

GIOVANNI MARLETTA

CURRICULUM VITAE

1 – CV and scientific activities

PERSONAL

Giovanni MARLETTA

1.1 - EDUCATION AND ACADEMIC APPOINTMENTS

- “Laurea” in Chemistry at University of Catania, “summa cum laude” 1980.

- September 1980-February 1984: **Research Fellow** at University of Catania, Department of Chemistry, Laboratory of Physical Chemistry of Surfaces and Interfaces.

- February 1984- October 1992: **Assistant Professor of Physical Chemistry at University of Catania**, Faculty of Math., Phys. and Nat. Sciences, Department of Chemistry

- November 1992- October 1994, **Associate Professor of Physical Chemistry at University of Calabria (Cosenza)**, Faculty of Math., Phys. and Nat. Sciences, Dept. of Chemistry.

- November 1994 - October 1996, **Full Professor of Physical Chemistry at University of Basilicata (Potenza)**, Faculty of Math. Phys. and Nat. Sciences, Dept. of Chemistry.

- November 1996 - present, **Full Professor of Physical Chemistry at University of Catania**, Faculty of Math. Phys. and Nat. Sciences, Dept. of Chemistry.

OTHER ACADEMIC DUTIES

- 1991- 1994, Lecturer of Physical Chemistry at University of Messina, Faculty of Math., Phys. and Nat. Sciences.

- 1994 - 1996 Lecturer of Physical Chemistry at University of Catania, Faculty of Math., Phys. and Nat. Sciences.

- 1996 - 2001, President of the Bachelor Course in Materials Science, Faculty of Math. Phys. and Nat. Sciences, University of Catania.

- 2005 – 2008, Coordinator of the XX cycle of Doctorate Course in Chemical Sciences at University of Catania.

- 2006 – 2009, Coordinator of the XXI cycle of Doctorate Course in Chemical Sciences at University of Catania.

- 2007 - 2010, President of the Bachelors (three-years) and Masters (two-years) of Science in Chemistry and Industrial Chemistry, Faculty of Math. Phys. and Nat. Sciences, University of Catania.

- 2012 - present, President of the Master of Science in Chemistry of Materials, University of Catania.

1.2 - RESEARCH INTERESTS AND RESULTS

The overall research activity of G.Marletta in a temporal succession has involved the fields of

1. **Nanotechnology, molecular surfaces and thin films (1999 – present).**
2. **Interaction of biological systems with synthetic surfaces (1996 – present).**
3. **Radiation-Matter Interactions (keV-MeV ions in polymers) (1981 – 2002).**

The main achievements of the research activity of G.Marletta can be summarized as follows:

The scientific activity has been reported in about 190 papers published in International Journals, more than 90 Invited Lectures at International Conferences and Schools and about 300 oral and poster presentations in International Conferences (separate lists available). Furthermore, G.Marletta has also lectured along the years in many Academic and Industrial Institutions in many Countries, including USA, Germany, France, UK, Japan, Spain, Sweden, Belgium, Hungary, Brasil, China, India, Mexico, Canada and Italy. Among the others, one may quote Seminars at T.J.Watson Research Center of IBM (Yorktown Heights, N.Y., USA); Bell Laboratories (Murray Hill, N.J., USA); University of Quebec, (Quebec City, Canada); CIRIL-CEA at Grand Accelérateur d'Ions Lourds (Ganil, Caen, France); GSI (Darmstadt, Germany); Toyota Research Laboratory (Nagoya, Japan); INSA (Lyon, France); Institute for Material Science (Friedrich-Schiller-Universität, Jena, Germany); Université du Maine (Le Mans, France); University of Muenster (Muenster, Germany); Université de Reims-Champagne (Reims, France); Université de Cergy-Pontoise (Paris, France), etc... (Invitation to Italian academic institutions are not reported here).

G.Marletta has coedited 11 Proceedings volumes on topics including Materials for Photonics, Ion Beam effects in Materials, Current Trends in Nanotechnology, Biofunctional Surfaces, etc...

