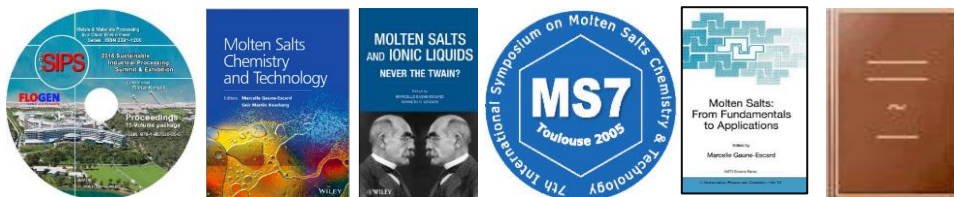




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## SCIENTIFIC ACTIVITIES

### Book Edition:



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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,

Wiley Publishers, 2010, 458 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.

Molten Salts: From Fundamentals to Applications  
Ed.: Marcelle Gaune-Escard  
Springer Science + Business Media, Volume 52, 2002, 413 pages

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

### **Book Chapters:**

Tungsten Carbide: High Temperature Electrochemical Synthesis From Ionic Melts,  
Technologies of Obtaining and Regeneration  
V. V. Malyshev, I. A. Novoselova, A. I. Gab, D. B. Shakhnin, I. M. Astrelin, and M.  
Gaune-Escard  
in Advances in Chemistry Research. vol. 33, Chapter 3, 71-124, James C. Taylor Ed.,  
NOVA Science Publishers, 2016

#### Preface

Gaune-Escard, M., Haarberg, G.M.  
in Molten Salts Chemistry and Technology, Eds: M. Gaune-Escard, G.M. Haarberg. 1,  
Wiley, 2014

Galvanic Coatings of Molybdenum and Tungsten Carbides from Oxide Melts:  
Electrodeposition and Initial Stages of Nucleation  
V. Malyshev, D. Shakhnin, A. Gab, M. Gaune-Escard, I. Astrelin  
in Molten Salts Chemistry and Technology, Eds: M. Gaune-Escard, G.M. Haarberg,  
Chapter 4.9, 303-317, Wiley, 2014

Effect of Electrolysis Parameters on the Coatings Composition and Properties during  
Electrodeposition of Tungsten Carbides and Zirconium Diborides  
V. Malyshev, D. Shakhnin, A. Gab, M. Gaune-Escard, I. Astrelin  
in Molten Salts Chemistry and Technology, Eds: M. Gaune-Escard, G.M. Haarberg,  
Chapter 4.8, 295-301, Wiley, 2014.

Molecular and Ionic Species in Vapor over Molten Ytterbium Bromides  
M. F. Butman, D. N. Sergeev, V. B. Motalov, L. S. Kudin, Rycerz L., Gaune-Escard M.  
in Molten Salts Chemistry and Technology, Eds: M. Gaune-Escard, G.M. Haarberg,  
Chapter 3.7, 203-212, Wiley, 2014

Thermodynamic Investigation of the BaF<sub>2</sub>-LiF-NdF<sub>3</sub> System  
Berkani, M., Gaune-Escard, M.  
in Molten Salts Chemistry and Technology, Eds: M. Gaune-Escard, G.M. Haarberg,  
Chapter 3.5, 181-192, Wiley, 2014

Preface

Gaune-Escard, M., Seddon, K.R.

in *Molten Salts and Ionic Liquids: Never the Twain?*

K.R. Seddon & M. Gaune-Escard Eds, John Wiley and Sons Publishers, 2010

Thermodynamic Properties of LnI<sub>3</sub>-MI Binary Systems (Ln = La or Nd; M = K, Rb, or Cs)

Rycerz, L., Butman, M.F., Gaune-Escard, M.

in *Molten Salts and Ionic Liquids: Never the Twain?*

K.R. Seddon & M. Gaune-Escard Eds, John Wiley and Sons Publishers, 2010, 341-354

Materials Informatics for Molten Salts Chemistry

Suh, C., Gadzuric, S., Gaune-Escard, M., Rajan, K.

in *Molten Salts and Ionic Liquids: Never the Twain?*

K.R. Seddon & M. Gaune-Escard Eds, John Wiley and Sons Publishers, 2010, 355-366

Calorimetric Methods,

M. Gaune-Escard

in *Molten Salts: From Fundamentals to Applications*, Marcelle Gaune-Escard Ed.,

Springer, NATO Science Series, 2002, 52, 375-400

The Challenges of Building a Molten Salt Database

Fuller, J., Gaune-Escard, M.

in *Green industrial applications of ionic liquids*, Dordrecht: Kluwer Academic Publishers, NATO science series. Series 2, Mathematics, physics and chemistry, 2002, 275-294

Structural Aspects of Molten Salts: Until Millenium and Beyond

A K Adya, H Matsuura, F Hutchinson, M Gaune-Escard, P A Madden, A C Barnes, H E Fischer

in *Progress in Molten Salt Chemistry Vol. 1*, R. W. Berg, H. A. Hjuler. Eds., Elsevier, pp. 37-44, 2000.

Influence of the Second Coordination Sphere on Redox Electrochemistry and Formal Standard Redox Potentials of the Couple Eu(III)/Eu(II) in Alkali Chloride Melts

S. A. Kuznetsov and M. Gaune-Escard

In *Progress in Molten Salt Chemistry*, Editors: R. W. Berg, H. A. Hjuler, Volume 1, Elsevier, 2000

Electric Conductivity of Molten PrCl<sub>3</sub> – Alkali Chloride Systems

A. M. Potapov, M. Gaune-Escard and L. Rycerz

In *Progress in Molten Salt Chemistry*, Editors: R. W. Berg, H. A. Hjuler, Volume 1, Elsevier, 2000

L. Rycerz, Marcelle Gaune-Escard

Mixing enthalpy of TbCl<sub>3</sub>-MCl liquid mixtures (M = Li, Na, K, Rb, Cs)

in *Advances in Molten Salts: From Structural Aspects to Waste Processing*, Ed.: Marcelle Gaune-Escard, Begell House, 1999

Thermodynamics of niobium chlorides and mixtures with alkali chlorides

M. Gaune-Escard

in *Refractory Metals in Molten Salts: Their Chemistry, Electrochemistry and Technology*, Editors: David H. Kerridge, Evgeny G. Polyakov, Springer, NATO ASI Series, Volume 53, 1998, 1-7

Investigations of complex formation and phase diagrams of molten salts related to the oxidized form of sulphuric acid catalysts

Folkmann G.E., Hatem G., Fehrmann R., Gaune-Escard M., Bjerrum N.J.

in *Molten Salt Chemistry and Technology*, Editors: M. Chemla, D. Devilliers, M. Vogler, Publisher: Trans Tech Publications, 1991, 53-60

Neodymium chloride and alkali chlorides mixtures: calorimetric investigation and modeling

Gaune-Escard M., Bogacz A., Rycerz L., Szczepaniak W

in *Molten Salt Chemistry and Technology*, Editors: M. Chemla, D. Devilliers, M. Vogler, Publisher: Trans Tech Publications, 1991, 61-70

BaF<sub>2</sub>-NaF-ZrF<sub>4</sub> melts : experimental thermodynamics and modeling

Hatem G., Gaune-Escard M., Hoch M

in *Molten Salt Chemistry and Technology*, Editors: M. Chemla, D. Devilliers, M. Vogler, Publisher: Trans Tech Publications, 1991, 71-78

Calorimetric Methods

Marcelle Gaune-Escard

In *Molten Salt Techniques*, vol. 4, Editors: Robert J. Gale, David D. Lovering, Plenum Press, 1991, 151-192

Thermodynamic Modeling of High Temperature Melts and Phase Diagram Calculations

M. Gaune-Escard, G. Hatem

in *Materials Chemistry at High Temperatures, Volume 1, 1990, Materials Chemistry at High Temperatures Characterization*, Editor: John W. Hastie, Springer, 1990, 275-294

Calcul des constantes thermodynamiques

M. Gaune-Escard, J.P. Bros

in *Techniques de l'Ingénieur*, 1989, K 540, 1-12.

### **Journal Articles:**

Nanostructured rhodium: electrochemical behavior and electrodeposition from low-temperature carbamide- and acetamide-containing melts

S. Kochetova, A. Savchuk, V. Malyshev, M. Gaune-Escard, L. Solianyuk  
Materials Science and Engineering Technology (Materialwissenschaft und  
Werkstofftechnik), 2015, 46, 1046-1049.

Phase diagram of NdI<sub>3</sub>-RbI pseudo-binary system. Thermodynamic properties of solid  
compounds

Salamon, B. Rycerz, L. Kapała, J. Gaune-Escard, M.  
Fluid Phase Equilibria, 2015, 404, 9–16

Enthalpies of Mixing in the LaI<sub>3</sub>-MI (M = Li, Na, K, Rb, Cs) Binary Systems

Pilarek, B., Rycerz, L., Chojnacka, I., Gaune-Escard, M.  
J. Chem. Eng. Data, 2015, 60 (9), 2629–2635

Lanthanide(III)-Alkali Metal halide Systems: Characterization and Prediction of Phase  
Diagram Topology

Ida Chojnacka, Leszek Rycerz, Marcelle Gaune-Escard  
Calphad, 2015, 51, 401–402

Compound formation in lanthanide-alkali metal halide systems

Gaune-Escard, M., Rycerz, L., Ingier-Stocka, E., Gadzuric, S.  
Transactions of the Institutions of Mining and Metallurgy, Section C: Mineral Processing  
and Extractive Metallurgy, 2014, 123 (1), 35

Thermodynamic and transport properties of the DyBr<sub>3</sub>-NaBr binary system

Chojnacka, I., Rycerz, L., Gaune-Escard, M.  
Journal of Thermal Analysis and Calorimetry, 2014, 116 (2), 681

A thermodynamic description of the KBr-EuBr<sub>2</sub> system

Gong, W., Gaune-Escard, M.  
Journal of Alloys and Compounds, 2014, 584, 503–506

Phase diagram and specific conductivity of the DyBr<sub>3</sub>-CsBr binary system

Chojnacka, I., Rycerz, L., Berkani, M., Gaune-Escard, M.  
Journal of Alloys and Compounds, 2014, 582, 505-510

L. Rycerz, W. Gong and M. Gaune-Escard

The TbBr<sub>3</sub>-LiBr Binary System: Experimental Thermodynamic Investigation And  
Assessment Of Phase Diagram

Journal of Chemical Thermodynamics, 2013, 56, 15-20

Alexei M. Potapov, Leszek Rycerz, Evgeniy S. Filatov and Marcelle Gaune-Escard,  
Electrical Conductivity of Melts Containing Rare-Earth Halides. II. MCl-PrCl<sub>3</sub> (M=Li,  
Rb, Cs)

Z. Naturforsch., 2013, 68a, 59-65

High-energy EXAFS study of molten GdCl<sub>3</sub> systems

Okamoto, Y., Shiwaku, H., Yaita, T., Suzuki, S., Gaune-Escard, M.  
Journal of Molecular Liquids, 2013, 187, 94

The structure and heat capacity of the NaCeF<sub>4</sub> compound.  
Constantin V., Popescu A.M., Gaune-Escard M.,  
Journal of Rare Earths, 2013, 31, 9, 911-915

Instrumentation and calibration of the Calvet calorimeter: Enthalpy of solution of PrBr<sub>3</sub> at standard conditions  
Salamon, B., Kapala, J., Gaune-Escard, M.  
Journal of Thermal Analysis and Calorimetry, 2012, 108 (2), 421-424

Phase diagram and electrical conductivity of the DyBr<sub>3</sub>-RbBr binary system  
Chojnacka, I., Rycerz, L., Berkani, M., Gaune-Escard, M.  
Journal of Thermal Analysis and Calorimetry, 2012, 108 (2), 481-488

Phase equilibrium in lanthanide halide systems: Assessment of CeBr<sub>3</sub> and MBr-CeBr<sub>3</sub> systems (M=Li,Na,K,Rb,Cs)  
Gong, W., Wu, Y., Zhang, R., Gaune-Escard, M.  
Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2012, 36, 44-51

Phase diagram of the TbBr<sub>3</sub>-CsBr Binary System. Thermodynamic and transport properties of the Cs<sub>3</sub>TbBr<sub>6</sub> compound  
CALPHAD: Computer Coupling of Phase Diagrams and Thermochemistry, 2012, 37, 108-115

I. Chojnacka, L. Rycerz, M. Berkani M. Gaune-Escard  
Phase diagram and electrical conductivity of the DyBr<sub>3</sub>-RbBr binary system  
J. Therm. Anal. Calorim , 2012, 108, 481-488

Electrochemical Studies on the Redox Behavior of Europium Fluoride Complexes in an Equimolar NaCl-KCl Melt  
Kuznetsov S.A., Gaune-Escard M.  
Electrochim. Acta., 2011, 414, 2, 126–131

Calorimetric investigation of PrBr<sub>3</sub>-MBr liquid mixtures (M=Na, K, Rb, Cs)  
L. Rycerz, M. Gaune-Escard  
J. Chem. Eng. Data, 2011, 56, 3273-3276

Thermodynamic Functions of PrBr<sub>3</sub> and Congruently Melting M<sub>3</sub>PrBr<sub>6</sub> Compounds (M=K, Rb, Cs)  
L.Rycerz, I. Chojnacka, M. Berkani, M. Gaune-Escard  
J. Chem. Eng. Data, 56 (2011) 1293-1298

Modelling of the thermodynamic properties of the ABr-CeBr<sub>3</sub> (A=Li-Cs ) systems  
Kapała, J., Rutkowska, I., Chojnacka, I., Gaune-Escard, M.

Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2010, 34 (1), 15-19

Synthesis and Characterisation of Ionic Liquids based on 1-butyl-3-methylimidazolium chloride and  $MCl_4$  ( $M = Hf$  and  $Zr$ )

Paul S. Campbell, Catherine C. Santini, Denis Bouchu, Bernard Fenet, Leszek Rycerz, Yves Chauvin, Marcelle Gaune-Escard, Catherine Bessada, Anne-Laure Rollet  
Dalton Transactions, 2010, 39, 1379-1388

Thermodynamic description of the CsBr-TbBr<sub>3</sub> system

Wu, Y., Gong, W., Gaune-Escard, M.  
Thermochimica Acta, 2010, 511 (1-2), 159-162

Phase Diagram and Electrical Conductivity of the PrBr<sub>3</sub>-CsBr Binary System

L. Rycerz, E. Ingier-Stocka, M. Berkani, M. Gaune-Escard  
Z. Naturforsch., 2010, 65a, 859-864

Review of the thermodynamic and transport properties of EuBr<sub>2</sub>-RbBr binary system

Rycerz, L., Ingier-Stocka, E., Gadzuric, S., Gaune-Escard, M.  
Journal of Thermal Analysis and Calorimetry, 2010, 101 (2), 455-461

Thermodynamic and transport properties of the PrBr<sub>3</sub>-RbBr binary system

L. Rycerz, E. Ingier-Stocka, M. Berkani, M. Gaune-Escard  
J. Alloys Compd., 501 (2010) 269-274.

Thermodynamic and transport properties of  $M_3CeBr_6$  compounds ( $M = K, Rb, Cs$ )

L. Rycerz, E. Ingier-Stocka, M. Gaune-Escard  
Journal of Thermal Analysis and Calorimetry 101 (2010) 493-498.

Thermodynamic investigation of the RbBr-TbBr<sub>3</sub> system

Gong, W., Wu, Y., Chen, T., Feng, S., Gaune-Escard, M., Jin, Z.  
Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2010, 34 (2), 176-179

Thermodynamic and transport properties of the PrBr<sub>3</sub>-KBr binary system

Rejek, J., Rycerz, L., Ingier-Stocka, E., Gaune-Escard, M.  
Journal of Chemical and Engineering Data, 2010, 55 (5), 1871-1875

Thermodynamic parameters of vaporization of EuBr<sub>2</sub>

Sergeev, D.N., Motalov, V.B., Butman, M.F., Kudin, L.S., Krämer, K.W., Rycerz, L., Gaune-Escard, M.  
Russian Journal of Physical Chemistry A, 2010, 84 (4), 554-560

Thermodynamic assessment of EuBr<sub>2</sub> and LiBr-EuBr<sub>2</sub> and NaBr-EuBr<sub>2</sub> binary systems

Gong, W., Gaune-Escard, M.  
Thermochimica Acta, 2009, 496 (1-2), 173-177

Phase diagram and thermodynamic and transport properties of the DyBr<sub>3</sub>-LiBr binary system

Kubikova, B., Rycerz, L., Chojnacka, I., Gaune-Escard, M.

