

Professor Maurizio Cossi

Dipartimento di Scienze e Tecnologie Avanzate (DISTA)

Università del Piemonte Orientale "Amedeo Avogadro"

Maurizio Cossi was born in Brescia in 1966. He obtained the degree in Theoretical Chemistry in 1991 at the Scuola Normale Superiore (Pisa), where he concluded also his PhD in 1995.

Since 1995 to 2001 he has been Researcher in the Department of Chemistry of the University of Naples "Federico II", since 2001 to 2006 Associate Professor of Physical Chemistry in the same Department. Since 2006, October he is Associate Professor of Physical Chemistry in the Department of Advanced Sciences and Technologies (DISTA) of the Università del Piemonte Orientale.

His main research interests involve the development of theoretical models and computational algorithms for the quantum mechanical calculation of molecular properties, with a particular focus on solute-solvent interactions and on molecular layers adsorbed on conductor and semiconductor surfaces.

Co-author of the Gaussian package (the most used quantum mechanical computational program, that is currently distributed as Gaussian09), where he gave an important contribution to the solvent effect description.

Co-author of MOLCAS program (version 6), one of the most used package for multi configurational calculations.

He has implemented a procedure for the calculation of solute-solvent interactions in periodic systems in the CRYSTAL03 program, distributed by the University of Torino to several international research groups.

He has inserted an up-to-date model for the simulation of solvent effects in a Car-Parrinello code for molecular dynamics.

Director of the Materials Science section of the Laboratory of Structure and Dynamics of Molecules at the Chemistry Department of the University of Naples.

Director of the section for "Theoretical and Experimental Methodologies" of the Alessandria Research Unit of the National Institute for Materials Science and Technology (INSTM).

He is collaborating with several Italian and foreign research groups, mainly in Rome, Pisa, Dresden, Lausanne, Lund, Karlsruhe, London and Israel.

He is coordinator of the Modeling and Computational work package of INNOVASOL project (2009-2012), funded by EU and aimed at developing a new generation of dye sensitized solar cells.

He has published 76 papers in international journals, and 4 chapters in collective books.