

POSTER LIST - CALPHAD XXX

Poster Session A – Tues 29th May 2001

First Principle and CVM Calculations, Thermodynamic Modelling, Assessments, and Applications

- A1 CVM-assessment of garnet and pyroxene solid solutions using calorimetric and spectroscopic constraints
Victor L. Vinograd and Andrew Putnis
- A2 Scalable Vector Graphics Approach to Phase Diagrams using the Pauling File,
Naoko Tatara, Kunio Iijima, Kenji Yoshida, Kiyoshi Kuroda and Ying Chen.
- A3 A theoretical calculation of phase stability in the Zr-Fe-Cr system applied to the
analysis of irradiation induced amorphization in Zircaloy
C.Rodriguez, D.A.Barbiric, J.A.Kovacs, M.E.Pepe, J.A.Alonso, R.Hojvat de Tandler
- A4 Application of thermodynamic calculations for the prediction of phase composition of
various Cr-Mo based steels
A. Kroupa, P. Unucka, M. Coufalova and M. Svoboda
- A5 CVM Calculation of the Phase Diagram of the bcc Co-Cr-Al System
L. T. F. Eleno and C. G. Schön
- A6 The Perfect Thermodynamics of Imperfect Materials
Marius Stan
- A7 Steady Solution of a Fokker-Planck Equation and Time-Dependent Nucleation Rate
Minoru Honjo and Yoshiyuki Saito
- A8 Thermodynamic Modelling of the Mg-Ba and the Al-Mg-Ba systems
Alexander Pisch
- A9 Thermodynamic Modelling of Multicomponent Spinels
Sergei A. Degterov, Eugene Jak, In-Ho Jung, Youn-Bae Kang, Hyun-Min Kim and
Arthur D. Pelton
- A10 An Assessment of Co and Fe-Co System under High Pressure
Xiaogang Lu and Bo Sundman
- A11 Thermodynamic Assessment of the Nb-Si System
Paulino B. Fernandes, Gilberto C. Coelho and Carlos A. Nunes
- A12 Reassessment of the Cu-Si and Cr-Si Binary Systems on the Basis of New
Calorimetric Data
Victor T. Witusiewicz, Suzana G. Fries, Ulrike Hecht, Stephan Rex Tanja Jantzen,
Inaki Hurtado and Hans Leo Lukas
- A13 Thermodynamic Assessment of the La-Sr-O System

- A. Nicholas Grundy, Bengt Hallstedt, Ludwig J. Gauckler
- A14 Thermodynamic Modelling and Calculation of Phase Equilibria in La-Sr-Mn-O System at Different Temperatures and Partial Pressures of Oxygen
David Sedmidubský, Jindrich Leitner, Aleš Strejc and Miloš Nevřiva
- A15 Thermodynamic assessment of the quaternary system Al-Fe-Mn-Si in the Al-rich corner
E. Balitchev, T. Jantzen, I. Hurtado and D. Neuschütz
- A16 Thermodynamic Modelling and Experimental Investigation of the Al-Fe-Mg-Si Quaternary System
Stephen Daniel
- A17 Gibbs Energy Modelling of Cobalt-Antimony Binary Phases
Jean Claude Tedenac and Marie Christine Record
- A18 Development of WCIC - White Cast Intermetallic Compound - with the help of Thermodynamic Calculations in the Ni-Al-Cr-C System
Yuri Nunes Silva, Cláudio Geraldo Schön and Hélio Goldenstein
- A19 Calphad Approach to the Design of Fluorescent Lamp Amalgams
S.C. Hansen and S.L. Chen
- A20 Thermodynamic Study of Aluminum Oxide and Nitride Precipitation in Ferrous Alloys
André Costa e Silva, Fernando Rizzo and John G. Speer
- A21 Prediction of Filler Wire Compositions for Welding High Strength Al Alloys using Phase Diagram Calculations
A.F. Norman, P.B. Prangnell and F.H. Hayes
- A22 Thermodynamic Optimisation of the Mo-S Binary System and Comparison of Different Models for the liquid phase
O. S. Szabo, K.C.H. Kumar, B. Blanpain and P. Wollants
- A23 Gibbs energy formulations and equation of state for Mg_2SiO_4 and Fe_2SiO_4
M.H.G. Jacobs, H.A.J. Oonk and B.H.W.S.de Jong,
- A24 Modelling Al_3Zr Precipitation Kinetics in Commercial Aluminium Alloys
J. D. Robson and P. B. Prangnell
- A25 The 733 K Isothermal section of the Fe-Cr-Zn ternary system
Pierre Perrot, Muriel Mathon, Sarah Maniez and Guy Reumont.
- A26 Calphad Approach to the Stability and Ageing of Candidate Alloys for the Yucca Mountain Project
P. E. A. Turchi, Larry Kaufman, and Zi-Kui Liu