Bibliometry in short:

SCOPUS: ~ 3150 citations

SCOPUS H-index: 29

1.3 - RESEARCH MANAGEMENT

- 1984 - 1990 - Member of the Consulting Committee for Research Funding in Chemistry of the Univ. of Catania.
- 1988 - 1994 - Member of the National Committee for Chemical Sciences of the Italian National Council of Research (C.N.R.).
- 1990 - 1997, Member of the Administration Board of the Consortium for the Development of Research in Optoelectronics (OPTEL InP).
- 1992 - 2000, Member of the Board of Directors of the Division of Physical Chemistry of the Italian Society of Chemistry (S.C.I.) (three full mandates).
- 1992 – 2002, Director of the Laboratory of Surfaces and Interfaces (SUPERLAB) of the Consortium Catania Ricerche (University of Catania, ST Microelectronics, SIFI SpA, etc...).
- 1996 – 2001 - Member of the Board of Directors of the Italian Targeted Project on “Special Materials for Advanced Technologies II” as Coordinator of the Sub-project on “Materials and Processes for Electronic, Optical and Electrochemical Applications”.
- 1998 – 2001 - Director of the Section of National Institute of Science and Technology of Materials (INSTM) at University of Catania (3 years term).
- 1999 – Member of the Board of Delegates of the European Materials Research Society (E-MRS).
- 1999 – present - Member of the Executive Committee of the European Materials Research Society (E-MRS).

- 1999 – 2000 - Vice-President of the European Materials Research Society (E-MRS) (years 1999-2000).
- 2000 – 2003 - President of the European Materials Research Society (E-MRS).
- 2002 – present - Promoter and Coordinator of the Laboratory for Molecular Surfaces and Nanotechnology (LAMSUN), University of Catania.
- 2001 - 2006 - Member of the Administration Board of the Consortium for the Development of Research in Optoelectronics (OPTEL InP).
- 2002 – 2006 – Director of of the Italian Targeted Project on “Special Materials for Advanced Technologies II”, National Council of Research (CNR, Rome).
- 2002 - 2006 – Member of the Expert Advisory Group of EU Commission for the 6th Framework Plan - Priority topic 3 “Nanotechnology, Knowledge-based materials, Innovative Processes” (four-year term).
- 2003 – 2005 – Member of the Peer Review Panel of the Engineering Physical Sciences Research Council (EPSRC), UK (three-year term).
- 2003 – Member of the Review Panel for the NEST Program (IST priority, 6th FP).
- 2004 – present - Fellow of the Royal Society of Chemistry (RSC, UK).
- 2006 – present - President of the National Interuniversity Consortium for the Study of Large Interface Systems (CSGI) (Firenze, Italy).
- 2007 – present - Delegate of the University of Catania for the District of Microsystem and Nanotechnologies.
- 2008 – Member of the Panel on “New Trends in Irradiation of Materials”, International Atomic Energy Agency (IAEA), Wien (Austria).
- 2008 – 2012 - President of the “Sicilian District of Micro- and Nanosystem” (Public Company involving University of Catania, University of Palermo, University of Messina, CNR, INAF, Sicilian Regional Government, ST-Microelectronics SpA, SIFI SpA, 11 further PMI).
- 2010 – Member of the Panel on “The role of radiation techniques in Nanoscience and Nanotechnology”, International Atomic Energy Agency (IAEA), Wien (Austria).
- 2011 – present – Coordinator of the “Nanotechnology Laboratory” of University of Catania (Italy).
- 2015 2018 – Member of the Borad of Directors of Physical Chemistry Division of SCI (Società di Chimica Italiana).
- 2018 present - Italian Delegate for the Physical Chemistry Board of EuChemS (European Association for Chemical and Molecular Sciences).