Journal of Phase Equilibria and Diffusion, 2009, 30 (5), 502-508

Multivariate analysis for chemistry-property relationships in molten salts

Suh, C., Gadzuric, S., Gaune-Escard, M., Rajan, K.

Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences, 2009, 64 (7-8), 467-476

Phase diagram and electrical conductivity of the CeBr<sub>3</sub>-CsBr binary system

Rycerz, L., Ingier-Stocka, E., Gaune-Escard, M.

Journal of Thermal Analysis and Calorimetry, 2009, 97 (2), 1015-1021

Electrochemical transient techniques for study of the electrochemistry and thermodynamics of nuclear materials in molten salts

Kuznetsov, S.A., Gaune-Escard, M.

Journal of Nuclear Materials, 2009, 389 (1), 108-114

Phase Diagram and Electrical Conductivity of the AgBr-NdBr<sub>3</sub> Binary System

P. Kolodziej, M. Szymanska-Kolodziej, I. Chojnacka, L. Rycerz and M. Gaune-Escard,

J. Alloys Comp., 2009, 480, 834-838

Ewa Ingier-Stocka, Leszek Rycerz, Madjid Berkani, Marcelle Gaune-Escard

Thermodynamic and transport properties of the PrBr<sub>3</sub>-MBr Binary Systems (M = Li, Na)

J. Molecular Liquids, 2009, 148, 40-44

Calorimetric investigation of the CeBr<sub>3</sub>-MBr liquid mixtures (M=Na, K, Rb, Cs)

L. Rycerz, M. Gaune-Escard

J. Chem. Eng. Data, 2009, 54, 2622-2625

L. Rycerz, E. Ingier-Stocka, M. Gaune-Escard

Phase diagram and electrical conductivity of the CeBr<sub>3</sub>-CsBr binary system

J. Therm. Anal. Calorim., 2009, 97, 1015-1021

Thermodynamic characterization of the congruently melting Cs<sub>3</sub>CeCl<sub>6</sub> compound

Butman, M.F., Motalov, V.B., Kudin, L.S., Rycerz, L., Gaune-Escard, M.

Journal of Chemical and Engineering Data, 2008, 53 (10), 2346

Molybdenum electrometallurgical processes in ionic melts

Malyshev, V.V., Gab, A.I., Gaune-Escard, M.

Materials and Manufacturing Processes, 2008, 23 (8), 748-751

A mass spectrometric study of the vaporization of cerium tribromide under Knudsen and Langmuir conditions



Motalov, V.B., Butman, M.F., Kudin, L.S., Krämer, K.W., Rycerz, L., Gaune-Escard, M.  
Journal of Molecular Liquids, 2008, 142 (1-3), 78-82

Thermodynamic functions of CeBr<sub>3</sub> and congruently melting M<sub>3</sub>CeBr<sub>6</sub> compounds (M = Rb, Cs)

Rycerz, L., Ingier-Stocka, E., Berkani, M., Gaune-Escard, M.  
Journal of Chemical and Engineering Data, 2008, 53 (7), 1453-1457

Phases of the K<sub>2</sub>TaF<sub>7</sub>-TaF<sub>5</sub> binary system

Kubikova, B., Boca, M., Gaune-Escard, M.  
Monatshefte für Chemie, 2008, 139 (6), 587-590

Thermodynamic functions of definite compounds formed in EuBr<sub>2</sub>-MBr binary systems (M = K, Rb)

Rycerz, L., Ingier-Stocka, E., Gadzuric, S., Gaune-Escard, M.  
Journal of Chemical and Engineering Data, 2008, 53 (6), 1266-1270

Phase diagram and electrical conductivity of the AgCl-NdCl<sub>3</sub> binary system

Szymanska-Kolodziej, M., Kolodziej, P., Rycerz, L., Gaune-Escard, M.  
Zeitschrift für Naturforschung - Section A Journal of Physical Sciences, 2008, 63 (5-6), 364-370

Thermodynamic properties of AgCl and AgBr

Rycerz, L., Szymanska-Kolodziej, M., Kolodziej, P., Gaune-Escard, M.  
Journal of Chemical and Engineering Data, 2008, 53 (5), 1116-1119

Electrical conductivity of the molten EuBr<sub>2</sub>-MBr binary mixtures (M = Li, Na, K, Rb, or Cs)

Rycerz, L., Ingier-Stocka, E., Gadzuric, S., Gaune-Escard, M.  
Journal of Molecular Liquids, 2008, 140 (1-3), 78-83

Thermodynamic investigation of the KBr-TbBr<sub>3</sub> system

Gong, W., Gadzuric, S., Bros, J.P., Gaune-Escard, M., Du, Y.  
Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2008, 32 (1), 43-48

Initial stages of nucleation of molybdenum and tungsten carbide phases in tungstate-molybdate-carbonate melts

Malyshev, V., Gab, A., Gaune-Escard, M.  
Journal of Applied Electrochemistry, 2008, 38 (3), 315-320

Thermal and conductometric studies of the CeBr<sub>3</sub>-MBr binary systems (M = Li, Na)

Ingier-Stocka, E., Rycerz, L., Gadzuric, S., Gaune-Escard, M.  
Journal of Alloys and Compounds, 2008, 450 (1-2), 162-166

Physicochemical properties of the EuBr<sub>2</sub>-KBr binary system

Rycerz, L., Ingier-Stocka, E., Cieslak-Golonka, M., Wojciechowska, A., Gadzuric, S., Gaune-Escard, M.

Journal of Alloys and Compounds, 2008, 450 (1-2), 157-161

Phase diagram and electrical conductivity of the CeBr<sub>3</sub>-RbBr binary system

Rycerz, L., Ingier-Stocka, E., Gadzuric, S., Gaune-Escard, M.

Journal of Alloys and Compounds, 2008, 450 (1-2), 175-180

Lanthanide(III) halides: Thermodynamic properties and their correlation with crystal structure

Rycerz, L., Gaune-Escard, M.

Journal of Alloys and Compounds, 2008, 450 (1-2), 167-174

Thermodynamic Characterization of the Congruently Melting Cs<sub>3</sub>CeCl<sub>6</sub> Compound

M. F. Butman, V. B. Motalov, L. S. Kudin, L. Rycerz and M. Gaune-Escard

Journal of Chemical & Engineering Data, 2008, 53, 10, 2346–2350

Molybdenum Electrometallurgical Processes in Ionic Melts

Malyshev, V.V., Gab, A.I., Gaune-Escard, M.

Materials and Manufacturing Processes, 2008, 23, 8, 748-751

Thermodynamics and transport properties of the CeBr<sub>3</sub> - MBr binary systems

Gaune-Escard, M., Rycerz, L., Ingier-Stocka, E., Gadzuric, S.

ECS Transactions, 2007, 3 (35), 453-465

Physicochemical properties of molten KF-K<sub>2</sub>NbF<sub>7</sub>-Nb<sub>2</sub>O<sub>5</sub> system

Kubikova, B., Cibulkova, J., Danek, V., Gaune-Escard, M.

ECS Transactions, 2007, 3 (35), 169-178

Codeposition of silver with tungsten carbide in tungstate melts

Malyshev, V., Gab, A., Gaune-Escard, M.

ECS Transactions, 2007, 3 (35), 423-428

Phase composition of the cathodic products obtained in alkali chloride melts containing potassium monooxyfluoride complexes of tantalum

Grinevitch, V.V., Kuznetsov, S.A., Arakcheeva, A.V., Gaune-Escard, M.

ECS Transactions, 2007, 3 (35), 363-374

Physicochemical properties of melts used for the electrodeposition of niobium

Kubikova, B., Danek, V., Gaune-Escard, M.

Zeitschrift für Naturforschung - Section A, Journal of Physical Sciences, 2007, 62 (9), 540-544

Electrochemical synthesis of rare-earth metal (Eu, Nd) borides in molten salts

Bukatova, G.A., Kuznetsov, S.A., Gaune-Escard, M.

Russian Journal of Electrochemistry, 2007, 43 (8), 929-935

Interactive experimentation and modeling for phase equilibrium

Weiping Gong, Marcelle Gaune-Escard, Zhanpeng Jin

Data Science Journal, 2007, 6, Supplement, S420-S428

Thermodynamic functions of congruently melting compounds formed in the CeBr<sub>3</sub>-KBr binary system

Rycerz, L., Ingier-Stocka, E., Berkani, M., Gaune-Escard, M.

Journal of Chemical and Engineering Data, 2007, 52 (4), 1209-1212

Unusual influence of the temperature on the standard rate constants of charge transfer for the Eu(III)/Eu(II) redox couple in chloride-bromide melts

Kuznetsov, S.A., Gaune-Escard, M.

Zeitschrift für Naturforschung - Section A Journal of Physical Sciences, 2007, 62 (7-8), 445-451

Electrical conductivity of melts containing rare-earth halides. I. MCl-NdCl<sub>3</sub> (M = Li, Na, K, Rb, Cs)

Potapov, A.M., Rycerz, L., Gaune-Escard, M.

Zeitschrift für Naturforschung - Section A Journal of Physical Sciences, 2007, 62 (7-8), 431-440

Thermodynamic assessment of LaBr<sub>3</sub> unary and LiBr-LaBr<sub>3</sub> binary system

Gong, W., Gaune-Escard, M.

Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2007, 31 (2), 186-191

Quality assurance in thermodynamic databases for performance assessment studies in waste disposal

Voigt, W.; Brendler, V.; Marsh, Ken; Rarey, R.; Wanner, H.; Gaune-Escard, M.; Cloke, P.; Vercouter, Th.; Bastrakov, E.; Hagemann, S.

Pure and Applied Chemistry, 2007, 79, 5, 883-894

Phase diagram of the TbBr<sub>3</sub>-RbBr binary system: Thermodynamic and transport properties of the Rb<sub>3</sub>TbBr<sub>6</sub> compound

Rycerz, L., Gaune-Escard, M.

Inorganic Chemistry, 2007, 46 (6), 2299-2306

Physicochemical features of lanthanide halide molten salt solutions

Rycerz, L., Gadzuric, S., Gong, W., Ingier-Stocka, E., Gaune-Escard, M.

Journal of Molecular Liquids, 2007, 131-132, 246-253

Phase diagram and electrical conductivity of CeBr<sub>3</sub>-KBr

Rycerz, L., Ingier-Stocka, E., Gadzuric, S., Gaune-Escard, M.

Zeitschrift für Naturforschung A, 2007, 62, 3-4, 197-204

Thermodynamics and Transport Properties of the CeBr<sub>3</sub>-MBr Binary Systems  
Marcelle Gaune-Escard, Leszek Rycerz, Ewa Ingier-Stocka, Slobodan Gadzuric  
ECS Transactions, 2007, 3 (35), 453-465

Phase composition of the cathodic products obtained in alkali chloride melts containing potassium monooxyfluoride of tantalum  
Grinevitch V., Kuznetsov S.A., Arakcheeva A. and Gaune-Escard M.  
ECS Transactions, 2007, 3, 35, 363-374.

Extracting information from the molten salt database  
S Gadzuric, C Suh, M Gaune-Escard, K Rajan  
Metallurgical and Materials Transactions A, 2006, 37 (12), 3411-3414

Kinetics of electrode processes and thermodynamic properties of europium chlorides dissolved in alkali chloride melts  
Kuznetsov, S.A., Gaune-Escard, M.  
Journal of Electroanalytical Chemistry, 2006, 595 (1), 11-22

Electrode and chemical reactions during electrodeposition of tantalum products in CsCl melt  
Grinevitch, V.V., Kuznetsov, S.A., Arakcheeva, A.A., Olyunina, T.V., Schönleber, A., Gaune-Escard, M.  
Electrochimica Acta, 2006, 51 (28), 6563-6571

Electronic conductivity of NaCl-KCl equimolar melt Containing Eu(III) and Eu(II) complexes by electrochemical impedance spectroscopy  
Kuznetsov, S.A., Gaune-Escard, M.  
Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences, 2006, 61 (9), 486-490

Electrochemical Transient Techniques for determination of uranium and rare-earth metal separation coefficients in molten salts.  
Kuznetsov S.A., Hayashi H., Minato K., Gaune-Escard M..  
Electrochim. Acta. 2006, 5112, 2463-2470.

Unusual nature of lanthanide chloride-alkali metal chloride M<sub>3</sub>LnCl<sub>6</sub> compounds in the solid state,  
Rycerz L., Gaune-Escard M.  
Journal of Alloys and Compounds, 2006, 408-412, 76-79.

Thermodynamic assessment of NdBr<sub>3</sub> unary and LiBr-NdBr<sub>3</sub> binary system  
Gong, W., Gaune-Escard, M.  
Journal of Alloys and Compounds, 2006, 419 (1-2), -333

Phase equilibria in the molten system KF-K<sub>2</sub>NbF<sub>7</sub>-Nb<sub>2</sub>O<sub>5</sub>  
Kubíková, B., Daněk, V., Gaune-Escard, M.

Zeitschrift für Physikalische Chemie, 2006, 220 (6), 765-773

Unusual nature of lanthanide chloride-alkali metal chloride  $M_3LnCl_6$  compounds in the solid state

Gaune-Escard, M., Rycerz, L.

Journal of Alloys and Compounds, 2006, 408-412, 76

Thermodynamics of Europium Chlorides in Alkali Chloride Melts,

Kuznetsov, S. A., Rycerz, L. & Gaune-Escard, M.

Special issue of JNMES to Honour the Memory of Prof. M. Chemla,

J. New Mat. for Electrochem. Systems, 2006, 9, 313-321

Electrochemical behavior and some thermodynamic properties of  $UCl_4$  and  $UCl_3$  dissolved in a LiCl-KCl eutectic melt

Kuznetsov, S.A., Hayashi, H., Minato, K., Gaune-Escard, M.

Journal of the Electrochemical Society, 2005, 152 (4), C203-C212

The influence of oxide ions on the electrochemical behavior of  $UCl_4$  and  $UCl_3$  in a LiCl-KCl eutectic melt

Kuznetsov, S.A., Hayashi, H., Minato, K., Gaune-Escard, M.

Electrochemistry, 2005, 73 (8), 630-632

Enthalpy of mixing of the  $PrCl_3$ -LiCl and  $NdCl_3$ -LiCl molten salt systems

Rycerz, L., Okamoto, Y., Gaune-Escard, M.

Zeitschrift für Naturforschung - Section A Journal of Physical Sciences, 2005, 60 (3), 196-200

Electrical conductivity of molten  $LaBr_3$  and  $LaBr_3$ -MBr binary mixtures

Ziolek, B., Rycerz, L., Gadzuric, S., Ingier-Stocka, E., Gaune-Escard, M.

Zeitschrift für Naturforschung - Section A Journal of Physical Sciences, 2005, 60 (1-2), 75-80

Thermodynamics of lanthanide halides and application to high-temperature processes.

Gaune-Escard M.

Scand. J. Metall., 2005, 346, 369-375

Thermodynamic assessment of LiCl- $NdCl_3$  and LiCl- $PrCl_3$  quasi-binary systems

Gong, W., Gaune-Escard, M., Rycerz, L.

Journal of Alloys and Compounds, 2005, 396 (1-2), 92-99

Thermodynamic assessment of  $TbBr_3$  unary and NaBr- $TbBr_3$  binary system

Gong, W., Gaune-Escard, M., Rycerz, L.