- A27 PANDAT - Multi-Component Phase Diagram Calculation Software
Shuanglin Chen, S. Daniel, Fan Zhang, Y. A. Chang, A. Oates and R. Schmid-Fetzer
- A28 Preliminary assessment of some Ti-based ternary systems: Co-Fe-Ti and Co-Ni-Ti
G. Cacciamani, R. Ferro, I. Ansara[†], N. Dupin
- A29 Electronic Structure and Stability of Pentlandites: Co₉S₈ and the Related (Fe,Ni)₉S₈ Alloys
H.R.Chauke, D.Nguyen-Manh, P.E.Ngoepe, D.G.Pettifor and S.G.Fries
- A30 Prediction of Heat Capacities of Solid Mixed Oxides
Jindrich Leitner^{*}, David Sedmidubský, Petr Abrman and Pavel Chuchvalec

Poster Session B – Thur ^{31st} May 2001

Experimental Studies of Phase Equilibria, Phase Diagrams and Thermophysical Properties.
Gibbs energy measurements and Calorimetry

- B1 Experimental Investigation and Thermodynamic Calculation of the Ternary Mg-Li-Si Phase Diagram
D.G.Kevorkov and R.Schmid-Fetzer
- B2 Experimental and thermodynamic assessment of the Fe-Gd-Zr system
M. Zinkevich, N. Mattern, and I. Bächer
- B3 Experimental and theoretical study of Ti-V-C-(N) phase diagram
M. Coufalova, A. Kroupa, R. Picha
- B4 Heat Capacity Measurements of Co-Cr Alloys in the Temperature Interval 313-1673K.
T. Lundgren , R.E. Aune and S.Seetharaman
- B5 Invariant reactions in the Sn-rich corner of the Cu-Sn-Zn system
A.N. Alcaraz, E.E. Vicente and L.M. Gribaudo
- B6 Thermodynamics of Fe-Mn Alloys
V. T. Witusiewicz, F. Sommer and E. Mittemeijer
- B7 Thermodynamic Investigations in the B2 Region of the Fe-Al System by Knudsen Effusion Mass Spectrometry
J. Herrmann, D. Kath and K. Hilpert
- B8 Experimental Study of the Nb-B System
L.A.Borges, G.C.Coelho and C.A.Nunes
- B9 Experimental determinations in the zirconium-rich zone of the Zr-Cr system
R.O. González and L.M.Gribaudo

- B10 The platinum rich zone of the platinum – zirconium phase diagram
P.R. Alonso, L.M. Gribaudo and D.E. Arias
- B11 Experimental Phase Diagram of the Central Region of the Zr-Sn-Fe System
N. Nieva and D. Arias
- B12 Contribution to the investigation of ternary Fe-Nb-Zr alloys
V. Goldbeck, M. Granovsky, M. Canay and D. Arias
- B13 Contribution of Mössbauer spectroscopy to the study of a region of the Zr-Nb-Fe diagram.
C. Ramos, C. Saragovi, M. Granovsky and D. Arias
- B14 Assessment of Experimental Measurements obtained from Electron Microprobe Analyses, Utilised Criteria for the Outlines of Phase Diagrams
N. Nieva , V. Goldbeck and D. Arias
- B15 Thermodynamics of Gold-Barium Alloys
Rashid Abdulrahman Alsaeed
- B16 Recent advances in the knowledge of the Zr-Ti-Sn system
S.F. Aricó and L.M. Gribaudo
- B17 Phase equilibria in Ti-TiB-V₃B₂-V alloys in the melting-crystallisation temperature range
T.Velikanova, L.Artyukh, O.Belous, P.Martsenyuk, M.Burka, Ntsyganenko and D.Miracle
- B18 High Al-content Ternary Phases in Al-Cr-Ni
Lesley Cornish, Sara Prins, Daven Compton and Michael Witcomb
- B19 Defect Chemistry of Intermetallic Compounds with D03-Structure
O. Semenova, R. Krachler, and H. Ipser
- B20 Enthalpies of Formation of Ti₃Al by Solution and Direct Reaction Calorimetry
K.Rzyman, Z.Moser and J.C.Gachon
- B21 A new determination of the Enthalpies of Formation of Tantalum Carbides
S.Michon, P.Berthod and J.C.Gachon
- B22 Experimental investigation and computer simulation of phase transformations during solidification and heat-treatment of Al-alloys.
M. Maubach, P. Franke, and D. Neuschütz
- B23 Phase Equilibria Analysis by the Smith Technique: -Magnesium-Rare Earth Alloys
A.Saccone, D.Macciò, S.Delfino, F.H.Hayes, R.Ferro
- B24 Phase Identification in the Ti-Ga system
A.V. Davydov, W.J. Boettinger, F.S. Biancaniello and A.J. Shapiro

- B25 Wetting Characteristics and Phase Equilibria in Cr-Containing Active Braze Alloys in contact with Si_3N_4
A.Winn, B. Derby and F.H.Hayes
- B26 Presentation of “PhaseDia” Computer Program.
G.Garzel and L.A.Zabdyr
- B27 Information System on Thermal Constants of Substances
Belov G.V., Iorish V.S., Yungman V.S.
- B28 Behaviour of copper and tin in steels: a new thermodynamic approach for recycling tin-can and incinerator scrap steels
A. Watson, A. Jha, X.Li, R. Brydson, and R.C. Cochrane
- B29 Calculation of surface tension and surface segregation of the Cu-Ni-Zn and Cu-Ni-Pd liquid alloys
R.Novakovic and E.Ricci