1.4 – MEMBERSHIP OF SCIENTIFIC COMMITTEES (RESEARCH INSTITUTIONS)

1.4.1 - International Research Bodies

- n. December 1991- December 1997 - Member of European Committee for COST-Chemistry, D-5 Action: “Surface and Interface Chemistry”
- n. 1992 - 1993 - Advisory Committee for the E-MRS European network on “Surface Engineering”
- n. 1995 - 2000 - Member of the Scientific Committee of the French National Facility “Grand Accelérateur d’Ions Lourds” (GANIL), Section of “Physique des Ions Rapids”, Caen, France.
- n. 1996 - Member of the Scientific Committee of the Ion Beam Facility of Strasbourg (CNRS) “Laboratoire PHASE”, Strasbourg, France.
- n. 1997 - 1998 - Scientific Committee of the Laboratoire SRSIM-CEA, Saclay (France)
- n. 1999 - 2000 - Scientific Committee of the Laboratoire LSI-CNRS, Palaiseau (France)
- n. 2002- 2006 – Member of the Expert Advisory Group of EU Commission for the 6th Framework Plan - Priority topic 3 “Nanotechnology, Knowledge-based materials, Innovative Processes” (four-year term), Bruxelles, Belgium.
- n. 2003 – 2005 - Member of the Peer Review Panel for the Engineering and Physical Sciences Research Council (EPSRC), London, UK.
- n. Member of the « IUMRS Commission on Membership Affairs » 2016.

1.4.2 - Membership of Scientific Committees and reviewing activity for Italian Research Bodies and Projects

- n. 1990 - 1995 - Scientific Committee of the “Istituto di Spettroscopia Molecolare” (ISM), C.N.R., Bologna.

- n. 1990 - 2000 - Scientific Committee of the “Istituto di Chimica dei Materiali” (ICMAT), C.N.R., (Roma).
- n. 1993 - 2000 - Advisory Scientific Committee of the “Consorzio Catania Ricerche” - Catania.
- n. 1994 - 2001 - Scientific Committee of the “Centro per la Chimica dei Plasmi” (CCP), C.N.R., Bari.
- n. 1994 - National Committee for the Feasibility of the National Targeted Program of C.N.R. on “Special Materials for Innovative Technologies II”.
- n. 1995 - 1999 - National Committee of CNR for Sincrotron Radiation.
- n. 1995 – 1998 - Member of the Advisory Scientific Committee for the Scientific and Technological Park of Calabria (CalPark).
- n. 1997 – 2002 - Scientific Committee of the “Istituto per la Chimica e Tecnologia dei Materiali Polimerici” (ITMP), C.N.R., Catania.
- n. 2002 – 2007 - Scientific Committee of the “Istituto per i Processi Chimico-Fisici” (IPCF), C.N.R., Pisa .
- n. 2003 – 2007 - Scientific Committee of the “Istituto per i Compositi Polimerici e Biomateriali”, C.N.R., Napoli.
- n. 2004 – Evaluation Panel of the Department of Chemistry, University of Siena, Siena.
- n. 2009 – Evaluation of projects for the Programme “Bando team 2009 – Incoming”, Provincia autonoma di Trento, Trento.
- n. 2010 - Evaluation of POR-FESR 2007 – 2013 Research Projects from SME and research institutions in Veneto for Veneto Innovazione S.p.A. (Regional Agency for the innovation diffusion for SME in Veneto).
- n. 2011 – Evaluation of Industrial Research Projects for the “Provincia autonoma di Bolzano-Alto Adige”, Bolzano.
- n. 2010-2012 – Reviewing Scientific Panel for the “Laboratorio di ricerca per la Nanofabbricazione e i Nanodispositivi basati su nanolitografia” (LaNN) of Veneto Nanotech – Committed by the “Fondazione Cassa di Risparmio di Rovigo e Padova”, Padova.
- n. G.Marletta has also performed referee activity on behalf of MIUR, for several Italian Research Programmes (PRIN, FIRB Giovani, etc...).