Journal of Alloys and Compounds, 2005, 402 (1-2), 58-65

Determination of uranium and rare-earth metals separation coefficients in LiCl-KCl melt by electrochemical transient techniques

Kuznetsov, S.A., Hayashi, H., Minato, K., Gaune-Escard, M.  
Journal of Nuclear Materials, 2005, 344 (1-3), 169-172

Electrochemical and calorimetric investigations of some thermodynamic properties of  
EuCl<sub>3</sub> and EuCl<sub>2</sub> dissolved in alkali chloride melts  
Kuznetsov, S.A., Rycerz, L., Gaune-Escard, M.  
Journal of Nuclear Materials, 2005, 344 (1-3), 152-157

Thermodynamic and transport properties of K<sub>3</sub>TbX<sub>6</sub> congruently melting compounds  
formed in TbX<sub>3</sub>-KX binary systems (X = Cl, Br)  
Rycerz, L., Gaune-Escard, M.  
Journal of Nuclear Materials, 2005, 344 (1-3), 124-127

Phase diagram and electrical conductivity of the EuBr<sub>2</sub>-NaBr binary system  
Ingier-Stocka, E., Gadzuric, S., Rycerz, L., Cieslak-Golonka, M., Gaune-Escard, M.  
Journal of Nuclear Materials, 2005, 344 (1-3), 120-123

Thermodynamic and structural properties of high temperature solid and liquid EuBr<sub>2</sub>  
Rycerz, L., Gadzuric, S., Ingier-Stocka, E., Berg, R.W., Gaune-Escard, M.  
Journal of Nuclear Materials, 2005, 344 (1-3), 115-119

Molten salts vis-à-vis ionic liquids the future prospects  
Gaune-Escard, M.  
Electrochemistry, 2005, 73 (8), 543

Phase diagram and electrical conductivity of EuBr<sub>2</sub>-LiBr binary system  
Gadzuric, S., Ingier-Stocka, E., Rycerz, L., Gaune-Escard, M.  
Journal of Alloys and Compounds, 2005, 397 (1-2), 63-67

XAFS study of europium chloride at high temperatures  
Watanabe, S., Adya, A.K., Rycerz, L., Barnes, A.C., Gaune-Escard, M., Okamoto, Y.,  
Akatsuka, H., Matsuura, H.  
Progress in Nuclear Energy, 2005, 47 (1-4), 632-638

Heat capacity and thermodynamic properties of LaBr<sub>3</sub> at 300-1100 K  
Rycerz, L., Ingier-Stocka, E., Ziolk, B., Gadzuric, S., Gaune-Escard, M.  
Zeitschrift fur Naturforschung - Section A, Journal of Physical Sciences, 2004, 59 (11),  
825-828

Heat capacity and thermodynamic functions of TbBr<sub>3</sub>  
Rycerz, L., Gaune-Escard, M.  
Journal of Chemical and Engineering Data, 2004, 49 (4), 1078-1081

Conference High Energy Density Electrochemical Power Sources, Nice, France (17-20  
September 2003): Preface  
Gaune-Escard, M.

Journal of Power Sources, 2004, 129, 1, ix

Electrical Conductivity of Molten Binary NdBr<sub>3</sub> - Alkali Bromide Mixtures

Gadzuric, S., Ingier-Stocka, E., Rycerz, L., Gaune-Escard, M.

Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences, 2004, 59 (1-2), 77-84

Phase Diagram of the TbBr<sub>3</sub>-KBr Binary System

Rycerz, L., Gaune-Escard, M.

Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences, 2004, 59 (1-2), 84-91

Phase diagram and electrical conductivity of TbBr<sub>3</sub>-NaBr binary system

Rycerz, L., Cieślak-Golonka, M., Ingier-Stocka, E., Gaune-Escard, M.

Journal of Thermal Analysis and Calorimetry, 2003, 72 (1), 231-239

Thermal and conductometric studies of NdBr<sub>3</sub> and NdBr<sub>3</sub>-LiBr binary system

Rycerz, L., Ingier-Stocka, E., Cieślak-Golonka, M., Gaune-Escard, M.

Journal of Thermal Analysis and Calorimetry, 2003, 72 (1), 241-251

Solubility of Lanthanide Chlorides (LnCl<sub>3</sub>) in Alkali Metal Chlorides (MCl):

Thermodynamics and Electrical Conductivity of the M<sub>3</sub>LnCl<sub>6</sub> Compounds

Gaune-Escard, M., Rycerz, L.

Monatshefte fur Chemie, 2003, 134 (5), 777-786

The electrochemical synthesis of europium boride

Bukatova G. A., Kuznetsov S. A., Gaune-Escard M..

J. Min. Metall., 2003, 39(1-2) B, 251-259.

Ex-vessel core melt stabilization research (ECOSTAR).

Steinwarz W., Koller W., Dyllong N., Hâfner W., Journeau C., Seiler J.M., Froment K., Cagnet G., Goldstein S., Fischer M., Hellmann S., Nie M., Eddi M, Alsmeyer H., Allelein H.-J., Spengler C., Bürger M., Sehgal B.R., Koch M.K., Bûscher T., Alkan Z., Petrov J. B., Gaune-Escard M., Weiss F.-P.

Nucl. Eng. Des., 2003, 221, 77-94

Phase diagram and electrical conductivity of TbBr<sub>3</sub>-NaBr binary system

Rycerz L., Ingier-Stocka E., Cieslak-Golonka M., Gaune-Escard M.

J. Therm. Anal. Calorim., 2003, 72, 231-239

The electrochemical synthesis of europium boride

G.A. Bukatova, S.A. Kuznetsov, M. Gaune-Escard

Journal of Mining and Metallurgy Section B Metallurgy, 2003, 251-259

Enthalpies of mixing in molten UCl<sub>3</sub>-NaCl system

Haruaki Matsuura, Ryuzo Takagi, Leszek Rycerz & Marcelle Gaune-Escard

Journal of Nuclear Science and Technology, 2002, 39, Supplement 3, 632-634

Enthalpies of phase transitions and heat capacity of TbCl<sub>3</sub> and compounds formed in TbCl<sub>3</sub>-MCl systems (M=K, Rb, Cs)

Rycerz, L., Gaune-Escard, M.

Journal of Thermal Analysis and Calorimetry, 2002, 68 (3), 973-981

SO<sub>2</sub> oxidation catalyst model systems characterized by thermal methods

Hatem, G., Eriksen, K.M., Gaune-Escard, M., Fehrmann, R.

Topics in Catalysis, 2002, 19 (3-4), 323-331

Thermodynamics of EuCl<sub>3</sub>: Experimental enthalpy of fusion and heat capacity and estimation of thermodynamic functions up to 1300 K

Rycerz, L., Gaune-Escard, M.

Zeitschrift für Naturforschung - Section A Journal of Physical Sciences, 2002, 57 (5-6), 215-220

Calorimetric investigation of NdCl<sub>3</sub>-MCl liquid systems (M =Li, Na, K, Rb, Cs)

Rycerz, L., Gaune-Escard, M.

Zeitschrift für Naturforschung - Section A Journal of Physical Sciences, 2002, 57 (3-4), 136-142

Influence of second coordination sphere on the kinetics of electrode reactions in molten salts

Kuznetsov, S.A., Gaune-Escard, M.

Zeitschrift für Naturforschung - Section A Journal of Physical Sciences, 2002, 57 (1-2), 85-88

Thermodynamics of SmCl<sub>3</sub> and TmCl<sub>3</sub>: Experimental enthalpy of fusion and heat capacity. Estimation of thermodynamic functions up to 1300 K

Rycerz, L., Gaune-Escard, M.

Zeitschrift für Naturforschung - Section A Journal of Physical Sciences, 2002, 57 (1-2), 79-84

Electrochemistry and Thermodynamics of EuCl<sub>3</sub> and EuCl<sub>2</sub> in Alkali Chloride Melts.

Kuznetsov S., Gaune-Escard M.

J. Nucl. Sci. Technol. 2002. Suppl 3, 628-631.

Thermochemical and Structural Properties of UNCl(s)

Huntelaar M., Booij A., Ijido D., Van Genderen A., Akabori M., Gaune-Escard M.,

Rycerz L.

J. Nucl. Sci. Technol., 2002. Suppl 3, 599-602

Preface - 9th IUPAC International Symposium on Solubility Phenomena (9th ISSP)

Hammamet, Tunisia, 25-28 July 2000 -

Fogg, P.G.T., Gamsjäger, H., Gaune-Escard, M.



Pure and Applied Chemistry, 2001, 73 (5), IV-IV

Virtual molten salt laboratory: Dream or reality?

Gaune-Escard, M., Fuller, J.

High Temperature Materials and Processes, 2001, 20 (3-4), 309-312

Analysis of the enthalpy of mixing data of binary and ternary [rare earth (Nd, La, Y, Yb), alkali metal]-fluoride systems

Gaune-Escard, M., Hoch, M.

Journal of Alloys and Compounds, 2001, 321 (2), 267-275

Mixing Enthalpies of TbBr<sub>3</sub>-MBr Liquid Mixtures (M = Li, Na, K, Rb, Cs)

Rycerz, L., Gaune-Escard, M.

Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences, 2001, 56 (12), 859-864

Calorimetric investigation of MCl-EuCl<sub>2</sub> melts (M = Na, K, Rb)

Da Silva, F., Rycerz, L., Gaune-Escard, M.

Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences, 2001, 56 (9-10), 653-657

Thermodynamic properties of EuCl<sub>2</sub> and the NaCl-EuCl<sub>2</sub> system

Da Silva, F., Rycerz, L., Gaune-Escard, M.

Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences, 2001, 56 (9-10), 647-652

Static and dynamic structure of molecular monomers and dimers of the rare-earth fluorides

Akdeniz, Z., Gaune-Escard, M., Tosi, M.P.

Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences, 2001, 56 (5), 381-385

Redox electrochemistry and formal standard redox potentials of the Eu(III)/Eu(II) redox couple in an equimolar mixture of molten NaCl-KCl

S. A. Kuznetsov, M. Gaune-Escard

Electrochim. Acta, 2001, 46, 1101-1111.

Electrochemical and Thermodynamic Properties of EuCl<sub>3</sub> and EuCl<sub>2</sub> in an Equimolar NaCl-KCl Melt

S. A. Kuznetsov, L. Rycerz and M. Gaune-Escard,

Z. Naturforsch., A: Phys. Sci., 2001, 56a 741-750

Thermodynamic investigation and modeling of {(1 - x)KCl + xCaCl<sub>2</sub>}

Hatem, G., Gaune-Escard, M., Lukas, H.L.

Journal of Chemical Thermodynamics, 2000, 32 (1), 17-27

Thermodynamics of the [Ir-In] system

P. Anres, P. Fossati, K. W. Richter, M. Gambino, M. Gaune-Escard and J.-P. Bros,  
J. Alloys Comp., 2000, 296, 119-127

Molar volume of molten  $\text{EuCl}_2$ : Estimation and experimental

Gaune-Escard, M., Koyama, Y., Takagi, R., Fukushima, K., Iwadate, Y.  
Journal of Molecular Liquids 83, 1999, (1-3), 105-110

Complexation and Ionic Arrangement in  $\text{Na}_3\text{ErCl}_6$  and  $\text{K}_3\text{ErCl}_6$  Melts Analyzed by X-ray Diffraction

Iwadate, Y., Fukushima, K., Takagi, R., Gaune-Escard, M.  
Electrochemistry, 1999, 67 (6), 553-557

Thermal and conductometric investigations and phase diagram of the  $\text{Rb}_2\text{S}_2\text{O}_7$ - $\text{V}_2\text{O}_5$  system

Abdoun, F., Hatem, G., Gaune-Escard, M., Eriksen, K.M., Fehrmann, R.  
Journal of Physical Chemistry B, 1999, 103 (18), 3559-3562

The structure of molten  $\text{DyCl}_3$  and  $\text{DyNa}_3\text{Cl}_6$  simulated with polarizable- And rigid-ion models

Takagi, R., Hutchinson, F., Madden, P.A., Adya, A.K., Gaune-Escard, M.  
Journal of Physics Condensed Matter, 1999, 11 (3), 645-658

Analysis of the enthalpy of mixing data of binary and ternary {Rare Earth (Dy, Nd, Pr, Tb) - Alkali metal} halide systems

Gaune-Escard, M., Rycerz, L., Hoch, M.  
Journal of Molecular Liquids, 1999, 83 (1-3), 83

[Pd-Sn] system: enthalpies of formation of the liquid [Pd+Sn] and heat capacities of  $\text{PdSn}$ ,  $\text{PdSn}_2$ ,  $\text{PdSn}_3$  and  $\text{PdSn}_4$  compounds

Mathon, M., Gambino, M., Hayer, E., Gaune-Escard, M., Bros, J.P.  
Journal of Alloys and Compounds, 1999, 285 (1-2 Complete), 123-132

Heat capacity of the  $\text{Rb}_3\text{LnCl}_6$  compounds with Ln = La, Ce, Pr, Nd

Rycerz, L., Gaune-Escard, M.  
Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences 54, 1999, (6-7), 397-403

Heat capacity of  $\text{K}_3\text{LnCl}_6$  compounds with Ln = La, Ce, Pr, Nd

Gaune-Escard, M., Rycerz, L.  
Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences, 1999, 54 (3-4), 229-235

Conductivity, thermal measurements, and phase diagram of the  $\text{Na}_2\text{S}_2\text{O}_7$ - $\text{NaHSO}_4$  system

Hatem, G., Gaune-Escard, M., Rasmussen, S.B., Fehrmann, R.

Journal of Physical Chemistry, 1999, B 103 (6), 1027-1030

Enthalpy of phase transitions and heat capacity of stoichiometric compounds in LaBr<sub>3</sub>-MBr systems (M = K, Rb, Cs)

Rycerz, L., Gaune-Escard, M.

Journal of Thermal Analysis and Calorimetry, 1999, 56 (1), 355-363

Mixing enthalpy of TbCl<sub>3</sub>-MCl liquid mixtures (M = Li, Na, K, Rb, Cs)

L. Rycerz, Marcelle Gaune-Escard

High Temperature Material Processes, 1998, 2, 4, 483-496

Thermodynamic assessment of the NaCl-DyCl<sub>3</sub> molten salt system

Da Silva, F; Gaune-Escard, M

High Temperature Material Processes, 1999, 1, 3, 77-89

The structure of salt eutectics

Gaune-Escard, M; Kerridge, DH

High Temperature Material Processes, 1999, 4, 3, 443-451

Unravelling the internal complexities of molten salts

Adya, A.K., Takagi, R., Gaune-Escard, M.

Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences, 1998, 53 (12), 1037-1048

Mixing enthalpy of TbCl<sub>3</sub> - MCl liquid mixtures (M=Li, Na, K, Rb, Cs)

Rycerz, L., Gaune-Escard, M.

High Temperature Material Processes, 1998, 2 (4), 483

Enthalpy of formation of the (Pt-Sn) system

Anres, P., Gaune-Escard, M., Bros, J.P., Hayer, E.

Journal of Alloys and Compounds, 1998, 280 (1-2), 158-167

Conductometric, density and thermal measurements of the M<sub>2</sub>S<sub>2</sub>O<sub>7</sub> (M=Na, K, Rb, Cs) salts

Hatem, G., Abdoun, F., Gaune-Escard, M., Eriksen, K.M., Fehrmann, R.

Thermochimica Acta, 1998, 319 (1-2), 33-42

Estimation of the chemical potential and the activity of NaCl in molten DyCl<sub>3</sub>-NaCl by molecular dynamics simulation

Sakurai, M., Takagi, R., Adya, A.K., Gaune-Escard, M.

Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences, 1998, 53 (8), 655-658

Thermodynamics of the [Rh-In] system

Anres, P., Fossati, P., Gaune-Escard, M., Bros, J.P.

Journal of Alloys and Compounds, 1998, 266 (1-2), 241-246

Thermodynamics of the (Rh-Ga) system

Anrés, P., Gaune-Escard, M., Bros, J.P.

Journal of Alloys and Compounds, 1998, 265 (1-2), 201-208

Conductivity, NMR measurements, and phase diagram of the K<sub>2</sub>S<sub>2</sub>O<sub>7</sub>-V<sub>2</sub>O<sub>5</sub> system

Folkmann, G.E., Eriksen, K.M., Fehrmann, R., Gaune-Escard, M., Hatem, G.,

Lapina, O.B., Terskikh, V.

Journal of Physical Chemistry B, 1998, 102 (1), 24-28

Comment on (Ga-Rh)

Anrés, P., Gaune-Escard, M., Bros, J.P.

Journal of Phase Equilibria, 1997, 18 (5), 417

Comment on gallium-iridium (Ga-Ir)

Anrés, P., Gaune-Escard, M., Bros, J.P.

Journal of Phase Equilibria, 1997, 18 (5), 415

First thermodynamic approach of the (Ir+Ga) system

Anrés, P., Gaune-Escard, M., Bros, J.P.

Journal of Alloys and Compounds, 1997, 259 (1-2), 225-233

Mixing enthalpy in the molten NdCl<sub>3</sub>-(LiCl-KCl)eutectic system

Takagi, R., Rycerz, L., Gaune-Escard, M.

Journal of Alloys and Compounds, 1997, 257 (1-2), 134-136

Modeling and assessment of the system

Hatem, G., Gaune-Escard, M.

Thermochimica Acta, 1997, 293 (1-2), 137-142

Calorimetric and thermal analysis investigations of the MF-LaF<sub>3</sub> mixtures (M = alkali metal)

Abdoun, F., Gaune-Escard, M., Hatem, G.

Journal of Phase Equilibria, 1997, 18 (1), 6-20

Co + Ga liquid system: Enthalpy of formation

Haddad, R., Gaune-Escard, M., Bros, J.P.

