

NEW MEMBERS OF EDITORIAL BOARD



Gabriella Borzone

Dipartimento di Chimica e Chimica Industriale,
Università di Genova, Via Dodecaneso 31 , 16146
Genova (Italy)

Tel: +39 010 3536153

Fax +39 010 3625051

e-mail: borzone@chimica.unige.it

Dr Gabriella Borzone is Professor in General and Inorganic Chemistry at Genoa University, Faculty of Sciences - born on December 1949 in Genoa, (Italy)

Qualifications:

- First-class honours degree in Chemistry, 1974, Genoa University
- Assistant Professor (1977-1985)
- Associate Professor of General and Inorganic Chemistry (1985-2003)

Teaching activity:

- Inorganic Chemistry 2nd and Laboratory
- Chemistry and Technology of Inorganic Materials
- Functional and Structural Inorganic Materials

Academic and Scientific Positions:

- Italian representative in the Management Committee of the COST Action MP0602

"Advanced Solder Materials for High Temperature Application (HISOLD)" since 2007 and responsible for the Working Group 1 "Mesoscale studies - thermodynamic and kinetic properties of materials".

- Team co-ordinator of the project of National Interest of the Italian Ministry of Education on " Crescita e caratterizzazione chimico fisica di film di materiali metallici e ceramici" 2004-2006

- Member of the Management Committee of the Inorganic Chemistry Division of the Italian Chemical Society (since 2003)

- Director of the Genoa Research Unit of the "Consorzio Interuniversitario Nazionale per la Scienza e Tecnologia dei Materiali (INSTM)"(1999 - 2004).

- Coordinator of the "Scienza e Tecnologia dei Materiali" Doctorate Course (since 2005)

- Delegate for International Exchanges - Faculty of Sciences - University of Genoa (since 2006)

- Member, representative of the University of Genoa, of the "European Chemistry Thematic Network (ECTN)" (since 2000)

- Departmental Coordinator in the framework of the European Community Action scheme for the Mobility of University students for the Degree course in Chemistry at the University of Genoa (since 1995).

- Membership of the International Relationship Committee of Genoa University (1990-1996) as representative of the Science Faculty.

- Member of the Management Committee of the "Associazione Italiana di Calorimetria ed Analisi Termica (AICAT)" (1983-1987)

- Referee of J. Alloys and Compounds, Termochimica Acta, J. Thermal Analysis and Calorimetry.

- Guest Editor of special issues of international Journals

- Member of Organizing and Scientific Committees of International and Italian Scientific Meeting and Conferences.

Research activities:

The main contributions are the following:

- Solid State Chemistry and Alloys (preparation, characterization and systematics of intermetallic compounds): particularly involved in the investigation of R-Ni and R-Ni-Al (R=rare earth) crystalline alloys, candidates for a variety of energy applications.

- Thermodynamic properties of metallic alloys: determination of enthalpies of formation, fusion and heat capacities of solid alloys of rare earths, actinides, Mg, Al, Ni, etc., by using calorimetric and

potentiometric techniques.

- Investigation by thermodynamic measurements of binary and ternary alloys candidates as lead-free solders. This activity is carried out in the framework of the COST Action 531 "Lead-free solder Materials" and the COST ACTION MP0602 "Advanced Solder Materials for High Temperature Application (HISOLD)".

- Engaged in the construction and use of different types of calorimeters working at room and high temperature.

- Phase equilibria experimental investigation, crystallochemistry of intermetallics

- Electrocatalytic behaviour of R-T-Al, R-T-T' (R= rare earth elements; T, T' = transition metals).

Cooperations with different national and international research groups among which: Institut für Anorganische Chemie/Materialchemie, Universität Wien, Ecole polytechnique Universitaire de Marseille, Université de Provence Aix-Marseille I (France), Dipartimento di Scienza dei Materiali del Politecnico di Torino (Italy); Dipartimento di Chimica dell'Università di Roma La Sapienza (Italy); Istituto Energetica ed Interfasi, CNR-IENI, Genova (Italy).

Publications:

Co-author of more than 90 original publications on refereed international journals and more than 150 communications at national and international meetings.

1 Patent N. GE2006A000118 (2006) on "Leghe a base di Argento e procedimenti per la loro realizzazione, particolarmente per la fabbricazione di gioielli"