1.5 - MEMBERSHIPS OF EDITORIAL BOARDS

- 2002 – today - Member of the Editorial Board of “Journal Applied Biomaterials and Biomechanics” (Switzerland)
- 2003 - 2005 - Member of the Editorial Board of “Journal of Physical Chemistry and Chemical Physics” (three-year term, Royal Society of Chemistry, UK,)
- 2004 – 2006 - Member of the Editorial Board of “Journal of Applied Physics/Applied Physics Letters” (American Physical Society, USA)
- 2006 – 2008 – Member of the Editorial Advisory Board of “Journal of Adhesion Science and Technology” (VSH, The Netherland)
- 2006 - 2009 - Member of the Editorial Advisory Board of “Journal of Physical Chemistry and Chemical Physics” (three-year term, Royal Society of Chemistry, UK)
- 2009 – 2016 - Member of the Editorial Board of “Advanced Biomaterials” (Wiley VCH, Germany)
- 2016 – 2018 - Associate Editor of “Materials Science and Technology (Wiley-VCH, Weinheim, Germany)

1.6 - ACTIVITY AS CHAIRMAN OF CONGRESSES, SCHOOLS, SYMPOSIA AND WORKSHOPS

1. E-MRS SPRING Meeting 1996, Chairman of Symposium K on “Nanometric Phenomena Induced by Laser, Ion and Cluster Beams” Strasbourg (France), June 4-7, 1996 (Co-chairmen: Marcel Toulemonde, Eleanor Campbell and Roger Kelly).
2. Italian National School of Physical Chemistry: “Physical Chemistry of Functional Materials”, Torino, 19-25 June, 1999.
3. E-MRS SPRING Meeting 2000, Chairman of Symposium E on “Current Trends in Nanotechnologies” Strasbourg (France), May 30-June 2, 2000 (Co-chairmen: Gabriel Crean, José Martinez Duart and Hermann Grimmeiss).

