

## Curriculum Vitae



*Giuseppe Arena*



### Personal information

Name & Surname	<b>Giuseppe Arena</b>
Citizenship	Italian
Date of birth	March 19 1949
Place of birth	Enna, Italy
Residence	Via Modigliani 10, 95030, Mascalucia, Italia

### Work address

Address	Department of Chemical Sciences, Viale Andrea Doria 6, 95125, Catania, Italia
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### Field(s) of interest

Key words	* Calorimetry * Speciation * Potentiometry * Supramolecular Chemistry * Molecular RecognitionTecnology (MRT)
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## Professional experience

### Teaching activity

- \* Supramolecular Chemistry – PhD Course (1996 to date)
- \* Analytical Chemistry – Chemistry Degree ( 1990 to date)
- \* Analytical Chemistry - Master, Bio-molecular Chemistry (2005-2010)
- \* Exchange Lecturer, Warsaw Technical University, Poland (2006)
- \* Analytical Chemistry Laboratory – Science and Technology of Cultural Heritage (2004-2010)
- \* Analytical Chemistry – Degree in Environmental Sciences, Science Faculty (2003-2006)
- \* Analytical Chemistry – Undergraduate - Science Faculty (2003-2006)
- \* Visiting Professor, Chemical Engineering Department, Brigham Young University, Provo, Utah (1998)
- \* Analytical Chemistry – Degree in Chemical and Pharmaceutical Technology – Faculty of Pharmacy (1994-1996)
- \* Analytical Chemistry – Degree in Food Science and Technology – Faculty of Agriculture (1990-1994)
- \* Visiting Professor, Chemistry Department, Brigham Young University, Provo, Utah (1989)
- \* Analytical Chemistry Laboratory, Degree in Chemistry, Science Faculty, University of Messina, Italy (1986-1990)
- \* Applied Analytical Chemistry, Chemistry Degree , Science Faculty (1982-1985)
- \* NATO Senior Scientist, Chemistry Department, Brigham Young University, Provo, Utah, USA (1984)
- \* Lecturer, Chemistry Department, Brigham Young University, Provo, Utah, USA (1984)
- \* Analytical Chemistry Laboratory, Degree in Chemistry, Science Faculty, University of Catania, Italy (1978-1982)
- \* Chemistry, Engineering Faculty, University of Catania, Italy (1987-1988)
- \* Post-doctoral Fellow, Chemistry Department, University of St Andrews, St Andrew, Scotland, UK (1986)

### Type of employment

Permanent position

### Position

Full Professor of Analytical Chemistry (1985 to date)

### Actual Employer

University of Catania, Italy

### Employer's Address

2, Piazza Università, 95120 Catania, Italy

<b>Society Boards</b>	<ul style="list-style-type: none"> <li>* Chairman elected of the Italian Association of Calorimetry and Thermal Analysis (2016-).</li> <li>* Chairman of the Italian Association of Calorimetry and Thermal Analysis (2014-2016).</li> <li>* Chairman of the Division of Analytical Chemistry, Italian Chemical Society</li> <li>* Board of Directors of the Italian Association of Calorimetry and Thermal Analysis</li> <li>* Chairman of the Interdivisional Group of Calorimetry and Thermal Analysis, Italian Chemical Society</li> <li>* Board of Directors of the Interdivisional Group of Calorimetry and Thermal Analysis, Italian Chemical Society</li> <li>* Vice-President of the Division of Analytical Chemistry, Italian Chemical Society</li> <li>* Coordinator of the PhD in Chemistry, Department of Chemical Sciences, University of Catania (1997-2003)</li> <li>* Chairman of the Steering Committee of the Italian Group of Supramolecular Chemistry</li> </ul>
<b>Scientific Boards</b>	<ul style="list-style-type: none"> <li>* Board of Directors, The <i>Calorimetry Conference, USA</i></li> <li>* Technical and Scientific Board of the Thalassographic Institute, CNR, Messina, Italy</li> </ul>
<b>Scientific/Editorial Boards</b>	<ul style="list-style-type: none"> <li>* Editorial Board - "Journal of Inclusion Phenomena and Molecular Recognition"</li> <li>* Regional Editor - "Journal Thermal Analysis and Calorimetry"</li> <li>* Editorial Board - "Termochimica Acta"</li> <li>* Editorial Board - "Supramolecular Chemistry"</li> <li>* Referee for International Journals (JACS, Chem. Comm., Inorg. Chem., Angewandte Chemie, J. Supramol. Chem., Thermochim. Acta, Chemistry Eur. J., Eur. J. Inorg. Chem., Eur. J. Org. Chem., J. Inorg. Biochem., Colloid Surf. A, European J. of Med. Chem., J. Membrane Scie., J. Pharm. Biomed. Anal., J. Therm. Anal. Calorim., New J. Chem., Sep. Sci. Technol., J. Polymer Res., Polym. Adv. Technol., React. Funct. Polym., RSC Advances, J. Solution. Chem., J. Incl Phen. Mol. Recognition , Sep. Sci. Technol. , Synth. Commun. , Tetrahedron Lett., Languimir, ChemPhysChem)</li> </ul>
<b>Society Memberships</b>	<p>Italian Chemical Society  ISMEC  Italian Association of Calorimetry and Thermal Analysis  Interdivisional Group of Calorimetry and Thermal Analysis, Italian Chemical Society  IUPAC</p>

