

2017 - Sustainable Industrial Processing Summit & Exhibition

2017 SIPS



GAUNE-ESCARD
INTERNATIONAL
SYMPOSIUM

22 - 26 October 2017
Fiesta Americana Condesa, Cancun, Mexico

on Sustainable Molten Salt
and Ionic Liquid Processing

CURRICULUM VITAE

Name : Marcelle GAUNE-ESCARD

Education : 1972 Docteur d'Etat es-Sciences Physiques
1968 Docteur 3ème cycle (PhD)
Marseille University, Marseille, France-

Present Position : Directeur de Recherche CNRS
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Research topics:

- Physicochemical and structural characterization of lanthanide halides melts & modeling
- Molten Salt Database (it includes all reference data edited up to 1990 (NIST-SRD) together with the most recent results of research or ongoing projects (IUPAC project TGM 23003-020-2-100 : « Ionic Liquids Database»).
- Application of combinatory informatics techniques (data mining, PCL, PLS) to the analysis of large datasets and their application to property predictions.
- Cooperation with the Combinatorial Sciences and Materials Informatics, Collaboratory (CoSMIC), NSF International Materials Institute and the International Council for Science : Committee on Data for Science and Technology (CODATA)
- IUPAC-NIST Solubility Data Series - *Mutual Solubility of Rare Earth Metal (Sc, Y, Lanthanides) Bromides in Molten Alkali Bromides*)
- Ukraine-France Dnipro program (*Nanostructured noble and refractory metals: electrochemical behaviour and electrodeposition from low-temperature ion-organic liquids*)
- Ukraine-France Dnipro program (*Regularities of the electro- and codeposition of molybdenum, tungsten and metals of iron triade in ionic melts*)

Scientific activities:

- **Book Edition :** *Molten Salts Chemistry and Technology* Eds: M. Gaune-Escard, G.M. Haarberg, Wiley, 2014, 672 pages • *Molten Salts and Ionic Liquids: Never the Twain?* K.R. Seddon & M. Gaune-Escard Eds, John Wiley and Sons Publishers, 2010, 458 pages • *Molten Salts: From Fundamentals to Applications* Ed.: Marcelle Gaune-Escard ; Springer Science + Business Media, Volume 52, 2002, 413 pages • *Proceedings of the 7th international symposium on molten salts chemistry and technology (MS 7)*, Toulouse, France, August 29-Sep 2005, Eds: Taxil P, Bessada C, Cassir M, Gaune-

Escard M. • *Advances in Molten Salts: From Structural Aspects to Waste Processing*
Ed.: Marcelle Gaune-Escard Begell House, (1999), 716 pages