4. E-MRS SPRING Meeting 2001, Chairman of Symposium S on “Current Trends in Nanotechnologies: from materials to devices” Strasbourg (France), June 4-8, 2001 (Co-chairmen: Hermann Grimmeiss, Harald Fuchs and Yasunori Taga).
5. MELARI NID and 1st Italian Workshop on “Current Trends in Nanotechnologies”, Catania (Italy), February 6-8, 2002 (Co-chairmen: A.Correia, R.Compañó, C.Taliani and S.Coluccia).
6. SHIM 2002 - 5th International Conference on Swift heavy Ions in Matter; Giardini-Naxos (Italy), 22-26 May, 2002 (Co-Chairmen: S.Bouffard, R.Neumann).
7. E-MRS SPRING Meeting 2002, Chairman of Symposium on “Current Trends in Nanotechnologies” Strasbourg (France), June 4-8, 2001 (Co-chairmen: H.Grimmeiss, A.Jantsch and Y. Taga).
8. 1st Brazilian MRS Meeting 2002, Chairman of the Symposium A on “Current Trends in Nanotechnology and Nanostructured Materials”, Rio de Janeiro (Brasil), July 8-12, 2002 (Co-chairmen: A.King, G. Solorzano).
9. E-MRS SPRING Meeting 2003, Chairman of Symposium A on “Current Trends in Nanotechnologies: from materials to devices” Strasbourg (France), June 9-13, 2003 (Co-chairmen: Hermann Grimmeiss, George Jeronimidis).
10. 2nd Brazilian MRS Meeting 2003, Chairman of the Symposium A on “Current Trends in Nanotechnology and Nanostructured Materials”, Rio de Janeiro (Brasil), (Co-chairmen: A.King, G. Solorzano).
11. E-MRS SPRING Meeting 2004, Chairman of Symposium A on “Current Trends in Nanotechnologies: from materials to devices” Strasbourg (France), May , 2004 (Co-chairmen: Marshall Stoneham, Hermann Grimmeiss, George Jeronimidis).
12. 3rd Brazilian MRS Meeting 2004, Chairman of the Symposium A on “Current Trends in Nanotechnology and Nanostructured Materials”, (Brasil), 8-12, 2002 (Co-chairmen: A.King, G. Solorzano).
13. E-MRS SPRING Meeting 2005, Chairman of Symposium A on “Current Trends in Nanotechnologies: from materials to devices” Strasbourg (France), May 31-June 3, 2005 (Co-chairmen: Joerg Weber, Hermann Grimmeiss, Piero Baglioni).
14. E-MRS SPRING Meeting 2006, Chairman of Symposium A on “Current Trends in Nanotechnologies: from materials to devices”; (Co-Chairmen: Hermann Grimmeiss, Guillermo Solorzano, Shou-Shan Fan, Hans-Joachim Muessig), Nice (France), May 29- June 2, 2006.
15. ESF-EMBO Conference on “Biological Surfaces and Interfaces”, (Co-Chairman: Marcus Textor) San Feliu de Guixols (Spain), July 1-6 2007.
16. E-MRS SPRING Meeting 2008, Symposium on “Functional Supramolecular Architectures for Organic Electronics and Nanotechnology”, (Co-Chairmen: F. Cacialli, P.Samori, M.Ruben, R.Farà), Strasbourg (France), May 26-30, 2008.
17. 11th International Conference on Advanced Materials and 7th Brazilian-MRS Meeting 2009, Symposium on “Functional materials for organic electronics and nanotechnology”, (Co-chairmen: R.Farà, P.Samori, M.Cremona), Rio de Janeiro (Brasil), October 2009.
18. E-MRS SPRING Meeting 2010, Chairman of Symposium B on “Functional Biointerfaces”; (Co-Chairmen: K.Jandt, C.Ortiz), Strasbourg (France), June 7-11, 2010.
19. E-MRS/ICAM Joint Meeting 2010, Chairman of the Conference, (Co-Chairmen: I.Boyd, R.Martins and T.Lippert), Strasbourg (France), 7-11, June 2010.
20. MRS Spring Meeting 2011, Chairman of Symposium II on “Ion Beams – New applications from mesoscale to nanoscale”, (Co-Chairmen: J.Baglin, A.Oztarhan, D.Ila), San Francisco (USA) April 25-29, 2011
21. E-MRS/IUMRS Joint Meeting 2011, Chairman of the Conference, (Co-Chairmen: H.U.Habermaier, J.Lindner), Nice (France), May 9-13 2011.
22. E-MRS SPRING Meeting 2012, Chairman of Symposium G on “Functional Biointerfaces”; (Co-Chairmen: K.Rezwan, M.Manso Silvan), Strasbourg (France), May 13-18, 2012.
23. E-MRS SPRING Meeting 2012, Chairman of Symposium G on “Nano-Engineered Bioactive Interfaces”; (Co-Chairmen: P.Netti, M.Lensen, P.Beltram), Strasbourg (France), May 25-31, 2013.
24. E-MRS FALL Meeting 2013, Co-Chair of the General Conference, Warsaw (Poland), September 15-20, 2013.

1.7 - MEMBERSHIP of SCIENTIFIC COMMITTEES OF CONFERENCES

1.7.1 - Memberships

- n. EURESCO Conference on “Biological Surfaces and Interfaces” (2001 - 2010).
- n. European Materials Research Society (E-MRS) (2000 – present).
- n. International Conference on Radiation Effects in Insulators (REI) (1997 - 2013).
- n. International Conference on “Swift Heavy Ions in Matter” (SHIM) (1995 - 2009).
- n. International Conference on Ionizing Radiation on Polymers (IRAP) (1994 - 2012).
- n. International Conference on Surface Modification of Materials by Ion Beams (SMMIB) (2013-present)
- n. The European Meeting of Vacuum Coaters (1994-2004).
- n. Italian Congress of Physical Chemistry (1993-2002).
- n. Italian Conference on Nanotechnology (2000 - 2006)