<b>Assignements</b>	<ul style="list-style-type: none"> <li>* Member of the International Committee for the selection of Full Professors, Aristotle University of Thessaloniki, Greece</li> <li>* Associate Professor Committee, University of Rome 'La Sapienza', Italy</li> <li>* Associate Professor Committee, University of Easter Piedmont, Italy</li> <li>* Associate Professor Committee, University of Pisa, Italy</li> <li>* Associate Professor Committee, University of Turin, Italy</li> <li>* Associate Professor Committee, University of Magna Graecia, Italy</li> <li>* Associate Professor Committee, University of Naples, Italy</li> <li>* Associate Professor Committee, University of Catania, Italy</li> <li>* Assistant Professor Committee, University of Pisa, Italy</li> <li>* National Committee for the selection of CNR Research personnel</li> <li>* Assistant Professor Committee, University of Rome 'La Sapienza', Italy</li> <li>* Italian National Committe for the selection of Full Professors of Analytical Chemistry</li> <li>* Full Professor Committee, University of Foggia, Italy</li> <li>* Assistant Professor Committee, University of Venice, Italy</li> <li>* Responsible of the Catania Laboratory, INCA National Consortium</li> <li>* Coordinator of the PhD Course offered by the Department of Chemistry, University of Catania, Italy</li> </ul>
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## Education

Initial /Final Year- Course	1968/1973 - Industrial Chemistry
Type of Degree	Laurea
Grade	110/110 <i>cum laude</i>
Granting Institution	University of Catania, Italy
Type of Institution	State University
Main Fields	Calorimetry, Electrochemistry, Speciation of complex systems

## Languages

Mother-tongue	Italian
Additional Language(s)	<b>English</b>
Reading	Very good
Writing	Good
Listening	Very good
Speaking	Good
	<b>French</b>
Reading	Very good
Writing	Sufficient
Listening	Sufficient
Speaking	Sufficient

## Scientific Activity

### Main research interests

- \* Speciation in aqueous solution
- \* Optimization of calorimetric apparatus
- \* Thermodynamics of complexes
- \* Molecular recognition assisted by metal ions
- \* Synthesis, characterization and biological activity of coordination compounds of copper(II)
- \* Thermodynamic and spectroscopic study of metal ion complexes with biological activity
- \* Characterization and speciation of new sequestering agents
- \* Carriers for the removal/determination of unwanted species

### Publications in International Journals (ISI)

Type of paper	Total	Last five years	Corresponding (last 5 yrs)
Original paper	113	18	8
Review article	3	2	1

h-index	Total Impact Factor	Total number of Citations	No. of citations w.o. self citations	Average Citation Index
32	350	>3500	3100	~ 30

### Publications in non-ISI Journals

Publications	TOT	Italian	English	Peer Reviewed	Without Peer review
Book chapters	6	2	4	4	2

<b>Awards</b>	<p><i>Sunner Memorial Award, The Calorimetry Conference (U.S.A.), Oak Ridge, Tennessee, 1989.</i></p> <p><i>Canneri Medal, Division of Analytical Chemistry-Italian Chemical Society, Sestri Levante (Italy), 2013</i></p>
<b>Lectures/Seminars</b>	<p><i>Last 5 years</i></p> <p>Invited Speaker - XXXVII Biennial Meeting, Spanish Royal Society of Chemistry (RSEQ) San Sebastian (Spain), May 26<sup>th</sup> - 30<sup>th</sup>, 2019 (to be given).</p> <p>Plenary Lecturer - CEEC-TAC IV, Chisinau, Moldova, August 28-31, 2017</p> <p>Invited Speaker - JTACC IV Meeting, Budapest, Hungary, June 5-9, 2017</p> <p>Plenary Lecturer - Calabria-Sicily Joint Meeting, Italian Chemical Society, Messina, February 9-10, 2017</p> <p>Invited Speaker - XXVI National Meeting of the Division of Analytical Chemistry, Italian Chemical Society, Giardini Naxos, Italy, September 18-22, 2016.</p> <p>Plenary Lecturer - Italian Embassy (Moscow), Russia-Italy Round Table, Susdal, Russia, October 18-20, 2016</p> <p>Plenary Lecturer - Ivanovo, Russia June 29-July 3, 2015.</p> <p>Invited Lecturer - ITC Workshop, Cape Town, RSA, February 19-March 1<sup>st</sup>, 2014.</p> <p>Invited Lecturer - Erasmus Intensive Program, Summer School for Thermal Analysis Techniques, June 29 to July 12, 2014 Thessaloniki, Greece.</p> <p>Invited Speaker- Italian Embassy (Moscow), Russia-Italy Round Table, Ivanovo-Plios, Russia, October 1-3, 2014.</p> <p>About fifty invited lectures/seminars at Italian (Turin, Bologna, Florence-S. Miniato, Frascati, Roma, Camerino, Ferrara, Palermo) and foreign (UC Berkeley-USA, Brigham Young University-USA, MEDICTA-Athens University, Greece, University of Porto-Portugal, Warsaw Technical University-Poland, Aristotle University, Thessaloniki-Greece, ACS Meeting-USA, NRC Zakopane-Poland, ISMC – Gdansk-Poland, BYU, Provo-USA, Park City-USA, Fukuoka-Japan, Kazan State University-Russia, University of Nagoya-Japan, University of Kanazawa-Japan, Kyoto Pharmaceutical University-Japan, University of Saarlandes-Germany, IUPAC- Snowbird-USA, Gandia-Valencia-Spain, ORNL, Tennessee-USA, Eurasia-Bangkok- Thailand) Institution/Universities.</p> <p>GA has been Chairman and/or member of the Scientific Committees of several National and International Schools/Meetings and has presented over 100 lectures/seminars.</p>

