

Curriculum of prof. Maurizio De Crescenzi

Born in Rome 6 June 1951.

Thesis "summa cum laude" in Solid State Physics (November 1975) at the University "La Sapienza" of Rome (Italy). From 1976 (November) to 1979 (February) he has been postdoctoral fellow at Laboratoire d'Optique des Solides, Paris VI University, Paris (France).

From 1979 his research activity has been focused on the study of the structural and electronic properties of surfaces (clean and interacting with chemisorbed species), and of metal/semiconductor interfaces by means of spectroscopic techniques such as Auger, XPS and Energy Loss in reflection and STM (Scanning Tunneling Microscopy) microscope.

During these years he has contributed actively to the development of some electron spectroscopic techniques as local surface structural tool, as the EELFS (Extended Energy Loss Fine Structure) and the EXFAS (Extended Fine Auger Structure). He has received for this several invited talks and oral presentations at topic Surface Science Conferences.

He has been Associated Professor of Electromagnetic Waves at Calabria University (Italy) (1979-1983), Associated Professor of Physics Laboratory at L'Aquila University (Italy) (1984-1985) and at University of Rome "Tor Vergata" (Italy) (1985-1990).

In 1990 he has been appointed Full Professor of Solid State Physics at the Physics Department of the Camerino University (Italy). During this period he has been responsible for the "Corso di Laurea in Fisica" and as a member of the Administration Council of the Camerino University. From 2001 he has moved as Full Professor in Solid State Physics at University of Rome "Tor Vergata" .

During these years he has investigated several aspects of the interaction of hydrocarbon molecules with silicon surfaces to form ordered and epitaxial film of

silicon carbide. More recently he has synthesized by CVD (Chemical Vapor Deposition) method carbon nanotubes both single and multiwall. The atomic and electronic characterizations have been performed through STM and TEM. He has received, from the Ministry of Research a PRIN2005 (Progetto di Ricerca di Interesse Nazionale) 210.000 euro to synthesize carbon nanotubes for opto and nano electronic applications.

He is author and coauthor of more than 210 international publications and of a book ("Electron Scattering and Related Phenomena", written in collaboration with prof.M.N.Piancastelli) concerning electronic and structural properties of the matter and applications of electron scattering. His Hirsch factor is 31 and his works have been cited more than 2800 times.