Journal of Alloys and Compounds, 1997, 247 (1-2), 240

Thermodynamics of nickel-tin liquid alloys

Haddad, R., Gaune-Escard, M., Bros, J.P., Ranninger-Havlicek, A., Hayer, E.,

Komarek, K.L.

Journal of Alloys and Compounds, 1997, 247 (1-2), 82-92

The Fermi enthalpy in liquid alloys

Hayer, E., Gaune-Escard, M., Bros, J.P.

Journal of Non-Crystalline Solids, 1996, 205-207 (1), 312-316

Conductivity, NMR, thermal measurements, and phase diagram of the  $K_2S_2O_7$ - $KHSO_4$  system

Eriksen, K.M., Fehrmann, R., Hatem, G., Gaune-Escard, M., Lapina, O.B., Mastikhin, V.M.

Journal of Physical Chemistry, 1996, 100 (25), 10771-10778

Formation enthalpies of liquid mixtures (M = Li, Na, K, Rb, Cs)

Gaune-Escard, M., Bogacz, A., Rycerz, L., Szczepaniak, W.

Thermochimica Acta, 1996, 279 (1-2), 1-10

Formation enthalpies of  $MBr$ - $NdBr_3$  liquid mixtures (M = Li, Na, K, Rb, Cs)

Gaune-Escard, M., Bogacz, A., Rycerz, L., Szczepaniak, W.

Thermochimica Acta, 1996, 279 (1-2), 11-25

Electrical conductivity of molten  $LnCl_3$  and  $M_3LnCl_6$  compounds (Ln = La, Ce, Pr, Nd; M = K, Rb, Cs)

Gaune, P., Gaune-Escard, M., Rycerz, L., Bogacz, A.

Journal of Alloys and Compounds, 1996, 235 (2), 143-149

Heat capacity of  $LaCl_3$ ,  $CeCl_3$ ,  $PrCl_3$ ,  $NdCl_3$ ,  $GdCl_3$ ,  $DyCl_3$

Gaune-Escard, M., Bogacz, A., Rycerz, L., Szczepaniak, W.

Journal of Alloys and Compounds, 1996, 235 (2), 176-181

Thermodynamics of the (Pt + Ga) system

Anres, P., Gaune-Escard, M., Bros, J.P.

Journal of Alloys and Compounds, 1996, 234 (2), 264-274

The cobalt-indium system: Enthalpy of formation and phase diagram

Bros, J.P., Gaune-Escard, M., El Allam, D., Haddad, R., Hayer, E.

Journal of Alloys and Compounds, 1996, 233 (1-2), 264-271

Cendres volantes et thermochemie

M. Mathon, J.P. Bros, M. Gaune-Escard

Déchets, sciences et techniques, 1996, 1, 28-32

Molar volume variation and ionic conduction in molten  $ErCl_3$ - $NaCl$  and  $ErCl_3$ - $KCl$  systems

Fukushima, K., Ikumi, T., Mochinaga, J., Takagi, R., Gaune-Escard, M., Iwadate, Y.

Journal of Alloys and Compounds, 1995, 229 (2), 274-279

Calorimetric investigations of the  $MBr$ - $NdBr_3$  melts (M=Li, Na, K, Cs)

Gaune-Escard, M., Bogacz, A., Rycerz, L., Szczepaniak, W.

Journal of Thermal Analysis, 1995, 45 (5), 1117-1124

The AlF<sub>3</sub>-BaF<sub>2</sub>-NaF molten salt system: calorimetric investigations and modelling  
Peretz, P., Hatem, G., Gaune-Escard, M., Hoch, M.  
Thermochimica Acta, 1995, 262 (C), 45-54

Enthalpies of formation of liquid and solid (palladium + indium) alloys  
Allam, D.E., Gaune-Escard, M., Bros, J.-P., Hayer, E.  
Metallurgical and Materials Transactions B, 1995, 26 (4), 767-773

The system: Enthalpies of formation of liquid and solid alloys  
Anres, P., Gaune-Escard, M., Hayer, E., Bros, J.P.  
Journal of Alloys and Compounds, 1995, 221 (1-2), 143-152

The limiting molar partial enthalpies of mixing of iron, cobalt, nickel, palladium and platinum in liquid gallium and indium  
Anres, P., Haddad, R., El Allam, D., Gaune-Escard, M., Bros, J.P., Hayer, E.  
Journal of Alloys and Compounds, 1995, 220 (1-2), 189-182

Enthalpy of formation of the liquid alloy.  
R. Haddad, M. Gaune-Escard, J.P. Bros.  
J. Alloys and Compounds, 1995, 226, 197-202

Etude thermodynamique des mélanges binaires de sels fondus MF-NF<sub>3</sub> (M = Li, Na, K, N = La, Nd).  
F. Abdoun, M. Berkani, G. Hatem, M. Gaune-Escard.  
J. Cal. Anal. Ther., 1995, XXVI, 119

Aspect thermodynamique de l'inertage des cendres volantes: Stabilité des mélanges d'oxydes.  
M. Mathon, J.P. Bros, M. Gaune-Escard.  
J. Cal. Anal. Ther., 1995, XXVI, 304-307

Calorimetric and Conductometric Investigations of the Systems K<sub>2</sub>S<sub>2</sub>O<sub>7</sub>-V<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>S<sub>2</sub>O<sub>7</sub>-K<sub>2</sub>SO<sub>4</sub>-V<sub>2</sub>O<sub>5</sub> in the Range 390-500°C  
Hatem G, Fehrmann R, Gaune-Escard M  
Thermochimica Acta., 1994, 243, 1, 63-77

X-Ray Diffraction Study on the Local Structure of Molten ErCl<sub>3</sub>  
Iwodate, Y., Iida, T., Fukushima, K., Mochinaga, J., Gaune-Escard, M.  
Zeitschrift fur Naturforschung - Section A Journal of Physical Sciences, 1994, 49 (7-8), 811-814

The gallium-iron system: Enthalpy of formation in liquid state  
Haddad, R., Gaune-Escard, M., Bros, J.P.  
Journal of Phase Equilibria, 1994, 15 (3), 310

Calorimetric investigation of PrCl<sub>3</sub>-NaCl and PrCl<sub>3</sub>-KCl liquid mixtures

Gaune-Escard, M., Rycerz, L., Szczepaniak, W., Bogacz, A.  
Thermochimica Acta, 1994, 236 (C), 59-66

Calorimetric investigation of NdCl<sub>3</sub>-MCl liquid mixtures (where M is Na, K, Rb, Cs)  
Gaune-Escard, M., Bogacz, A., Rycerz, L., Szczepaniak, W.  
Thermochimica Acta, 1994, 236 (C), 67-80

Enthalpies of mixing in PrCl<sub>3</sub>-CaCl<sub>2</sub> and NdCl<sub>3</sub>-CaCl<sub>2</sub> liquid systems  
Gaune-Escard, M., Rycerz, L., Szczepaniak, W., Bogacz, A.  
Thermochimica Acta, 1994, 236 (C), 51

Enthalpies of mixing in the DyCl<sub>3</sub>-NaCl and DyCl<sub>3</sub>-PrCl<sub>3</sub> liquid systems  
Gaune-Escard, M., Rycerz, L., Bogacz, A.  
Journal of Alloys and Compounds, 1994, 204 (1-2), 185-188

Enthalpies of phase transition in the lanthanide chlorides LaCl<sub>3</sub>, CeCl<sub>3</sub>, PrCl<sub>3</sub>, NdCl<sub>3</sub>,  
GdCl<sub>3</sub>, DyCl<sub>3</sub>, ErCl<sub>3</sub> and TmCl<sub>3</sub>  
Gaune-Escard, M., Rycerz, L., Szczepaniak, W., Bogacz, A.  
Journal of Alloys and Compounds, 1994, 204 (1-2), 193-196

Entropies of phase transitions in the M<sub>3</sub>LnCl<sub>6</sub> compounds (M=K, Rb, Cs; Ln=La, Ce, Pr,  
Nd) and K<sub>2</sub>LaCl<sub>5</sub>  
Gaune-Escard, M., Rycerz, L., Szczepaniak, W., Bogacz, A.  
Journal of Alloys and Compounds, 1994, 204 (1-2), 189-192

Calorimetric determination of enthalpy of formation for BaF<sub>2</sub>-MF-ZrF<sub>4</sub> liquid ternary  
mixtures. Part 2. M is Li, K  
Hatem, G., Mahmoud, K., Gaune-Escard, M.  
Thermochimica Acta, 1993, 230 (C), 15

Complex formation in pyrosulfate melts. 4. Density, potentiometry, calorimetry, and  
conductivity of the systems Cs<sub>2</sub>S<sub>2</sub>O<sub>7</sub>-V<sub>2</sub>O<sub>5</sub>, Cs<sub>2</sub>S<sub>2</sub>O<sub>7</sub>-Cs<sub>2</sub>SO<sub>4</sub>, and Cs<sub>2</sub>S<sub>2</sub>O<sub>7</sub>-Cs<sub>2</sub>SO<sub>4</sub>-  
V<sub>2</sub>O<sub>5</sub> in the temperature range 340-550 °C  
Folkmann, G.E., Hatem, G., Fehrmann, R., Gaune-Escard, M., Bjerrum, N.J.  
Inorganic Chemistry, 1993, 32 (9), 1559-1565

Experimental thermodynamics and phase equilibria estimation in Zr-fluoride glasses  
Hatem, G., Gaune-Escard, M., Hoch, M.  
Journal of Non-Crystalline Solids, 1993, 161, 91-97

Chemical interaction in the liquid (Co + Ga), (Co + In), (Ni + Ga), and (Ni + In) systems  
Hayer, E., Komarek, K.L., Gaune-Escard, M., Bros, J.P.  
Journal of Non-Crystalline Solids, 1993, 156-158 (Part 1), 379-383

Calorimetric investigation of {xKF+(1-x)NdF<sub>3</sub>}(l)  
Hatem, G., Gaune-Escard, M.

The Journal of Chemical Thermodynamics, 1993, 25 (2), 219-228

Les systèmes ternaires fondus BaF<sub>2</sub>-MF-ZrF<sub>4</sub> détermination calorimétrique de l'enthalpie d'excès: Partie 2. M est Li, K

G Hatem, K Mahmoud, M Gaune-Escard  
Thermochimica Acta, 1993, 230, 15-28

Complex formation of pyrosulfate melts. 4. Density, potentiometry, calorimetry, and conductivity of the systems cesium pyrosulfate-vanadium pentoxide, Cs<sub>2</sub>S<sub>2</sub>O<sub>7</sub>-cesium sulfate and Cs<sub>2</sub>S<sub>2</sub>O<sub>7</sub>-Cs<sub>2</sub>SO<sub>4</sub>-V<sub>2</sub>O<sub>5</sub> in the temperature range 340-550.degree.C

G. E. Folkmann, G. Hatem, R. Fehrmann, M. Gaune-Escard, N. J. Bjerrum  
Inorg. Chem., 1993, 32 (9), 1559-1565

Enthalpies of formation of liquid and solid (gallium + palladium) alloys

El Allam, D., Gaune-Escard, M., Bros, J.-P., Hayer, E.  
Metallurgical Transactions B, 1992, 23 (1), 39

Conductivity, thermal analysis, and phase diagram of the system Cs<sub>2</sub>S<sub>2</sub>O<sub>7</sub>-V<sub>2</sub>O<sub>5</sub>.

Spectroscopic characterization of Cs<sub>4</sub>(VO<sub>2</sub>)<sub>2</sub>(SO<sub>4</sub>)<sub>2</sub>S<sub>2</sub>O<sub>7</sub>

Folkmann, G.E., Hatem, G., Fehrmann, R., Gaune-Escard, M., Bjerrum, N.J.  
Inorganic Chemistry, 1991, 30 (21), 4057-4061

Crystallographic and <sup>27</sup>Al NMR study on premelting phenomena in crystals of sodium tetrachloroaluminate

Krebs, B., Greiwing, H., Brendel, C., Taulelle, F., Gaune-Escard, M., Berg, R.W.  
Inorganic Chemistry, 1991, 30, 981-988

Ni+Pd+Ga and Ni+Pd+in liquid alloys: Enthalpies of formation

El Allam, D., Hayer, E., Gaune-Escard, M., Bros, J.P.  
Journal of Thermal Analysis, 1991, 37 (8), 1687-1695

Les systèmes ternaires fondus ZrF<sub>4</sub>-BaF<sub>2</sub>-MF: détermination calorimétrique de l'enthalpie d'excès. Partie I. M = Na

Hatem, G., Mahmoud, K., Gaune-Escard, M.  
Thermochimica Acta, 1991, 182 (1), 91-106

Conductivity, thermal analysis, and phase diagram of the system cesium pyrosulfate-vanadium pentoxide. Spectroscopic characterization of cesium vanadyl sulfate disulfate Cs<sub>4</sub>(VO<sub>2</sub>)<sub>2</sub>(SO<sub>4</sub>)<sub>2</sub>S<sub>2</sub>O<sub>7</sub>

G. E. Folkmann, G. Hatem, Rasmus. Fehrmann, M. Gaune-Escard, N. J. Bjerrum  
Inorg. Chem., 1991, 30 (21), 4057-4061

Thermodynamic modeling of simple and complex melts

M. Gaune-Escard  
Chem. Papers, 1991, 45 (2), 159-175



The Ag-Au-Si system: Experimental and calculated phase diagram

Hassam, S., Agren, J., Gaune-Escard, M., Bros, J.P.

Metallurgical transactions. A, Physical metallurgy and materials science, 1990, 21A (7), 1877-1884

Thermodynamic investigation of the gold-gallium system

Hayer, Erhard, Komarek, Kurt L., Gaune-Escard, Marcelle, Bros, Jean Pierre

Zeitschrift fuer Metallkunde/Materials Research and Advanced Techniques, 1990, 81 (4), 233-238

Enthalpy of mixing of liquid (Au+Al) alloys

Hayer, Erhard, Gehringer, Friedrich, Komarek, Kurt L., Gaune-Escard, Marcelle, Bros, Jean Pierre

Zeitschrift fuer Metallkunde/Materials Research and Advanced Techniques, 1989, 80 (3), 186-191

Li<sub>2</sub>UCl<sub>6</sub>, Na<sub>2</sub>UCl<sub>6</sub>, and Cs<sub>2</sub>UCl<sub>6</sub> compounds: Enthalpies and phase transitions and electrical conductivity in the solid and liquid states

Gaune-Escard, M., Fouque, Y., Bros, J.P., Wisniowski, M., Bogacz, A.

Berichte der Bunsengesellschaft/Physical Chemistry Chemical Physics, 1989, 93 (2), 128-135

Hatem, G., Tabaries, F., Gaune-Escard, M.

Enthalpies de formation des melanges liquides ZrF<sub>4</sub>-MF (M = Li, Na, K, Rb)

Thermochim. Acta, 1989, 149, 15-26.

Thermodynamic modeling of high temperature melts and phase diagram calculations

Gaune-Escard, M., Hatem, G.

High Temperature Science, 1988, 26 (1), 275-294

Critical assessment of thermodynamic properties and phase-diagram calculations of K-KCl and K-KBr systems.

Rand, M., Gaune-Escard, M., Gaune, P., Bros, J.P.

Berichte der Bunsengesellschaft/Physical Chemistry Chemical Physics, 1988, 92 (8), 877-880

Enthalpies of formation of the Ag-Au-Si, Ag-Au-Ge, and Ag-Au-Sn ternary liquid alloys; experimental determinations and applications of the Hoch-Arpschhofen model

Hassam, S., Gaune-Escard, M., Bros, J.P., Hoch, M.

Metallurgical transactions. A, Physical metallurgy and materials science, 1988, 19 A (8), 2075-2089

Experimental and calculated Ag + Au + Ge Phase Diagram

Hassam, S., Gambino, M., Gaune-Escard, M., Bros, J.P., Agren, J.

Metallurgical Transactions A, 1988, 19 (3), 409-416

Complex formation in pyrosulfate melts. 3. Density and conductometric measurements of the system  $V_2O_5-K_2S_2O_7$  in the temperature range 350-490 °C

Hatem, G., Fehrmann, R., Gaune-Escard, M., Bjerrum, N.J.

Journal of Physical Chemistry, 1987, 91 (1), 195-203

Enthalpie de fusion de l'uree et de quelques melanges eutectiques a base d'uree

Gambino, M., Gaune, P., Nabavian, M., Gaune-Escard, M., Bros, J.P.

Thermochimica Acta, 1987, 111 (C), 37-47

Excess molar enthalpies of the molten-salt mixtures:  $\{(1-x)Li_2SO_4 + xNaF\}(l)$ ,  $\{(1-x)Na_2SO_4 + xLiF\}(l)$  and  $\{(1-x)Li_2SO_4 + xLiF\}(l)$

Hatem, G., Gaune-Escard, M.