- **Papers** in international Journals (more than 250)
- **Conferences** and communications at international Conferences & Invited lecturer at the same (more than 300)
- **Editor** *MOLTEN SALTS & IONIC LIQUIDS Bulletin* (Newletters since 1976 , distribution 600, 24 countries, quarterly ; Web edition since 1996).
- **MOLTEN SALTS database**
- **Member** of the: Electrochemical Society (ECS) • Society for Metals, Minerals and Materials (TMS) • International Union of Pure and Applied Chemistry (IUPAC) • CODATA-France • CODATA Executive Committee (2008-2010) • IUPAC Subcommittee on Solubility and Equilibrium Data (SSED) • International Thorium Molten-Salt Forum (ITMSF)
- **Member of Editorial Boards:** • J. Chemical Thermodynamics • Z. Naturforsch. A • High Temperature Material Processes • IUPAC-NIST Solubility Data Series (Vol. 63, Metals In Liquid Alkali Metals, Part I: Be to Os) • Materials Discovery (Elsevier) •
- **Organizer or Member of the Organizing Committees of most International Molten Salt Conferences:**
 - **Conference Chair :**
 - EUCHEM Conference on Molten Salts, La Gaillarde, France (1982) • Journées Européennes sur les Sels Fondus, Marseille-Tunis, France-Tunisia (1990) • European Research Conference on Molten Salts, Porquerolles, France (1998) • CODATA Working Group “Building Information on Molten Salts”, Marseille (2000) • High Power Electrochemical Sources, Crete (2000) • NATO-Advanced Study Institute, “Molten Salts : from Fundamentals to Applications” Kas, Turkey (2001) • High Energy Density Electrochemical Power Sources, Nice ; France (2003) • SIPS2016 : 4th International Symposium on Molten Salts and Ionic Liquids HAINAN-ISLAND, CHINA (2016) •
 - **Conference Co-Chair**
 - 7th International Symposium on Molten Salts Chemistry & Technology (MS7), Toulouse, France (2005) • EUCHEM Conference on Molten Salts and Ionic Liquids, Hammamet, Tunisia(2006) • Workshop «Materials and Informatics» CODATA, Beijing, China (2006) • Sadoway60 Symposium, Cambridge, USA, (2010) • Fray Symposium, Cancun, Mexico, (2011) • Shechtman Symposium, Cancun, Mexico, (2014) • SIPS2016 : Øye International Symposium (*Intl Symp. on Sustainable Ionic Liquid and Aluminum Extraction and Processing*) HAINAN-ISLAND, CHINA (2016)
 - **Member of Scientific Committees**
 - 9th IUPAC International Symposium on Solubility Phenomena and Related Equilibrium Processes, Tunis, Tunisia (2000) • 12th IUPAC International Symposium on Solubility Phenomena and Related Equilibrium Processes (ISSP), Freiberg, Germany (2006) • Advances In Metallurgical Processes And Materials, Dnipropetrovsk, Ukraine - ADMET 2007 (2007) • Ionic Liquids for Electrochemical Devices, Rome, Italy (2008) • IUPAC – 13th International Symposium on Solubility Phenomena and Related Equilibrium, Dublin, (2008) • EUCHEM Conference on Molten Salts and Ionic Liquids, Copenhagen, Denmark, (2008) • VIII International Conference on Molten Slags, Fluxes and Salts – Molten, Santiago, Chile (2008) • EUCHEM Conference on Molten Salts and Ionic Liquids , Bamberg, Germany (2010)

- S. Seetharaman seminar, Stockholm, Sweden (2010) • IUPAC – 14th International Symposium on Solubility Phenomena and Related Equilibrium, Leoben (2010) • EUCHEM Conference on Molten Salts and Ionic Liquids, Wales, UK (2012) • AdMet Conference, Kiev, Ukraine (2014) • EUCHEM Conference on Molten Salts and Ionic Liquids XXV, Tallinn, Estonia (2014) •

All these activities resulted, at an early stage) in the formation of international research networks in different research fields , informal networks or subject of various cooperations.

These research activities and achievements were highlighted by the 2004 “Max Bredig Award”, which was granted by the Electrochemical Society (USA) for the first time to a French scientist (and a female)

- **PhD Supervision** :15 students
- **International Research Cooperations**
 - Technical University, Wroclaw, **Poland** • Russian Academy of Sciences, Apatity, **Russia** • Institute of physical chemistry "I.G.Murgulescu" - Romanian Academy, Bucharest, **Romania** • National Technical University of Ukraine “Kyiv Polytechnical Institute”, Kyiv, **Ukraine** • University of Novi Sad, Novi Sad, **Serbia** • Iowa State University, Ames, **USA** • Slovak Academy of Science, Bratislava, **Slovakia** • Central South University, Changsha, **China** • Chiba University, Chiba , **Japan** • Ivanovo State University of Chemistry and Technology, Ivanovo, **Russia** • University of Abertay Dundee, Scotland, U.K. • Tokyo Institute of Technology, Tokyo, **Japan** • Japan Atomic Energy Agency, Hyogo, **Japan** • Tohoku University, Sendai, **Japan** • The Queen's College, Oxford, **U.K.** • University of Abertay-Dundee, Dundee, **U.K.** • Université de Béjaïa, Targaouzemmour, **Algeria** • Baykov Institute of Metallurgy and Materials Science RAS, Moscow, **Russia** • Institute of High Temperature Electrochemistry, Ekaterinburg, **Russia** • Japan Atomic Energy Research Institute, Ibaraki-ken, **Japan** • Istanbul University, **Turkey** • University of Cincinnati, **USA** • Technical University of Denmark, Lyngby, **Denmark** • University of Vienna, **Austria** • National Institute of Standards and Technology (NIST), Gaithersburg, **USA** •