

Richard and Patricia Spriggs Phase Equilibria Award
History of Awardees

Date Awarded	Name	Awarded For:
2025	Georgii Khartcyzov, Cora Kleeberg, Maksym Shevchenko, Denis Shishin, Evgueni Jak	"Analysis of slag chemistry in WEEE smelting using experimental and modelling study of the "CuO0.5"-ZnO-FeO-FeO1.5-CaO-SiO2-AlO1.5 system in equilibrium with Cu metal"; <i>Ceramics International</i> ; Volume 50, Issue 15, 2024; 26513-26527
2024	Mariia Ilatovskaia, André Treichel, Olga Fabrichnaya	"The Mg-TiO2-SiO2 System: Experiments and thermodynamic assessment"; <i>Journal of the American Ceramic Society</i> ; Vol. 106, Issue 12; 2023; 7704-7727
2023	Yuchao Qiu, Song Li' Junjie Shi' Yumo Zhai' Bin Yu, Jianzhong Li, Changle Hou' Jingjing Dong, Changsheng Liu	"Phase equilibria of MgO–Al ₂ O ₃ –TiO ₂ system at 1600°C in air Emphasis on pseudobrookite and spinel"; <i>Journal of the American Ceramic Society</i> ; 2022; 1-12
2022	O.V. Chudinovych, O.R. Andrievskaya, .D. Bogatyryova, V.V. Kovylyaev, O. I. Bykov	"Phase equilibria in the La ₂ O ₃ -Y ₂ O ₃ -Nd ₂ O ₃ system at 1500°C"; <i>Journal of the European Ceramic Society</i> ; 41 (2021) 6606–6616
2021	Kai Xu, Keke Chang, Xiaobing Zhou, Leilei Chen, Junwen Liu, Zixuan Deng, Feng Huang, Qing Huang	"Thermodynamic descriptions of the light rare-earth elements in silicon carbide ceramics" <i>Journal of the American Ceramic Society</i> ; 2020; 103:3812–3825
2020	Xi Lan, Jintao Gao, Yu Du, Zhancheng Guo	"Thermodynamics and crystallization kinetics of REEs in CaO–SiO ₂ –Ce ₂ O ₃ system"; <i>J Am Ceram Soc</i> . 2019; 103: pgs 2845–2858
2019	Raphael M.C.V. Reis, Edgar D. Zanotto	"Simple model for particle phase transformation kinetics", <i>Acta Materialia</i> , 154 228-236 (2018)
2018	Kang Yan, Minxia Fang, Xiaobing Ren, Shui Ren	"Crucial role of octahedral untilting R3m/P4mm morphotropic phase boundary in highly piezoelectric perovskite oxide", <i>Acta Materialia</i> 134 (2017) 195-202

Date Awarded	Name	Awarded For:
2017	Masao Kita, Tomoaki Fukada, Shu Yamaguchi, Takahisa Omata	"High temperature phases with wurtzite-derived structure in Zn ₂ LiGaO ₄ –ZnO alloy system", <i>Journal of Alloys and Compounds</i> , 688, Part A 69-76 (2016)
2016	Andrea Quaini, Christine Guéneau, Stéphane Gossé, Bo Sundman, Dario Manara, Anna L. Smith, David Bottomley, Patrick Lajarge, Markus Ernstberger, Fiqiri Hodaj	"High temperature investigation of the solid/liquid transition in the PuO ₂ –UO ₂ –ZrO ₂ system", <i>Journal of Nuclear Materials</i> , 467 (2015) 660-676
2015	Nan Zhang, Hiroko Yokota, A. Michael Glazer, Zihé Ren, D.A. Keen, Dean S. Keeble, Pamela A. Thomas, Zuo-Guang Ye	"The missing boundary in the phase diagram of PbZr _{1-x} Ti _x O ₃ ", <i>Nature Communications</i> 5, October (2014), Article number 5231
2014	Mao Chen and Baojun Zhao	"Phase Equilibrium Studies of "Cu ₂ O"-SiO ₂ -Al ₂ O ₃ System in Equilibrium with Metallic Copper", <i>Journal of the American Ceramic Society</i> , vol. 96 [11] pp 3631-3636 (2013)
2013	Kiyoshi Kobayashi and Yoshio Sakka	"Phase Relationships in the Quasi-Ternary LaO _{1.5} -SiO ₂ -MgO System", <i>Science and Technology of Advanced Materials</i> , vol. 13 [4] (2012)
2012	Jinichiro Nakano, Kyei-Sing Kwong, James Bennett, Thomas Lam, Laura Fernandez, Piyananee Komolwit and Seetharaman Sridhar	"Phase Equilibria in Synthetic Coal - Petcoke Slags (Al ₂ O ₃ –CaO–FeO–SiO ₂ –V ₂ O ₃) under Simulated Gasification Conditions", <i>Energy & Fuels</i> , vol. 25 [7], pp 3298-3306 (2011)
2011	Dae-Hee Woo, Hae-Geon Lee	"Phase Equilibria of the MnO–SiO ₂ –Al ₂ O ₃ –MnS System", <i>Journal of the American Ceramic Society</i> , 93 [7] 2098–2106 (2010)
2010	Genki Kobayashi, Shin-ichi Nishimura, Min-Sik Park, Ryoji Kanno, Masatomo Yashima, Takashi Ida, and Atsuo Yamada	"Isolation of Solid Solution Phases in Size-Controlled Li _x FePO ₄ at Room Temperature", <i>Advanced Functional Materials</i> , 2009, 19, 395–403.

Date Awarded	Name	Awarded For:
2009	Elena R. Andrievskaya	"Phase equilibria in the refractory oxide systems of zirconia, hafnia and yttria with rare-earth oxides", <i>Journal of the European Ceramic Society</i> 28 (2008) 2363-2388.
2008	Soonil Lee, Clive A. Randall, and Zi-Kui Liu	"Modified Phase Diagram for the Barium Oxide-Titanium Dioxide System for the Ferroelectric Barium Titanate", <i>Journal of the American Ceramic Society</i> , 90 [8] 2589-2594 (2007).
2007	Winnie Wong-Ng, Zhi Yang, Lawrence Cook, Julia Frank, Mario Luong	"Subsolidus Phase Relationships of the BaO-R ₂ O ₃ -CuO ₂ (R = Eu, Dy and Ho) Systems Under Carbonate-free Conditions at T = 810 °C and pO ₂ = 100 Pa", <i>Physica C</i> 439 (2006) 93-100.
2007	A. Nicholas Grundy, Ming Chen, Bengt Hallstedt, Ludwig J. Gauckler	"Assessment of the La-Mn-O System", <i>Journal of Phase Equilibria and Diffusion</i> -26 (2) 131-151 (2005).
2006	Terrell A. Vanderah, Virginia Lea Miller, Igor Levin, S.M. Bell, and Taki Negas	"Phase Relations, Crystal Chemistry, and Dielectric Properties in Sections of the La ₂ O ₃ -CaO-MgO-TiO ₂ System ", <i>J. Solid State Chem</i> . 177, 2023-2038 (2004).
2005	Masao Morishita and Alexandra Navrotsky	"Calorimetric Study of Nickel Molybdate: Heat Capacity, Enthalpy, and Gibbs Energy of Formation" , <i>Journal of the American Ceramic Society</i> , 86[11]1927-32(2003).
2004	Theodore M. Besmann and Karl E. Spear	"Thermochemical Modeling of Oxide Glasses", <i>Journal of the American Ceramic Society</i> , 85 [12] 2887-94 - (2002)
2003	Robert Roth	Lifetime Achievement