CONCORSO PUBBLICO, PER TITOLI ED ESAMI, PER L'ASSUNZIONE CON CONTRATTO DI LAVORO SUBORDINATO A TEMPO PIENO E INDETERMINATO DI N. 1 RICERCATORE DI III LIVELLO PROFESSIONALE DEL C.C.N.L. ISTRUZIONE E RICERCA.

AREA SCIENTIFICA: MICROSCOPIA AVANZATA E SCIENZA DEI MATERIALI.

BANDO N. 1/2025.

TRACCIA 1

Describe in detail a TEM/STEM methodology applied to the study of a functional nanostructured or complex material (e.g., complex oxides, semiconductors, ferroelectrics, metallic catalysts). In particular, with respect to correlations between microstructure and functional properties, the candidate should describe how atomic-scale observations - such as crystal defects, dislocations, interfaces, cation ordering, strain fields, or heterostructures - can be connected to the material's electronic, ferroelectric, catalytic, or optical properties and which can be the benefits of the combination of Electron Microscopy based techniques with complementary techniques. The candidate should also discuss the role of the sample preparation and manipulation strategies.