The Journal of Chemical Thermodynamics, 1987, 19 (10), 1095-1104

Structural transitions in  $UCl_4$  anticipating melting

Bros, J.P., Gaune-Escard, M., Szczepaniak, W., Bogacz, A., Hewat, A.W.

Acta Crystallographica Section B, 1987, 43 (2), 113-116

Enthalpy of mixing of  $\{(1-x)KCl+xBiCl_3\}$  at 690 K

Lukas, W., Gaune-Escard, M., Bros, J.P.

The Journal of Chemical Thermodynamics, 1987, 19 (7), 717-720

Complex formation in pyrosulfate melts. 2. Calorimetric investigations of the systems  $V_2O_5-K_2S_2O_7$ ,  $V_2O_5 \cdot K_2S_2O_7-K_2SO_4$ ,  $V_2O_5 \cdot 2K_2S_2O_7-K_2SO_4$ , ...

Fehrmann, R., Gaune-Escard, M., Bjerrum, N.J.

Inorganic Chemistry, 1986, 25 (8), 1132-1137

Etude thermodynamique des systèmes  $MCl-BiCl_3$  ( $M=Li, Na, K, Rb$ ): II. Température, enthalpie de fusion et capacité calorifique des composés définis.

Z. Benkhaldoun, M. Gambino, G. Hatem, J.P. Bros, M. Gaune-Escard

J. Cal. Anal. Therm. XVII, 1986, 284-295

Etude thermodynamique des systèmes  $MCl-BiCl_3$  ( $M=Li, Na, K, Rb$ )

Z. Benkhaldoun, G. Hatem, M. Gaune-Escard

J. Cal. Anal. Therm. XVII, 1986, 134-145

Thermodynamic data compilation of molten salt mixtures.

Bros, J.P., Fouque, Y., Gaune-Escard, M., Hatem, G.

CODATA Bulletin, 1985, (58), 104-107

$UCl_4$  compound: determination of high temperature phase transitions from electrical conductivity and calorimetric measurements.

Fouque, Y., Bros, J.P., Gaune-Escard, M., Wisniowski, M., Bogacz, A.

Berichte der Bunsengesellschaft/Physical Chemistry Chemical Physics, 1985, 89 (7), 777-779

Difficultés expérimentales rencontrées dans la détermination des enthalpies de mélange de sels fondus très réactifs

Z. Benkhaldoun, G. Hatem, M. Gaune-Escard  
J. Cal. Anal. Therm. XVI, 1985, 432

Structural transitions and ionic conduction in Na<sub>2</sub>UBr<sub>6</sub>

Hewat, A.W., Taylor, J.C., Gaune-Escard, M., Bros, J.P., Szczepaniak, W., Bogacz, A.  
Journal of Physics C: Solid State Physics, 1984, 17 (26), 4587-4601

Enthalpies of formation at 1373 K of the liquid alloys Ag+Au, Ag+Sn, Au+Sn and Ag+Au+ Sn.

Rakotomavo, J., Gaune-Escard, M., Bros, J.P., Gaune, P.  
Berichte der Bunsengesellschaft/Physical Chemistry Chemical Physics, 1984, 88 (7), 663-670

Electrical conductivity and enthalpies of transformation in Li<sub>2</sub>UBr<sub>6</sub> between 500 and 800 K. Comparison with Na<sub>2</sub>UBr<sub>6</sub>

Bogacz, A., Szczepaniak, W., Bros, J., Fouque, Y., Gaune-Escard, M.  
Journal of the Chemical Society, Faraday Transactions 1: Physical Chemistry in Condensed Phases, 1984, 80 (11), 2935-2941

The unsymmetrical reciprocal molten-salt mixture (Na<sup>+</sup> + Rb<sup>+</sup> + F<sup>-</sup> + SO<sub>4</sub><sup>2-</sup>) calorimetric measurement and evaluation of the excess molar enthalpies

Hatem, G., Gaune-Escard, M.  
The Journal of Chemical Thermodynamics, 1984, 16 (9), 897-904

CaCl<sub>2</sub> + KCl + NaCl molten-salt mixtures. Experimental and estimated enthalpies of mixing

Patrick Sem, Gerard Hatem, Jean-Pierre Bros and Marcelle Gaune-Escard  
J. Chem. Soc., Faraday Trans. 1, 1984, 80, 297-308

Enthalpies of formation of Ag-Si, Au-Si and Ag-Au-Si liquid alloys at 1423 K.

Hassam, S., Gaune-Escard, M., Bros, J.P.  
Berichte der Bunsengesellschaft/Physical Chemistry Chemical Physics, 1983, 87 (9), 785-792

Thermodynamic models of molten salt mixtures

Gaune-Escard, M.  
Pure and Applied Chemistry, 1983, 55 (3), 505

Enthalpies of mixing in some binary liquid alkali perrhenate mixtures

Lukas, W., Gaune-Escard, M.  
Journal of The Less-Common Metals, 1983, 90 (1), L17-L18

Thermodynamics of liquid (potassium + potassium bromide) at high temperatures

Kozouliia, P., Bros, J.P., Gaune-Escard, M.

The Journal of Chemical Thermodynamics, 1983, 15 (8), 757-771

Calorimetric measurements and coupled thermodynamic-phase diagram analysis in the Na,K/F,SO<sub>4</sub> system

Hatem, G., Gaune-Escard, M., Pelton, A.D.

Journal of Physical Chemistry, 1982, 86 (15), 3039-3046

Enthalpies of formation of Au-Ge and Au-Ag-Ge liquid alloys at 1373 K.

Hassam, S., Gaune-Escard, M., Bros, J.P.

High Temperature Science, 1982, 16 (2), 131-151

Calorimetric investigation of the RbF-Rb<sub>2</sub>SO<sub>4</sub> liquid system and comparison of the excess thermodynamic functions in the AF-A<sub>2</sub>SO<sub>4</sub> (A=Li, Na, K, Rb) molten salt mixtures

Hatem, G., Gaune-Escard, M.

Thermochimica Acta, 1982, 57 (3), 351-364

Recherche des transitions de phase des composés M<sub>2</sub>UBr<sub>6</sub> (M = Li, Na, K, Rb, Cs).

Gaune-Escard, M., Fouque, Y., Bros, J.P., Szczepaniak, W., Bogacz, A.

Journées de Calorimétrie et d'Analyse Thermique, (Preprints), 1982, 13

Temperatures and enthalpies of melting of alkali-metal perrhenates

Lukas, W., Gaune-Escard, M.

The Journal of Chemical Thermodynamics, 1982, 14 (6), 593-597

Excess enthalpies of the charge-asymmetric reciprocal molten salt mixtures: {LiF + K<sub>2</sub>SO<sub>4</sub>} and {KF + Li<sub>2</sub>SO<sub>4</sub>}

Hatem, G., Gaune-Escard, M.

The Journal of Chemical Thermodynamics, 1982, 14 (9), 893-899

Enthalpy of mixing of liquid Au-Sn alloys.

Hayer, Erhard, Komarek, Kurt L., Bros, Jean Pierre, Gaune-Escard, Marcelle

Zeitschrift fuer Metallkunde/Materials Research and Advanced Techniques, 1981, 72 (2), 109-115

New fast-ion conductors from uranium halides-the UCl<sub>6</sub>/Na<sub>2</sub>UBr<sub>6</sub> structures

Bogacz, A., Bros, J., Gaune-Escard, M., Hewat, A.W., Taylor, J.C.

Journal of Physics C: Solid State Physics, 1980, 13 (29), 5273-5278

UBr<sub>4</sub> compound: Determination of high temperature phase transitions from electrical conductivity and calorimetric measurements in the temperature range 715-930 K

Fouque, Y., Bros, J.P., Gaune-Escard, M., Szczepaniak, W., Bogacz, A.

Journal of Inorganic and Nuclear Chemistry, 1980, 42 (2), 257-260

Calorimetric determination of equilibrium phase diagrams of inorganic systems

Gaune-Escard, M., Bros, J.P.

Thermochimica Acta, 1979, 31 (3), 323-339

Asymmetrical reciprocal molten salt systems: excess enthalpies of the liquid mixture (Na<sup>+</sup>+K<sup>+</sup>+F<sup>-</sup>+SO<sub>4</sub><sup>2-</sup>)

Hatem, G., de Gasquet, B., Gaune-Escard, M.

The Journal of Chemical Thermodynamics, 1979, 11 (10), 927-937

Calculation of phase diagrams of quaternary reciprocal systems

Gaune-Escard, M.

Calphad, 1979, 3 (2), 119-127

Liquidus and solidus surfaces of the Ag-Au-Pd equilibrium phase diagram.

Miane, Jean Maxime, Gaune Escard, Marcelle, Bros, Jean Pierre

High Temperatures - High Pressures, 1977, 9 (4), 465-469

Excess enthalpies in the reciprocal molten salt mixture Na<sup>+</sup>+K<sup>+</sup>+NO<sub>3</sub><sup>-</sup>+OH<sup>-</sup>

Aghai-Khafri, H., Bros, J.P., gaune-Escard, M.

The Journal of Chemical Thermodynamics, 1976, 8 (4), 331-338

Évaluation des fonctions thermodynamiques d'excès de mélanges réciproques de sels fondus

M. Gaune-Escard

Silicates Industriels, 1976, 3, 151-158

High temperature calorimetry up to 1800 K

Gaune-Escard, Marcelle, Bros, Jean Pierre

Canadian Metallurgical Quarterly, 1974, 13 (2), 335-338

Thermodynamic study of the sodium(+), potassium(+) ion//nitrate, bromide ion reciprocal system

H. Aghai-Khafri, J.P. Bros, M. Gaune Escard,

Rev. Int. Htes Temp. Refract., 1974, 11, 199–204.

Mixing enthalpy and structure of the molten NaCl-DyCl<sub>3</sub> system.

R. Takagi, L. Rycerz, M. Gaune-Escard."

Denki Kagaku, 62, 3, 240, (1994).

Enthalpies of mixing in the PrCl<sub>3</sub>-CaCl<sub>2</sub> and NdCl<sub>3</sub>-CaCl<sub>2</sub> liquid systems.

M. Gaune-Escard, L. Rycerz, W. Szczepaniak, A. Bogacz.

Thermochimica Acta, 1994, 236, 51-58

Modeling of ZrF<sub>4</sub>-MF (M = Li, Na, K, Rb) and zirconium fluoride-sodium fluoride-barium fluoride melts

G. Hatem, Mahmoud K., M. Gaune-Escard, M. Hoch.

High Temperature Science, 1991, 31, 3, 159-179

Barium fluoride-sodium fluoride-zirconium fluoride melts. Experimental thermodynamics and modeling.

Hatem G., M. Gaune-Escard, M. Hoch.  
Materials. Science. Forum, 1991, 73-75, 71

Investigations of complex formation and phase diagrams of molten salts related to the oxidized form of sulphuric acid catalysts.

G.E. Folkmann, G. Hatem, R. Fehrmann, M. Gaune-Escard, N.J. Bjerrum.  
Materials Science Forum, 1991, vol. 73-75, 53-60

Thermosalt, exemple d'application: le calcul du diagramme d'équilibre des phases du système CsCl-KCl-LiCl.

Juhem P., Hatem G., Bros J.P., Fouque Y., Gaune-Escard M.  
Chem. Papers, 1991, 45 (2), 159-175

Enthalpies of mixing in the ternary system  $\text{AlCl}_3\text{-KCl-AlCl}_3\text{NH}_3$

G. Hatem, M. Gaune-Escard, J.P. Bros, T. Østvold  
Ber. Bunsenges. Phys. Chem., 1988, 92, 751-754

Thermosalt, une banque de données thermodynamiques cohérentes pour les mélanges de sels fondus.

Gaune-Escard M., Bros J.-P., Fouque Y., Gaune P., Hatem G., Juhem P  
Métaux. 1988. T. 64. № 753-754. C. 208-210.

Thermodynamics of zirconium tetrafluoride-based molten salt mixtures.

Hatem, K. Mahmoud, M. Gaune-Escard.  
Mater. Sci. Forum, 32-33 (halide Glasses 5) 635-642, (1988)

Enthalpie de fusion de l'urée et de quelques mélanges eutectiques à base d'urée.

M. Gambino, P. Gaune, M. Nabavian, M. Gaune-Escard, J.P. Bros .  
Thermochimica Acta, 1987, 111, 37-47

P. Gaune, Y. Fouque, M. Gaune-Escard.

Etude calorimétrique et analyse thermodynamique du mélange liquide  
J. Chim. Phys., 1981, 78, 7-8, 621

G. Hatem, M. Gaune-Escard.

Influence d'un effet d'ordre sur les grandeurs thermodynamiques de mélange de systèmes dissymétriques de sels fondus  $\text{AB}_2\text{-A'B}$   
J. Chim. Phys., 1980, 77, 925

Estimation de l'enthalpie de fusion de mélanges eutectiques de sels fondus utilisables pour le stockage thermique de l'énergie

J. P. Bros, M. Gaune-Escard  
Revue de Phys. Appliquée, 1979, 14, 107-112

Y. Fouque, M. Gaune-Escard, W. Szczepaniak, A. Bogacz  
Synthèse, mesures des conductibilités électriques et des entropies de changements  
d'états pour le composé  $\text{Na}_2\text{UBr}_6$   
J. Chim. Physique, 1978, 75, 4, 361-366

Description d'un processus de mélange et grandeurs thermodynamiques de systèmes  
binaires de sels fondus du type  $\text{AB}_2\text{-A}'\text{B}$   
G. Hatem, M. Gaune-Escard.  
J. Chim. Phys., 1977, 7-8, 754

Modèle statistique de solution binaire de sels fondus du type  $\text{AB}_2\text{-A}'\text{B}_2$  .II. Traitement de  
Guggenheim  
G. Hatem, M. Gaune-Escard.  
J. Chim. Phys., 1975, 4, 463

Modèle statistique de solution binaire de sels fondus du type  $\text{AB}_2\text{-A}'\text{B}_2$  . I Traitement de  
Bragg et Williams  
G. Hatem, M. Gaune-Escard.  
J. Chim. Phys., 1975, 4, 459

Modèle statistique de système ternaire de sels fondus a cation ou a anion commun. II  
Conséquences du choix de deux formes particulières des énergies potentielle et de  
vibration sur les grandeurs thermodynamiques de mélange  
M. Gaune-Escard  
J. Chim. Phys., 1974, 9, 1175

Modèle de système ternaire de sels fondus a cation ou a anion commun.  
I Traitement général d'un système  $(\text{A}, \text{A}'', \text{A}''') \text{B}$   
M. Gaune-Escard  
J. Chim. Phys., 1974, 9, 1167

Modèle statistique de solution binaire de sels fondus à cation ou anion commun III.  
Application à l'analyse de l'enthalpie de mélange.  
J. Chim. Phys., 1973, 11-12, 1666-1671

Modèle statistique de solution binaire de sels fondus à cation ou anion commun II.  
Conséquences du choix de deux formes particulières des énergies potentielles et de  
vibration sur les grandeurs thermodynamiques de mélange  
J. Chim. Phys., 1972, 1397-1401

### **Conference Proceedings:**

Preliminary Study For Copper And Tin Recovery In Weee Leachate By Using Ionic  
Liquids Based On Choline Chloride

A. Popescu, V. Constantin, C. Donath, E. Neacsu, V. Soare, M. Gaune Escard ;  
2015 Sustainable Industrial Processing Summit (SIPS2015), vol. 7: Ionic Liquids and  
Energy Production, Eds: F. Kongoli, M. Gaune-Escard, M. Mauntz, J. Rubinstein, H.L.  
Dodds, Publisher Flogen Stars Outreach, 2015, 243-253

Phase Diagrams of the DyBr<sub>3</sub>-MBr (M = Li-Cs) Binary Systems  
Chojnacka, Ida; Rycerz, Leszek; Gaune-Escard, Marcelle  
2014 Sustainable Industrial Processing Summit (SIPS2014),: Shechtman International  
Symposium, Volume 6: Ionic Liquids & Rare Earth, 2014, 183-194

Phase Equilibrium in Lanthanide Halide Systems: Comparison between the MBr-LaBr<sub>3</sub>  
and MBr-CeBr<sub>3</sub> Systems (M=Li, Na, K, Rb, Cs)  
Gong, Weiping; Gaune-Escard, Marcelle; Wu, Yue  
2014 Sustainable Industrial Processing Summit (SIPS2014),: Shechtman International  
Symposium, Volume 6: Ionic Liquids & Rare Earth, 2014, 237-242

