Giuliana Magnacca was born in Pescara on November 10th, 1966.
She obtained the degree in Chemistry (1990) with the thesis "Influence of support and pretreatment on the chemistry of chromium supported on silica", where FTIR spectroscopy was widely applied to study probe-molecules adsorption phenomena. For the next four years she was involved in the study of aluminas and modified aluminas (with phosphate groups, Sm2O3, PbO, CaO, BaO, CeO2, and so on), also supporting noble metals as platinum used for automotive converters, collaborating with CRF (FIAT Research Center) and she developed the characterization of the samples using: i) gas-volumetric adsorption for the determination of surface area and porosity, ii) X-Ray Diffraction to individuate phases and dimentions of crystallites, iii) Transmission Electron Microscopy (in High Resolution) for a more detailed structural and morphological characterization of samples. In the same period she began the study of adsorption using microcalorimetry and this technique is still widely applied for the study of several systems (aluminas and modified aluminas, zirconias and sulfated zirconias, iron oxides and sulfated iron oxides, mixed oxides etc. using CO, H_2O, CO_2, CH_3CN, hydrocarbons and so on). Two-years-fellowship was granted by the chemical industry Ausimont for the characterization of heterogeneous catalysts for hydrofluorination of hydrocarbons (for the elimination of CFC as propellent in some formulations). The PhD in Chemistry was obtained in 1998 with the thesis "Electron microscopy, adsorption microcalorimetry and optical spectroscopies for the characterization of structure and reactivity of polydispersed oxidic systems", under the supervision of prof. C. Morterra. During the PhD, she worked on XPS (X ray Photoelectron Spectroscopy) in the Surface Science Laboratory of New South Wales University (Sydney, Australia, supervisors Dr. Paul Pigram and Prof. Robert Lamb) and on ^{129}Xe-NMR with Dr. Tim Bastow (CSIRO, Monash University, Melbourne). She became researcher in Physical Chemistry in 1999 at the Chimica IFM Department of Torino University.
In 2011-2012-2013 she spent six months as visiting scientist at la Plata University (Argentina) and Sao Paulo University (Brasil) participating to an European mobility project Marie Curie IRSES (EnvironBOS project).
She is employed in the Chemistry courses (of second level) and third level courses for the Doctoral School of Sciences and Innovative Technologies, and she is tutor of many thesis of laurea, both of the first and of the second level.
The technical skills concern:
1) the study of morphology and structure of materials through the use of gas-volumetric apparatus for N2 adsorption for determination of area and porosity, Scannig and Transmission Electron Microscopies (coupled with EDS probe) for the characterization of materials at the micro and nanoscale, X-ray Diffraction for the analysis of regular structures.
2) the surface characterization of materials by means of FTIR spectroscopy of adsorbed probe molecules for evaluating surface acidity, basicity, hydrophilicity and hydrophobicity. The qualitative results obtained through FTIR spectroscopy measurements are coupled with quantitative and calorimetric determinations using microgravimetric and adsorption microcalorimetric measurements.
3) the thermal stability of samples carried out via thermal analyses (Thermo Gravimetric Analysis, Differential Scanning Calorimetry).
The scientific interests concern the physico-chemical characterization of materials for (photo)catalysis, biomedical applications, environmental applications and so on, and many scientific collaborations with Italian and foreign Universities are active on these fields.
She is author of 56 publications in international journals with referees, and of many contributions in national and international congresses in the field of Physical Chemistry, Surface Science, Catalysis, Materials Science.

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