applications in materials science, essentially taken from electronic industry, that offers a wide range of analytical needs, experimental and instrumental contexts.

Starting from the principles of SIMS (sputtering and ionization mechanisms, instrumentation) the course will tend to draw a large picture of the weight of instrumental and experimental parameters in the quality of the final analysis results, leading to meaningful information from their samples.