## Collaborations

- \* Chemistry Department, U.W.I.S.T., Cardiff, U.K, (Professor David R. Williams).
- \* Department of Chemistry, University of Siena, Italy (Professor Rolando Barbucci).
- \* Department of Analytical Chemistry, University of Turin (Professor Giorgio Ostacoli).
- \* Research Institute, Department of Biochemistry, Toronto, Canada (Prof. Bibudendra Sarkar).
- \* Thermochemical Institute, Brigham Young University, Provo, Utah, U.S.A., (Professor James J. Christensen).
- \* Department of Chemistry, Brigham Young University, Provo, Utah, U.S.A. (Professor Reed M. Izatt).
- \* Department of Chemistry, University of Palermo, Italy (Professor Lorenzo Pellerito).
- \* Department of Chemistry, University of Ferrara, Italy (Professor Fernando Pulidori).
- \* Department of Chemistry, Brigham Young University, Provo, Utah, U.S.A. (Professor John D. Lamb).
- \* Department of Organic and Industrial Chemistry, University of Parma, Italy (Professor R. Ungaro)
- \* Department of Organic and Industrial Chemistry, University of Parma, Italy (Professor A. Pochini)
- \* FR Organische Chemie der Universität des Saarlandes, Germany (Professor H-J. Schneider)
- \* Institute for Fundamental Research of Organic Chemistry, Kyushu University, Fukuoka, Japan (Professor Yasuhiro Aoyama)
- \* Graduate School of Chemistry, University of Nagoya, Japan (Professor Osamu Yamauchi)
- \* Department of Chemical Engineering, Brigham Young University, Provo, Utah, U.S.A. (Professor John L. Oscarson)
- \* Department of Chemical Engineering, Brigham Young University, Provo, Utah, U.S.A. (Professor Roger G. Harrison)
- \* Department of Chemistry and Biochemistry, Texas Tech., Lubbock, Texas, U.S.A. (Professor Richard Bartsch).
- \* Department of Chemistry, University of Berkeley, CA, U.S.A. (Professor Kenneth N. Raymond).
- \* Department of Chemistry, University of Michigan, Ann Arbor, U.S.A. (Professor Vincent Pecoraro)

All the above collaboration have resulted in the publication of papers in International Journals.

## Collaborations with national companies

- \* Meridionale Impianti, Catania, Italy - Responsible for the project "Study of an innovative system for the distribution of chemicals employed in production of semiconductors"
- \* Meridionale Impianti, Catania, Italy - Responsible for the project "Study of an innovative system for the treatment and recovery of hydrogen and chlorosilanes contained in waste gases from epitaxial reactors employed for the production of semiconductors"

## Evaluation of Research projects

- \* MIUR, PRIN
- \* PhD Theses, University of Joannesburg, South Africa
- \* PhD Theses, University of Cape Town, South Africa
- \* FIR, Puglia

## Research Projects

- \* Principal Investigator, Multiple equilibria in natural and biological fluids: from speciation to selective sequestering, PRIN 2015, MIUR, Italy
- \* Project Manager of a bilateral Agreement with the Department of Chemistry, University of California, Berkeley, USA
- \* Project Manager of a bilateral Agreement with the Department of Chemistry, Materials and Bioengineering, University of Kansai, Japan
- \* Project Manager of a bilateral Agreement with the Department of Chemistry, University of Nagoya, Japan
- \* Student tutor and Visiting teacher within the framework of a Socrates exchange project with the *Warsaw University of Technology*, Poland
- \* Local Manager of the national research project "Models in Enzymes"
- \* Manager of an Italy-U.S.A (Brigham Young University-Universita' di Messina) research project
- \* Manager of a Vigoni project with the Chemistry Department, University of Saarlandes, Saarbrucken (Germany)