The MBr-EuBr<sub>2</sub> Molten Salt Mixtures: From Experiments to Assessment (M=Alkali  
Metal) (Abstract only)  
Gaune-Escard, Marcelle; Gadzuric, Slobodan; Gong, Weiping; Rycerz, Leszek  
2014 Sustainable Industrial Processing Summit (SIPS2014),: Shechtman International  
Symposium, Volume 6: Ionic Liquids & Rare Earth, 2014, 355-356

Density, Excess Properties, Electrical Conductivity and Viscosity of Ionic Liquid Binary  
Mixtures with Lower Amides (Abstract only)  
Gadzuric, Slobodan; Vranes, Milan; Tot, Aleksandar; Zec, Nebojsa;  
Papovic, Snezana; Dozic, Sanja; Gaune-Escard, Marcelle  
2014 Sustainable Industrial Processing Summit (SIPS2014),: Shechtman International  
Symposium, Volume 6: Ionic Liquids & Rare Earth, 2014, 375-376

Corrosion Resistance of Ti-6Al-4V in Molten Chloro-Fluoride  
Popescu, Ana Maria Julieta; Neacsu, Elena Ionela; Gaune-Escard, Marcelle;  
Yanushkevich, Kazimir; Donath, Cristina; Constantin, Virgil  
2014 Sustainable Industrial Processing Summit (SIPS2014),: Shechtman International  
Symposium, Volume 6: Ionic Liquids & Rare Earth, 2014, 383-392

Main Problems of Realization of Electrodeposition of Refractory and Noble Metals from  
Low- and Medium-Temperature Melts (Abstract only)  
Malyshev, Viktor; Shakhnin, Dmytro; Gab, Angelina; Gaune-Escard, Marcelle  
2014 Sustainable Industrial Processing Summit (SIPS2014),: Shechtman International  
Symposium, Volume 6: Ionic Liquids & Rare Earth, 2014, 393-394

Relationship between the Passivation Properties of Noble and Refractory Metals and their  
Electrochemical Behavior in Low-Temperature Ionic Liquids (Abstract only)  
Tumanova, Nelly; Kochetova, Svetlana; Malyshev, Viktor; Shakhnin, Dmytro;  
Gaune-Escard, Marcelle



2014 Sustainable Industrial Processing Summit (SIPS2014),: Shechtman International Symposium, Volume 6: Ionic Liquids & Rare Earth, 2014, 395-396

Study of binary systems NdF<sub>3</sub>-MF (M = Li, Na, K): experimental, and thermodynamic computation

M. Berkani and M. Gaune-Escard

XXXIX JEEP – 39<sup>th</sup> Edition of the Joint European Days on Equilibrium Between Phases  
MATEC Web of Conferences, Volume 3, 2013, 1-3

Corrosion and Electrochemical Behaviour of Aluminium in Halide-Oxide Melts as the Base for Al Diboride Synthesis

V. Malyshev, D. Shakhnin, V. Soloviev, L. Chernenko, M. Gaune-Escard

Visnyk KrNU im. M. Ostrogradskogo, Iss. 3(80), 2013, 217-222 (in Russian)

Thermodynamical Substantiation and Practical Realization of Regulation of Acid-Base Interactions in Tungstate Melts

V. Malyshev, V. Soloviev, L. Chernenko, S. Bondus, A. Gab, M. Gaune-Escard

Visnyk KrNU im. M. Ostrogradskogo, Iss. 2(79), 2013, 180-187 (in Russian).

Systematics in the formation of lanthanide halide compounds

Marcelle Gaune-Escard, Leszek Rycerz, Ewa Ingier-Stocka, Slobodan Gadzuric

Proc. Ninth International Conference on Molten Slags, Fluxes and Salts (MOLTEN12)  
May 28- 31, 2012, Beijing, China.

Compound Formation in Lanthanide-Alkali Metal Halide Systems (Keynote)

Marcelle Gaune-Escard, Leszek Rycerz, Ewa Ingier-Stocka, Slobodan Gadzuric

Proc. Fray International Symposium Metals and Materials Processing in a Clean Environment, Volume 3: Molten Salts & Ionic Liquids 2011, Ed. Florian Kongoli, 475-488

Thermodynamic and transport properties of DyBr<sub>3</sub>-KBr binary system.

Ida Chojnacka, Leszek Rycerz, Marcelle Gaune-Escard

Proc. Fray International Symposium Metals and Materials Processing in a Clean Environment, Volume 3: Molten Salts & Ionic Liquids 2011, Ed. Florian Kongoli, 467-472

The Effect of Electrolysis Parameters on the Coating Composition and Properties during Electrodeposition Of Tungsten Carbides And Zirconium Diborides

Victor Malyshev, Dmytro Shakhnin, Angelina Gab, Marcelle Gaune-Escard

Proc. Fray International Symposium Metals and Materials Processing in a Clean Environment, Volume 3: Molten Salts & Ionic Liquids 2011, Ed. Florian Kongoli, 459-466

Galvanic Coatings of Molybdenum and Tungsten Carbides from Oxide Melts:

Electrodeposition and Initial Stages of Nucleation

Victor Malyshev, Dmytro Shakhnin, Angelina Gab, Marcelle Gaune-Escard

Proc. Fray International Symposium Metals and Materials Processing in a Clean Environment, Volume 3: Molten Salts & Ionic Liquids 2011, Ed. Florian Kongoli, 441-458

Electrochemistry of Rare-Earth Metals and Synthesis of their Borides in Halide Melts  
Sergey Kuznetsov, Marcelle Gaune-Escard  
Proc. Fray International Symposium Metals and Materials Processing in a Clean Environment, Volume 3: Molten Salts & Ionic Liquids 2011, Ed. Florian Kongoli, 439-440

Molecular and Ionic Species in Saturated Vapour Over Molten Ytterbium Bromides  
Mikhail Butman, Dmitri Sergeev, Vladimir Motalov, Lev Kudin, Leszek Rycerz, Marcelle Gaune-Escard  
Proc. Fray International Symposium Metals and Materials Processing in a Clean Environment, Volume 3: Molten Salts & Ionic Liquids 2011, Ed. Florian Kongoli, 413-426

High temperature solubility of lanthanide halides in alkali metal halide melts.  
Gaune-Escard, Marcelle  
IUPAC, 32<sup>nd</sup> International Conference on Solution Chemistry, ICSC 2011 La Grande Motte, Aug. 28-Sept. 2, 2011

Modeling of molten salt mixtures: thermodynamic assessment of CeBr<sub>3</sub> and MBr-CeBr<sub>3</sub> systems (M=Li, Na, K, Rb)  
Wu Yu, Gong W., Rycerz L., Ingier-Stocka E., I. Chojnacka, Kapala J., Gadzuric S., Gaune-Escard M.  
Proc. 2011 TMS Annual Meeting & Exhibition, Late News Symposium San Diego, CA, USA - 27/02/2011 - 03/03/2011- CD

Lanthanide(III)-alkali metal halide systems: characterization and prediction of phase diagram topology  
Gaune-Escard M. , Rycerz L., Ingier-Stocka E., Gadzuric S.  
Proc. 2011 TMS Annual Meeting & Exhibition, Late News Symposium San Diego, CA, USA 27/02/2011 - 03/03/2011, p13-21

Recycling waste tungsten carbide-cobalt cermets  
Gab, V. Malyshev, M. Gaune-Escard  
EUCHEM 2010 Conference on Molten Salts and Ionic Liquids (Bamberg, 14-19 March, 2010): book of abstracts. – Bamberg, 2010. – P. 240.

Metal electroreduction and electroplating from ionic melts  
V. V. Malyshev, A. I. Gab, M. Gaune-Escard  
The Sadoway60 Symposium (Massachusetts, 9-11 June, 2010): proceedings. – Massachusetts, 2010. – P. 141.

Lanthanide-based halide systems: a Fascinating route from multitechnique Data acquisition to data prediction

Marcelle Gaune-Escard, L. Rycerz, S. Gadzuric, W. Gong, M.F. Butman, S.A. Kuznetsov  
Proceedings of the VIII international Conference on molten Slags, Fluxes and Salts (MOLTEN2009) 18-21 January 2009, Santiago, Chile, 151

Past, present and future of molybdenum electrometallurgical processes in ionic melts

V. V. Malyshev, A. I. Gab, M. Gaune-Escard

International Conference 'Advances in Metallurgical Processes and Materials'

(Dnipropetrovsk, 27-30 May, 2007): proceedings (vol. II). – Dnipropetrovsk, 2007. – P. 6-14.

Thermodynamics and Transport Properties of the CeBr<sub>3</sub>-MBr Binary Systems

M. Gaune-Escard, L. Rycerz, E. Ingier-Stocka, S. Gadzuric

Proc. Molten salts 15: in memory of Robert Osteryoung, The Electrochemical Society 2007, 453-465

Max Bredig Award Address

Some Steps on the Molten Salt Route

M. Gaune-Escard

Proc. the International Symposium Molten Salts XIV, ECS Proceedings Volume 2004-24, Editors: R. A. Mantz, P. C. Trulove, H. C. De Long, M. Hagiwara, G. R. Stafford, 2006, 2-18

Kinetics of Electrode Processes in LiCl-KCl Melt

S.A. Kuznetsov, H. Hayashi, K. Minato, and M. Gaune-Escard

Proc. the International Symposium Molten Salts XIV, ECS Proceedings Volume 2004-24, Editors: R. A. Mantz, P. C. Trulove, H. C. De Long, M. Hagiwara, G. R. Stafford, 2006, 761-778

Some Recent Results on the EuBr<sub>3</sub>-MBr Binary Systems (M- Li, Na, K, Rb)

S. Gadzuric, L. Rycerz, E. Ingier-Stocka, M. Gaune-Escard

Proc. the International Symposium Molten Salts XIV, ECS Proceedings Volume 2004-24, Editors: R. A. Mantz, P. C. Trulove, H. C. De Long, M. Hagiwara, G. R. Stafford, 2006, 841-849

Electrochemical Study of Sodium Tungstate-Sodium Pyrosulfate Melt and Tungsten Coatings Electrodeposited from Them

V. V. Malyshev, A.I. Gab, I.M. Astrelin, M. Gaune-Escard

Proc. the International Symposium Molten Salts XIV, ECS Proceedings Volume 2004-24, Editors: R. A. Mantz, P. C. Trulove, H. C. De Long, M. Hagiwara, G. R. Stafford, 2006, 1027-1036

Studying the initial stages of the formation of crystals in the electrodeposition coating of molybdenum and tungsten carbides in molten salts

Malyshev V.V., Gab A.I., Gaune- Escard M.

Proc. 6th International Conference "Equipment and technology of thermal processing of metals and alloys ". Kharkiv, 2005. - T. 2. - P. 245-248

Nucleation Of Carbide Phase Crystals On Various Metallic Materials In Oxide Melts  
Victor V. Malyshev, Angelina I. Gab, Igor M. Astrelin, Khasbi B. Kushkhov, Marcelle Gaune-Escard

Proc. 7th International Symposium on Molten Salts Chemistry and Technology, MS 7, Toulouse-France, 2005, August 29-September 2, volume II, 913-920

Electrochemical reduction and deposition of tungsten from FLiNaK-B<sub>2</sub>O<sub>3</sub>-Na<sub>2</sub>WO<sub>4</sub> molten salt system

A. Gab, V. Malyshev, M. Gaune-Escard

Proc. 7th International Symposium on Molten Salts Chemistry and Technology, MS 7, Toulouse-France, 2005, August 29-September 2, volume II, 921-924

Electrical conductance of the melts containing rare earth metals (review).

Potapov A.P., Khoklov V. A., Gaune-Escard M.

Proc. 7th International Symposium on Molten Salts Chemistry and Technology, MS 7, Toulouse-France, 2005, August 29-September 2

Electrochemistry and electrorefining of rare earth metals in chloride melts.

Kuznetsov S., Gaune-Escard M.

Proc. 7th International Symposium on Molten Salts Chemistry and Technology, MS 7, Toulouse-France, 2005, August 29-September 2

High energy XAFS study of molten salt systems.

Okamoto Y., Shiwaku, H, Yaita T., Minato K., Gaune-Escard M.

Proc. 7th International Symposium on Molten Salts Chemistry and Technology, MS 7, Toulouse-France, 2005, August 29-September 2

Magnesium and Boron joint electrodeposition.

Bukatova G., Kuznetsov S., Gaune-Escard M.

Proc. 7th International Symposium on Molten Salts Chemistry and Technology, MS 7, Toulouse-France, 2005, August 29-September 2

Correlation between thermodynamic properties, electrical conductivity and crystal structure of M<sub>3</sub>LnX<sub>6</sub> compounds.

Rycerz, L., Gaune-Escard M.

Proc. 7th International Symposium on Molten Salts Chemistry and Technology, MS 7, Toulouse-France, 2005, August 29-September 2

Thermal and conductometric studies of the CeBr<sub>3</sub>-LiBr Binary system.

Ingier Stocka E., Rycerz L., Gadzuric S., Gaune-Escard M..

Proc. 7th International Symposium on Molten Salts Chemistry and Technology, MS 7, Toulouse-France, 2005, August 29-September 2

The structure and heat capacity of the NaCeF<sub>4</sub> compound.  
Constantin V., Popescu A.M., Gaune-Escard M.  
Proc. 7th International Symposium on Molten Salts Chemistry and Technology, MS 7,  
Toulouse-France, 2005, August 29-September 2

Physicochemical Features Of Lanthanide Halide Molten Salt Solutions.  
Gadzuric S., Gong W., Rycerz L., Ingier-Stocka E., Gaune-Escard M.  
Proc. IUPAC 29th International Conference on Solution Chemistry (ICSC) , Portoroz-  
Slovenia , 2005, 20-24 August

Divalent halides of lanthanides: Ambiguous behaviour of EuCl<sub>2</sub> and its mixtures with  
NaCl  
A K Adya, S Watanabe, H Matsuura, L Rycerz, A C Barnes, E Canetta, M Gaune-  
Escard (2004)  
Proc. Rare Earths, 2004, 7-12 November 2004, Nara, Japan

Physico-chemical properties and transition metal complex formation in alkali pyrosulfate  
and hydrogen sulfate melts.  
Rasmussen, S.B., Hamma, H., Eriksen, K.M., Hatem, G., Gaune-Escard, M. and  
Fehrmann, R.  
Proc. VII International Conference on Molten Slags Fluxes and Salts, The South African  
Institute of Mining and Metallurgy, (2004), 189-196

Correlation between thermodynamic properties and crystal structure of lanthanide(III)  
halides  
Rycerz L., Gaune-Escard M.  
Proc. EUCHEM Conference on Molten Salts, Piechowice-Poland, 2004, June 20-25, 331-  
341

Electrical conductivity of molten LaBr<sub>3</sub>-MBr binary mixtures.  
Ziolek B., Rycerz L., Gadzuric S., Ingier-Stocka E., Gaune-Escard M..  
Proc. EUCHEM Conference on Molten Salts, Piechowice-Poland, 2004, June 20-25, 411-  
419

Electrochemical investigation of the fluoride complex of Ce(III) reduction in molten  
fluoride systems. Popescu A.M., Constantin V., Gaune-Escard M., Olteanu M.  
Proc. EUCHEM Conference on Molten Salts, Piechowice-Poland, 2004, June 20-25, 295-  
302

Electrochemistry and formal standard redox potentials of the Yb(III)/Yb(II) couple in  
equimolar NaCl-KCl melt, . Kuznetsov S.A., Gaune-Escard M.  
Proc. EUCHEM Conference on Molten Salts, Piechowice-Poland, 2004, June 20-25

Electrochemistry of uranium in LiCl-KCl melt: methodical aspects, kinetic parameters  
and thermodynamic properties  
Kuznetsov S., Hayashi H., Minato K., Gaune-Escard M.

Proc. EUCHEM Conference on Molten Salts, Piechowice-Poland, 2004, June 20-25

EuB6 and GdB6 electrochemical synthesis

Bukatova G., Kuznetsov S.A., Gaune-Escard M.

Proc. EUCHEM Conference on Molten Salts, Piechowice-Poland, 2004, June 20-25

Physicochemical properties of the EuBr<sub>2</sub>-KBr binary system

Ingier-Stocka E., Gadzuric S., Rycerz L., M. Gaune-Escard

Proc. EUCHEM Conference on Molten Salts, Piechowice-Poland, 2004, June 20-25, 170-176

Potassium heptafluorotantalate: how does it melt?

Kubikova B., Boca M., Gaune-Escard M., Danek V.

