

## The Author

### Description



### Cristina de Castro

Dr. Cristina de Castro graduated in 1992 with honors and November 1993, she started her Ph.D. in Chemistry, in the University of Napoli Federico II, focusing her attention on the structural determination of polysaccharides from phytopathogenic bacteria. After completing her PhD, she worked for 16 months in the Chemistry Laboratories of the Carlsberg Research Center. In 1998, she started a Post Doctoral fellowship in Italy which she left in November 1999 in favor of an Assistant Professor position at the University of Napoli.

Dr. de Castro research activity is in carbohydrate structural chemistry. Her training in this field started during the bachelor thesis, when she determined the structure of the mucilage produced from a plant, *Ceratozamia spinosa*. The main target was to reveal a chemotaxonomic correlation between individuals of the same family, looking at the carbohydrate composition. She continued her work on carbohydrate structural chemistry, widening her interests by including carbohydrate membrane components of bacterial first and in the recent years from viral source.

Dr. de Castro is experienced in carbohydrate analysis and in the development of state of art chemical and spectroscopical approaches valuable for structural analysis of any carbohydrate-containing sample. These approaches have been applied with success to different kinds of carbohydrates, as those related to sulfated chondroitin or to the elucidation of the biosynthetic pathway of viosamine in the giant virus Mimivirus, or as those isolated from *Paramecium bursaria chlorella* virus. It is worth mentioning that host-independent viral glycobiology is a new emerging aspect of glycoscience.

The research activity of Dr. de Castro is translated in the production of more than 100 scientific publications, and in fruitful collaborations with several research institutions of international relevance such as the Research Center in Borstel (Germany), the Center of Biological Investigation (Madrid, Spain), the Department of Experimental Medicine and Center of Excellence for Biomedical Research (University of Genova), and with Department of Plant Pathology (University of Nebraska Lincoln, NE, USA).