1.8 – GRANTS

1.8.1 – INTERNATIONAL PROJECTS

- 1988-1990 - Partner of a COMETT I Programme on “Techniques of Surface Analysis: Fundamental aspects and Applications”, with Univ. of Lyon, Univ. of Namur, CSIC of Barcelona, Univ. of Heraklion and various French and Italian Industries.
- 1991-1993 - Partner of a COMETT II Programme on “Surface Techniques for Industrial Applications”, with Univ. of Lyon, Univ. of Namur, CSIC of Barcelona Univ. of Heraklion and various French and Italian Industries.
- 1993-'96 - Partner of a BRITE-EURAM programme on “Transparent inorganic Coatings for plastic materials” with Galilei Vacuum Technology (Italy), CETEV (Italy), Otto Nielsen Inc. (Denmark), University Autonoma of Madrid (Spain) and Von Ardenne (Germany).
- 1995-'97 - Coordinator of a Copernicus Project on ”Advanced Beam-Based Technology for Hard Ceramic Coatings of Transparent Plastics”, with Univ. of Lyon, Hungarian Academy of Sciences, OPTILAB (Budapest) and Czech Academy of Science.
- 1996/1997 and 1997/1998 - Italian Partner of a Tempus Programme on “Surface Engineering: Techniques and Applications” with Univ. of Lyon, Eötvös Lorand University, Technical University of Budapest, Soprom University, Miskolc University, and Veszprem University, Hungary.
- 1998-2000 – Partner of CRAFT Project on “Protective hard coating for plastic lenses” with Surfcoat (Finland), Biophy (France), CE.TE.V. (Italy), FactOptique (France).
- 2006-2010 – Contractor of the European Project for Integrated Infrastructure Initiative Programme on “Ion Technology and Spectroscopy at Low Energy Ion Beam Facilities (ITS-LEIF)” – Sub-task: “Slow ion induced nanostructuring of surfaces and thin films”
- 2007-2010 – Contractor of the European Project on “Threaded Molecular Wires as Supramolecularly engineered multifunctional materials (THREADMILL)” – Marie Curie RTN Programme.

1.8.2 – COORDINATION OF ITALIAN PROJECTS (last 10 years)

- PRIN 2001 (2002//2003): “Potentialities of the XPS spectroscopy and other spectroscopic methodologies for the study of surface interactions among polymeric and glass surfaces and adhesive proteins” (12 Research Units)
- FISR 2001 (2002/2005): Silicon Technologies for Bioelectronics Microsystems (10 Research Units)
- PRIN 2005 (2006/2007): “Self-assembling films of synthetic oligopeptides for biomimetic surfaces” (5 Research Units)
- PRIN 2008 (2010/2012): “Protein-Inspired Innovative Biopolymers for Tissue Regeneration” (4 Research Units)
- FIRB “Idee Progettuali” 2006 (2007/2010): “Development of innovative biomaterials and advanced optical methodologies for new generation oftalmological devices” (2 Research Units).

1.8.3 – COORDINATION OF LOCAL UNIT RESEARCH IN ITALIAN PROJECTS (last 10 years)

- PRIN 2002: “Processi di interazione fra sistemi biologici e superfici polimeriche attivate mediante irradiazione”.
- FIRB 2001 (11/2002 - 11/2005): Realizzazione in vitro di scaffolds compositi e poliuretanic colonizzati con cellule osteoprogenitrici umane isolate da pazienti con patologia ortopedica.
- FIRB 2001 (01/2003 - 10/01/2007): Tecnologie per la manipolazione su scala nanometrica dei materiali e loro applicazione biomedica.
- FIRB 2001 (11/2003 - 11/2007): Sviluppo di microsistemi multifunzionali per analisi in diagnostica clinica e nel settore alimentare.
- FIRB INTERNAZIONALI 2004 (07/2006 – 07/2010): Strategie convergenti per la progettazione, lo sviluppo e la fabbricazione di micro- e nanodispositivi multifunzionali per il riconoscimento e la chemioterapia locale di cellule tumorali.
- FIRB “PIATTAFORME/RETI” 2008 (09/2009 – 09/2013): Rete Nazionale di Ricerca sulle Nanoscienze ItalNanoNet.
- FIRB “Accordi di Programma” 2011 (02/2012 – 02/2016): Idrogeli nanocompositi ibridi contenenti nanoparticelle ferromagnetiche per il trattamento di tumori ossei primitivi e secondari.