Proc. EUCHEM 2004 Conference Piechowice-Poland, 2004, June 20-25

Kinetics of electrode processes in LiCl-KCl melt

Kuznetsov, S.A., Hayashi, H., Minato, K., Gaune-Escard, M.

Proceedings - Electrochemical Society PV 2004-24, 2004, 761-770

Some recent results on the EuBr<sub>2</sub>-MBr binary systems (M= Li, Na, K, Rb)

Gadzuric, S., Rycerz, L., Ingier-Stocka, E., Gaune-Escard, M.

Proceedings - Electrochemical Society PV 2004-24, 2004, 841-849

Electrochemical study of sodium tungstate - Sodium pyrosulfate melts and tungsten coatings electrodeposited from them

Malyshev, V.V., Gab, A.I., Astrelin, I.M., Gaune-Escard, M.

Proceedings - Electrochemical Society PV 2004-24, 2004, 1027-1035

Tin oxide-based inert anodes for aluminium electrolysis - variation of properties and behavior as a function of composition and preparation, .

Popescu A.M., Zuca Z., Gaune-Escard M., Mihaiu S., Constantin V. .

Proc. EUCHEM Conference on Molten Salts, Piechowice-Poland, 2004, June 20-25, 287-294

Tungstate - pyrosulphate melts and their application for tungsten coatings electrodeposition, .

Malyshev V., Gab A., Gaune-Escard M.

Proc. EUCHEM Conference on Molten Salts, Piechowice-Poland, 2004, June 20-25

Electroplating with tungsten from pyrosulphate-containing oxide melts.

Malyshev V., Gab A., Astrelin I., Gaune-Escard M.

Electrochemical Society Proceedings - Molten salts XIV, (2004), Fourteenth International Symposium on Molten Salts, Honolulu-Hawaii, 2004, 3-8, October

Kinetics of Electrode Processes in LiCl-KCl-UCl<sub>4</sub> Melt.

Kuznetsov S., Hayashi H., Minato K., and Gaune-Escard M.

Electrochemical Society Proceedings - Molten salts XIV, (2004), Fourteenth International Symposium on Molten Salts, Honolulu-Hawaii, 2004, 3-8, October

Some recent results on EuBr<sub>2</sub>-MBr Binary Systems.

Gadzuric S., Rycerz L., Ingier-Stocka E. and Gaune-Escard M.

Electrochemical Society Proceedings - Molten salts XIV, (2004), Fourteenth International Symposium on Molten Salts, Honolulu-Hawaii, 2004, 3-8, October

Some Steps On The Molten Salt Route, Max Bredig Award address.

Gaune-Escard M.

Electrochemical Society Proceedings - Molten salts XIV, (2004), Fourteenth International Symposium on Molten Salts, Honolulu-Hawaii, 2004, 3-8, October, 1-17

Physicochemical properties of alkali-lanthanide halide systems: Data acquisition and storage of information.

Gaune-Escard M., Rycerz L., Kuznetsov S.A.,

Proc. IUPAC High Temperature Materials Chemistry (HTMC-XI) Conference, Tokyo University-Japon, 2003, 17-23 May

Correlation between thermodynamic properties, electrical conductivity and structure of M<sub>3</sub>LnCl<sub>6</sub> compounds

Rycerz L., Gaune-Escard M.

Proc. Int. Symp. on Ionic Liquids in Honour of Marcelle Gaune-Escard, Carry le Rouet-France, 2003, June 26-28, 211-223

Deviations from the Arrhenius equation of electrical conductivity polytherms.

Potapov A., Rycerz L., Gaune-Escard M.

Proc. Int. Symp. on Ionic Liquids in Honour of Marcelle Gaune-Escard, Carry le Rouet-France, 2003, June 26-28, 477-481

Electrical conductivity of molten rare earth chlorides. Pure chlorides and binary mixtures,

Potapov A., Rycerz L., Gaune-Escard M.

Proc. Int. Symp. on Ionic Liquids in Honour of Marcelle Gaune-Escard, Carry le Rouet-France, 2003, June 26-28, 469-475

Investigation of NaCeF<sub>4</sub> in the LiF-NaF-BaF<sub>2</sub> melt.

Constantin V., Zuca S., Popescu A.M.J., Gaune-Escard M.

Proc. Int. Symp. on Ionic Liquids in Honour of Marcelle Gaune-Escard, Carry le Rouet-France, 2003, June 26-28, 483-489

Overvoltage and anodic process on SnO<sub>2</sub>-based inert anodes in cryolite-alumina melts.

Popescu A.M.J., Zuca S., M. Gaune-Escard M

Proc. Int. Symp. on Ionic Liquids in Honour of Marcelle Gaune-Escard, Carry le Rouet-France, 2003, June 26-28, 491-499

Thermal studies of LaBr<sub>3</sub> and LaBr<sub>3</sub>-LiBr binary system

Rycerz L., Ingier-Stocka E., Ziolk B., Gadzuric S., Gaune-Escard M.  
Proc. Int. Symp. on Ionic Liquids in Honour of Marcelle Gaune-Escard, Carry le Rouet-  
France, 2003, June 26-28, 83-93

Structure and electrochemistry of tungsten-containing ionic melts  
V. V. Malyshev, A. I. Gab, N. N. Uskova [et al.]  
Proc. Int. Symp. on Ionic Liquids in Honour of Marcelle Gaune-Escard, Carry le Rouet-  
France, 2003, June 26-28, 517-532.

Influence of the First and Second Coordination Spheres on Electrochemical and  
Thermodynamical Properties of Europium in Alkali Chloride Melts  
S. Kuznetsov and M. Gaune-Escard  
Proc. Thirteenth International Symposium On Molten Salts, Editors: H. C. Delong, R.  
W. Bradshaw, M. Matsunaga, G. R. Stafford, and P. C. Trulove, The  
Electrochemical Society Inc., 2002, 579–589

Mixing Enthalpies of  $TbBr_3$  -  $MBr$  Liquid Mixtures ( $M=Li, Na, K, Rb, Cs$ )  
M. Gaune-Escard and L. Rycerz  
Proc. Thirteenth International Symposium On Molten Salts, Editors: H. C. Delong, R.  
W. Bradshaw, M. Matsunaga, G. R. Stafford, and P. C. Trulove, The  
Electrochemical Society Inc., 2002, 603-610

Molten Salt Data for Pyrochemistry: New Research Advances and Development of  
Information System  
M Gaune-Escard, A K Adya, L Rycerz  
OECD Proceedings of the Workshop on Pyrochemical Separations, ISBN:  
9789264184435, Edited by:OECD/NEA, 2001, 99-109

Electrochemical Studies of  $EuCl_3$  and  $EuCl_2$  in an Equimolar  $NaCl-KCl$  Melt  
S.A. Kuznetsov, M. Gaune-Escard  
OECD Proceedings of the Workshop on Pyrochemical Separations, ISBN:  
9789264184435, Edited by:OECD/NEA, 2001, 295-305

Thermodynamic Properties of Solid and Liquid  $LnCl_3$  and  $LnCl_3-MCl$  Systems  
( $Ln=Lanthanide$ ;  $M= Alkali$ )  
Gaune-Escard, M., Rycerz, L.  
Proc 12th International Symp. on Molten Salts, Edited by: Hugh C. De Long, Paul C.  
Trulove, Gery R. Stafford, The Electrochemical Society Inc., 1999, 333-340

Structural and thermodynamic properties of molten  $UCl_3$  and  $UCl_3-MCl$  ( $M=Li, Na, K,$   
 $Cs$ ) systems  
A K Adya, H Matsuura, R Takagi, L Rycerz, M Gaune-Escard  
Proc 12th International Symp. on Molten Salts, Edited by: Hugh C. De Long, Paul C.  
Trulove, Gery R. Stafford, The Electrochemical Society Inc., 1999, 341-355

The Structure of molten  $UCl_3$



H Matsuura, R Takagi, A K Adya, L Rycerz, M Gaune-Escard, F Hutchinson, P A Madden

Proc. 31st International Conference of Molten Salt Chemistry, 11-12 November 1999, Japanese Molten Salts Society, Sendai, Japan

A K Adya, H Matsuura, R Takagi, L Rycerz, M Gaune-Escard

The structure of molten  $\text{UCl}_3$  by neutron and X-ray diffraction and molecular dynamics simulations

Proc. Int George Papatheodorou Symp., ICE/HT Patras Science Park, Greece, 1999, 53-57.

Thermodynamic and physico-chemical properties of molten  $\text{EuCl}_2$  and  $\text{EuCl}_2\text{-NaCl}$  melts

M Gaune-Escard, F Da Silva, L Rycerz, R Takagi, Y Iwadate, A K Adya

Proc. XI Int Symp on Molten Salts, Edited by: P. C. Trulove, H. C. De Long, G. R. Stafford, S. Deki; The Electrochemical Society Pennington, NJ, USA: The Electrochemical Soc. Inc., 1998, 627-636

Structural and thermodynamic properties of molten  $\text{DyCl}_3$  and  $\text{DyCl}_3\text{-NaCl}$  by molecular dynamics simulation

A K Adya, R Takagi, M Sakurai, M Gaune-Escard

Proc. XI Int Symp on Molten Salts, Edited by: P. C. Trulove, H. C. De Long, G. R. Stafford, S. Deki, The Electrochemical Soc. Inc., 1998, 499-512

Electrochemical processes of molybdenum electrodeposition in melts

V. Malyshev, A. Gab, M. Gaune-Escard

Proc. XI Int Symp on Molten Salts, Edited by: P. C. Trulove, H. C. De Long, G. R. Stafford, S. Deki, The Electrochemical Soc. Inc., 1998, 208

Phase transitions in  $\text{Rb}_3\text{LnCl}_6$  ( $\text{Ln} = \text{La, Ce, Pr, Nd}$ ) compounds: Thermodynamics, electrical conductivity and structure

M Gaune-Escard, F Da Silva, L Rycerz, A K Adya, R Takagi

Proc. IX Int. Conf. on High Temperature Materials Chemistry, Edited by: K. E. Spar, The Electrochemical Soc. Inc., 1997, 259-264

Enthalpy of formation of liquid (transition metal-sp metal) binary alloys

Gaune-Escard, M., Bros, J.P.

Proc. TMS Annual Meeting, 1997, 21

Structural determination of phase transitions in the  $\text{Rb}_3\text{CeCl}_6$  and  $\text{Rb}_3\text{NdCl}_6$  compounds

A K Adya, M Gaune-Escard, L Rycerz, F Da Silva, A Hewat

(1997) annual report No. 5-24-44, Institut Laue Langevin, Grenoble, France

Structural determination of  $\text{EuCl}_2$  and  $x\text{EuCl}_2 + (1-x)\text{NaCl}$  systems by neutron diffraction

A K Adya, R Takagi, M Gaune-Escard, L Rycerz, H Fischer  
(1997) annual report No. 6-03-205. Institut Laue Langevin, Grenoble, France

Structural determination of molten DyCl<sub>3</sub> and NaCl-DyCl<sub>3</sub> systems by neutron diffraction

A K Adya, R Takagi, M Gaune-Escard, H Fischer  
(1996) annual report No. 6-03-193. Institut Laue Langevin, Grenoble, France

Thermochemistry, Physico-Chemical Properties and Modeling of the Liquid MX-LnX<sub>3</sub> Mixtures (M = alkali, Ln = rare-earth, X = halide)

Gaune-Escard, M.

Proceedings of the Tenth International Symposium on Molten Salts, Electrochemical Society, 1996, 439-467

Calorimetric Investigation of the PrCl<sub>3</sub>-MCl Melts and of the M<sub>3</sub>PrCl<sub>6</sub> Compounds (M = Li, Na, K, Rb, Cs)

Gaune-Escard, M., Rycerz, L., Szczepaniak, W., Bogacz, A.

Proceedings of the Ninth International Symposium on Molten Salts, The Electrochemical Society, 1994, 91-98

Mixing Enthalpy and Structure of the Molten NaCl-DyCl<sub>3</sub> System

Takagi, R.; Rycerz, L.; Gaune-Escard, M.

Proceedings of the Ninth International Symposium on Molten Salts, Electrochemical Society, 1994, 99-107

Calculations of Phase Equilibria in the Ternary Molten Salt System AlF<sub>3</sub>-BaF<sub>2</sub>-NaF

Gaune-Escard, M., Hatem, G., Peretz, P., Hoch, M.

Proceedings of the Ninth International Symposium on Molten Salts, Electrochemical Society, 1994, 116-123

Physico-chemical properties of solid and liquid rare-earth halides.

M. Gaune-Escard, A. Bogacz, L. Rycerz, W. Szczepaniak.

Proc. 12th IUPAC Conference/47th Calorimetry Conference, 16-21 August 1992, Snowbird, Utah, USA.

Thermosalt, exemple d'application: le calcul du diagramme d'équilibre des phases du système CsCl-KCl-LiCl.

Juhem P., Hatem G., Bros J.P., Fouque Y., Gaune-Escard M.

14<sup>èmes</sup> Journées d'Etude des Equilibres entre Phases. Montpellier, 1988, C. 143-148.

Conductivité électrique et diagramme d'équilibre des phases; capacité calorifique à pression constante et enthalpie de mélange

G. Hatem, M. Gaune-Escard

Journées de Calorimétrie et Analyse Thermique Nice, 42, 1988.

L'enthalpie de formation du système ternaire fondu ZrF<sub>4</sub>-LiF-LaF<sub>3</sub>

K. Mahmoud, G.Hatem, M. Gaune-Escard

Journées de Calorimétrie et Analyse Thermique, XIX, C 23.1, 1988

Etude calorimétrique du système liquide  $\text{AlCl}_3\text{-KCl-NH}_3\text{AlCl}_3$

G. Hatem, M. Gaune-Escard, J.P. Bros, T. Østvold

Journées de Calorimétrie et Analyse Thermique , XIX, P 22.1, 1988.

Système fondu  $\text{ZrF}_4\text{-NaF-BaF}_2$ : enthalpie d'excès

K. Mahmoud, G. Hatem, M. Gaune-Escard.

Journées de Calorimétrie et Analyse Thermique, XVIII, 43, 1987.

Alkali metal-alkali halide solutions: thermodynamics of the K-KCl system.

Gaune-Escard, M., Farcot, A., Bros, J.P.

Proceedings - The Electrochemical Society, 1984, 84-2, 713-

Les systèmes  $\text{LiF-Rb}_2\text{SO}_4$  et  $\text{RbF-Li}_2\text{SO}_4$  . Enthalpies de formation des mélanges liquides. Evaluation de l'incertitude expérimentale

G. Hatem, M. Gaune-Escard.

Journées de Calorimétrie et Analyse Thermique, 1981, XII, HT6,

Calorimétrie de mélange entre 1200 et 1800 K. Difficultés rencontrées et solutions apportées

H. Eslami, J.P. Bros, G. Hatem, B. De Gasquet, M. Gaune-Escard

Journées de Calorimétrie et Analyse Thermique, 1979, X, HT3,

Etude calorimétrique du mélange de sels fondus  $\text{KF-NdF}_3$

G. Hatem, T. Jriri, M. Gaune-Escard.

Journées de Calorimétrie et Analyse Thermique, XX-XXI, 361-366, (1990).

Etude thermodynamique des systèmes  $\text{MCl-BiCl}_3$  (M = Li, Na, K, Rb) I. Enthalpie de mélange.

Z. Benkaldoun, G. Hatem, M. Gaune-Escard.

Journées de Calorimétrie et Analyse Thermique, XVII, 134, 1986.

Etude thermodynamique des systèmes  $\text{MCl-BiCl}_3$  (M = Li, Na, K, Rb) II. Température , enthalpie de fusion et capacité calorifique des composés définies

Z. Benkaldoun, M. Gambino, G. Hatem, J.P. Bros, M. Gaune-Escard

Journées de Calorimétrie et Analyse Thermique, XVII, 284, 1986.

Difficultés expérimentales rencontrées dans la détermination des enthalpies de mélange de sels fondus très réactifs

Z. Benkaldoun, G. Hatem, M. Gaune-Escard

Journées de Calorimétrie et Analyse Thermique, 1985, XVI, 432

La vallée eutectique du système ternaire Ag-Au-Si

S. Hassam, M. Gaune-Escard, M. Gambino, J.P. Bros

Journées de Calorimétrie et Analyse Thermique, 1985, XVI, 432

Thermodynamic properties data compilation of molten salt mixtures

M. Gaune-Escard, J.P. Bros

9th International CODATA Conference, CODATA Bull.1984

Etude du diagramme d'équilibre des phases du système ternaire Au-Ag-Ge par analyse thermique différentielle

S. Hassam, M. Gambino, M. Gaune-Escard, J.P. Bros

Journées de Calorimétrie et Analyse Thermique, 1984, XV, 321

Comparaison et critique des enthalpies de fusion des composés  $M_2UCl_6$  ( $M = Li, Na, Cs$ ) obtenues par cryométrie et calorimétrie

A. Bocacz, W. Winiowski, Y. Fouque, J.P. Bros, M. Gaune-Escard

Journées de Calorimétrie et Analyse Thermique, 1983, XIV, 339

La calorimétrie et l'analyse enthalpique pour la caractérisation thermodynamique de mélanges stockeurs d'énergie

J.P. Bros, M. Gaune-Escard

Journées de Calorimétrie et Analyse Thermique, 1983, XIV, 8

Stockage thermique de l'énergie à basse température : enthalpie de fusion et capacité calorifique de mélanges à base d'urée

J.P. Bros, M. Gambino, M. Gaune-Escard, N. Tran-Huu

Journées de Calorimétrie et Analyse Thermique, XIV, 92, 1983

Entropies de changements d'état du sulfate de lithium

G. Hatem, M. Gaune-Escard

Journées de Calorimétrie et Analyse Thermique, 1983, XIV, 96, 5

Diagramme d'équilibre des phases et enthalpie de formation à 1400 et 1500 K de l'alliage ternaire Ag+Au+Si

S. Hassam, M. Gaune-Escard, J.P. Bros

Journées de Calorimétrie et Analyse Thermique, 1983, XIV, 166

### Conferences:

The application of deep eutectic solvents ionic liquids for environmentally-friendly dissolution and recovery of metals from electronic waste

A. Popescu ; C. Donath ; E. Neacsu ; V. Soare ; M. Burada ; V. Constantin ; M. Gaune Escard

SIPS2016: 4th Intl. Symp. on Sustainable Molten Salt and Ionic Liquid Processing

Mixing Enthalpy of  $LnX_3$ -MX Lanthanide(III)-Alkali Metal Halide Systems

L. Rycerz ; I. Chojnacka ; S. Gadzuric ; M. Gaune Escard  
SIPS2016: 4th Intl. Symp. on Sustainable Molten Salt and Ionic Liquid Processing

Phase diagram and electrical conductivity of  $\text{NdBr}_3$  -  $\text{KBr}$   
M. Berkani ; Y. Bounouri ; M. Gaune Escard  
SIPS2016: 4th Intl. Symp. on Sustainable Molten Salt and Ionic Liquid Processing

Electrochemical Behaviour and Electrodeposition of Silicon onto Graphite from Halide and Halide-Oxide Melts  
D. Shakhnin ; L. Molotovska ; V. Malyshev ; A. Sushchenko ; M. Gaune Escard  
SIPS2016: 4th Intl. Symp. on Sustainable Molten Salt and Ionic Liquid Processing

Thermodynamical Substantiation of Metallothermic and High-Temperature Electrochemical Synthesis of Chromium Silicides  
A. Gab ; L. Molotovska ; V. Malyshev ; A. Sushchenko ; M. Gaune Escard  
SIPS2016: 4th Intl. Symp. on Sustainable Molten Salt and Ionic Liquid Processing

Synthesis of Disperse Powders of VI-B Group Metals Silicides from Ionic Melts  
V. Malyshev ; A. Sushchenko ; A. Gab ; N. Uskova ; O. Podyman ; M. Gaune Escard  
SIPS2016: 4th Intl. Symp. on Sustainable Molten Salt and Ionic Liquid Processing

Heat-Resistant  $\text{CrSi}_2$ : Synthesis of Nanocrystalline Powders, Single Crystals, and Coatings from Molten Salts  
L. Molotovska ; D. Shakhnin ; V. Malyshev ; A. Sushchenko ; M. Gaune Escard  
SIPS2016: 4th Intl. Symp. on Sustainable Molten Salt and Ionic Liquid Processing

The thermal decomposition of sodium carbonate and calcium carbonate in molten sodium chloride and the molten salt synthesis (MSS) of sodium silicate and calcium silicate.  
R. Sheikh ; S. Simons ; D. Brett ; M. Gaune Escard  
SIPS2016: 4th Intl. Symp. on Sustainable Molten Salt and Ionic Liquid Processing

The production of graphene-based nanomaterials and the application of economic models.  
R. Sheikh ; G. Peters ; M. Gaune Escard ; C. Schwandt  
SIPS2016: 4th Intl. Symp. on Sustainable Molten Salt and Ionic Liquid Processing

Thermal energy storage in molten salts  
Marcelle Gaune-Escard  
EUCHEM Conference on Molten Salts and Ionic Liquids 2016, Vienna, Austria

Electrochemical study of molibdenum and tungsten carbides phases crystals nucleation and growth  
V. Malyshev, N. Uskova, D. Shakhnin, A. Gab, M. Gaune-Escard  
European Materials Research Society Fall Meeting, Warsaw University of Technology, Poland, 15-19 September, 2014

Thermodynamics of lanthanide halide + alkali halide binary mixtures: Experimental and chemometric study  
Slobodan Gadžurić, Marcelle Gaune Escard, Leszek Rycerz, Krishna Rajan  
IUPAC 16th International Symposium on Solubility Phenomena and Related Equilibrium Processes, Karlsruhe, Germany, July 21-25, 2014

Lanthanide(III)-Alkali Metal halide Systems: Characterization and Prediction of Phase Diagram Topology  
Chojnacka, Ida; Rycerz, Leszek; Gaune-Escard, Marcelle.  
XLIII CALPHAD International Conference, June 1-6, 2014, Changsha, Hunan (China).

Influence of fluoride and oxide ions on the electrochemical behaviour of uranium in LiCl-KCl eutectic melt  
Sergey Kuznetsov, Marcelle Gaune-Escard  
Actinides2013, July 21-26, Karlsruhe, Germany, 2013

Thermodynamic investigation on CsBr-CeBr<sub>3</sub>, CsBr-LaBr<sub>3</sub> and CsBr-TbBr<sub>3</sub> systems  
W. Gong, Y. Wu, M. Gaune-Escard  
European Conference on Advanced Materials and Processes, Montpellier, France-12-15 September 2013

Change of electrochemical and corrosion titanium behavior in the result of tungsten carbide electroplating  
V. Malyshev, A. Gab, D. Shakhnin, M. Gaune-Escard  
European Conference on Advanced Materials and Processes, Montpellier, France-12-15 September 2013

Disorder in solids  
Ida Chojnacka, Leszek Rycerz, Marcelle Gaune-Escard  
2nd Central and Eastern European Conference on Thermal Analysis and Calorimetry, 27-30 August 2013, Vilnius, Lithuania

Thermodynamic and transport properties of lanthanide(III) halide-alkali metal halide systems  
Leszek Rycerz, Ida Chojnacka, Marcelle Gaune-Escard  
2nd Central and Eastern European Conference on Thermal Analysis and Calorimetry, 27-30 August 2013, Vilnius, Lithuania

Phase diagrams of NdI<sub>3</sub> – RbI pseudo-binary system. Thermodynamic properties of solid compounds  
Beata Salamon, Bożena Pilarek, Leszek Rycerz, Jan Kapała, Marcelle Gaune-Escard  
2nd Central and Eastern European Conference on Thermal Analysis and Calorimetry, 27-30 August 2013, Vilnius, Lithuania

Molten Salts & Nuclear Energy  
M. Gaune-Escard

EUCHEM Conference on Molten Salts and Ionic Liquids 2012, Newport, South Wales, United Kingdom

High temperature solubility of lanthanide halides in alkali metal halide melts.  
Gaune-Escard Marcelle, Rycerz Leszek, Gadzuric Slobodan  
International Union of Pure and Applied Chemistry (IUPAC), ICSC 2011 La Grande Motte, France, 28 August–2 September 2011

Recycling waste tungsten carbide–cobalt cermets  
A. Gab, V. Malyshev, M. Gaune-Escard  
EUCHEM 2010 Conference on Molten Salts and Ionic Liquids, Bamberg, Germany, 14-19 March, 2010

Lanthanide-alkali metal halide systems: characterization and prediction of phase diagram topology  
Marcelle Gaune Escard, Leszek Rycerz, Slobodan Gadzuric  
13. Ulusal Sivihal Fiziği Sempozyumu, Piri Reis Üniversitesi Konferans Salonu, Tuzla, İstanbul, 27-29 Ekim 2009

Lanthanide(III)-Alkali Metal halide Systems: Characterization and Prediction of Phase Diagram Topology  
Gaune-Escard, M; Rycerz, L  
12th Symposium on Thermochemistry and Thermophysics of Nuclear Materials (STTNM), Pörschach, Austria, August 30th-September 3rd, 2008

Electrochemical transient techniques for study of the electrochemistry and thermodynamics of nuclear materials in molten salts  
S.A. Kuznetsov, M. Gaune-Escard  
12th Symposium on Thermochemistry and Thermophysics of Nuclear Materials (STTNM), Pörschach, Austria, August 30th-September 3rd, 2008

The (rare-earth + alkali) halide systems: A gold mine for phase equilibrium research  
Gaune-Escard M.  
14th National Conference and Multilateral Symposium on Phase Diagrams and Material Design, 3-5 November 2008, Changsha, Hunan, China

Phase equilibrium in LnXn-MX Lanthanide-Alkali metal halide systems: from Ln(III) to Ln(II)  
M. Gaune-Escard, L. Rycerz, E. Ingier-Stocka, S. Gadzuric  
2008 Joint Symposium on Molten Salts, Kobe, Japon, 19-23 October 2008 (oral)

Lanthanide(III)-Alkali Metal halide Systems: Characterization and Prediction of Phase Diagram Topology  
M. Gaune-Escard, L. Rycerz  
2008 Joint Symposium on Molten Salts, Kobe, Japon, 19-23 October 2008 [Keynote Lecture]

Novel Niobium and Tantalum Compounds Produced by Electrochemical Synthesis  
S. A. Kuznetsov, V. V. Grinevitch, A. V. Arakcheeva, M. Gaune-Escard  
2008 Joint Symposium on Molten Salts, Kobe, Japon, 19-23 October 2008

Molten Salts, power and energy

M. Gaune-Escard

International Conference on Ionic Liquids for Electrochemical Devices, ILED 2008, June 9-11, 2008, Rome, Italy

Statistical learning and informatics for molten salt / ionic liquids chemistry

Changwon Suh, Slobodan Gadzuric, Marcelle Gaune-Escard and Krishna Rajan

EUCHEM Conference on Molten Salts and Ionic Liquids, September 16-22, 2006, Hammamet, Tunisia

Thermodynamic properties of LnI<sub>3</sub>-MI binary systems (Ln = La, Nd)

Leszek Rycerz, Marcelle Gaune-Escard

EUCHEM Conference on Molten Salts and Ionic Liquids, September 16-22, 2006, Hammamet, Tunisia

Transport properties of molten rare earth chlorides. (Density, viscosity and electrical conductance)

Alexei Potapov, Vladimir Khokhlov, Yuzuru Sato, Marcelle Gaune-Escard

EUCHEM Conference on Molten Salts and Ionic Liquids, September 16-22, 2006, Hammamet, Tunisia

Electrochemical behavior of silver and its codeposition with molybdenum carbide in tungstate-molybdate-carbonate melts

Angelina Gab, Victor Malyshev, Igor Astrelin, Sergey Sarychev and Marcelle Gaune-Escard

EUCHEM Conference on Molten Salts and Ionic Liquids, September 16-22, 2006, Hammamet, Tunisia

Data mining of molten salt database

Slobodan Gadžurić, Changwon Suh, Krishna Rajan and Marcelle Gaune-Escard

EUCHEM Conference on Molten Salts and Ionic Liquids, September 16-22, 2006, Hammamet, Tunisia

Phase diagram and electrical conductivity of the CeBr<sub>3</sub> – KBr binary system

Leszek Rycerz, Ewa Ingier-Stocka, Slobodan Gadzuric and Marcelle Gaune-Escard

EUCHEM Conference on Molten Salts and Ionic Liquids, September 16-22, 2006, Hammamet, Tunisia

Physicochemical properties of melts used for electrodeposition of niobium

Blanka Kubíková, Vladimír Daněk, Marcelle Gaune-Escard



EUCHEM Conference on Molten Salts and Ionic Liquids, September 16-22, 2006,  
Hammamet, Tunisia

Unusual influence of the temperature on the standard rate constants of charge transfer for  
the redox couple Eu(III)/Eu(II) in chloride-bromide melts

Sergey Kuznetsov, Marcelle Gaune-Escard

EUCHEM Conference on Molten Salts and Ionic Liquids, September 16-22, 2006,  
Hammamet, Tunisia

Electronic conductivity of NaCl-KCl equimolar melt containing europium complexes of  
mixed valency

Sergey Kuznetsov, Marcelle Gaune-Escard

EUCHEM Conference on Molten Salts and Ionic Liquids, September 16-22, 2006,  
Hammamet, Tunisia

Molybdenum (tungsten) – nickel (cobalt) intermetallic compounds: synthesis and  
obtaining conditions

Victor Malyshev, Angelina Gab, Igor Astrelin, and Marcelle Gaune-Escard

EUCHEM Conference on Molten Salts and Ionic Liquids, September 16-22, 2006,  
Hammamet, Tunisia

Interplay of physicochemical and structural features in ionic compounds and melts

Marcelle Gaune-Escard, Leszek Rycerz, Slobodan Gadzuric

20th International CODATA Conference: Scientific Data and Knowledge within the  
Information Society, 22-25 October 2006, Beijing, China

Interactive experimentation and modeling for phase equilibrium

Weiping Gong, Marcelle Gaune-Escard, Zhanpeng Jin

20th International CODATA Conference: Scientific Data and Knowledge within the  
Information Society, 22-25 October 2006, Beijing, China

Physicochemical features of lanthanide halide molten salt solutions.

Gadzuric S., Gong W., Rycerz L., Ingier-Stocka E., Gaune-Escard M.

IUPAC 29th International Conference on Solution Chemistry (ICSC), Portoroz, Slovenia,  
20-24 August, 2005

Extracting Information From Molten Salt Database .

Gadzuric S., Suh C., Gaune-Escard M., Rajan K.

Fourth International Alloy Conference (IAC-4), Kos-Greece, June 26-July 01, 2005

Heat capacity determination of Cerium compound by calorimetric methods

Popescu A.M., Constantin V., Rycerz L., Gaune-Escard M.

Russian International Conference On Chemical Thermodynamics, Moscow, Russia, June  
27-July 2, 2005

Thermodynamics of lanthanide halides and application to high temperature processes.  
Gaune-Escard M.

Metal Separation Technologies III, symposium in Honour of L.E. Holappa, Copper Mountain-Colorado, 2004, 20-24 June

Molten Salt Database project: Building Information and Predicting Properties.

Gaune-Escard M.

Codata 2002 18th international Conference Frontiers of Scientific Data, Montreal, Canada, 29 Sept.- 3 Oct., 2002

Thermodynamics of Alkali-lanthanide halides systems: understanding, and predicting the properties of such systems.

Gaune-Escard M.

Third International Alloy Conference (IAC-3), Estoril/Cascais, Portugal, June 30-July 5, 2002

New Advances in Molten Salt Research: Data for Pyrochemical Reprocessing of Nuclear Fuels:

Marcelle Gaune-Escard

TMS Meeting, February 17-21, 2002 • Seattle, Washington, USA

Banque de données en milieu sels fondus.

Gaune-Escard M.

Atelier GEDEON-Practis, Les Reacteurs à sels fondus (RSF) Pyrochimie et cycles des combustibles nucléaires du futur, Saint Paul lez Durance, France, 19-20 Juin, 2002

Bases de données et système d'information interactif pour les sels fondus.

Gaune-Escard M.

Reunion Practis - Thermodynamique : solutions et interfaces", mai, 2002

Thermodynamic data compilation of molten salt mixtures

J.P. Bros, M. Gaune-Escard, G. Hatem, N. Mossarello, Y. Fouque

10<sup>th</sup> International Codata Conference, Ottawa, Canada, 14-17 July, 1986

Thermodynamic data compilation of molten salt mixture: critical assessment of the KNO<sub>3</sub>-NaNO<sub>3</sub>-RbNO<sub>3</sub> ternary system

M. Gaune-Escard, N. Mossarello

10<sup>th</sup> International Codata Conference, Ottawa, Canada, 14-17 July, 1986

M. Gaune-Escard, G. Hatem, Y. Fouque, J.P. Bros

First Codata Symposium on Chemical Thermodynamic and Thermophysical properties databases, CODATA Bulletin, 1985, 58, 104