Professional Activities and Publications of

JUSTIN DANIEL MEYER

PATENTS:

No. 6,808,760 "Method for preparing α-dialuminum trioxide nanotemplates", W.Y. Lee, Y.-F. Su, L. He, and J.D. Meyer, October 2004.

PAPERS:

- G. Y. Kim, L.M. He, J.D. Meyer, A. Quintero, J.A. Haynes, and W.Y. Lee, "Mechanisms of Hf Dopant Incorporation during the Early Stage of CVD Aluminide Coating Growth under Continuous Doping Conditions," <u>Metall. Mater. Trans. A</u>, V35A, 3581-3593 (2004).
- L.M. He, J.D. Meyer, and W.Y. Lee, "Effects of Prehafnizing on Morphological Development of a Chemical Vapor Deposition Aluminide Coating Formed on Single-Crystal Ni-Based Superalloy," <u>Metall. Mater. Trans. A</u>, V35A, 891-897 (2004).
- L.M. He, K. Putyera, J.D. Meyer, L.R. Walker, and W.Y. Lee, "Depth Profiling of Hf-Doped Aluminide Coating by Glow-Discharge Mass Spectrometry," <u>Metall. Mater. Trans. A</u>, **V33A**, 3578-3582 (2002).
- Yi-Feng Su, Michele A. Torzilli, Justin Daniel Meyer, Claudia J. Rawn, Michael J. Lance, Sakari Ruppi, and Woo Y. Lee, "Effects of an Electroplated Platinum Interlayer on the Morphology and Phases of Chemically-Vapor-Deposited Alumina on Single Crystal, Nickel-Based Superalloy," J. Am. <u>Ceram. Soc.</u>, 85 [8] 2089-2096, (2002).
- Y.-F. Su, M. Torzilli, J.D. Meyer, W.Y. Lee, M.J. Lance, C.J. Rawn, and S. Ruppi, "Synthesis of Alpha-Al₂O₃ Template on Ni Superalloy Surface by Chemical Vapor Deposition," <u>Elevated</u> <u>Temperature Coatings: Science and Technology IV</u>, Edited by N.B. Dahotre, J.M. Hampikian, and J.E. Morral, The Minerals, Metals & Materials Society, Warrendale, PA, pp.15-28 (2001).
- G. Y. Kim, J.D. Meyer, L.M. He, W.Y. Lee, and J.A. Haynes, "Synthesis of Hf-Doped β-NiAl Coating by Continuous Doping Procedure," <u>Elevated Temperature Coatings: Science and Technology IV</u>, Edited by N.B. Dahotre, J.M. Hampikian, and J.E. Morral, The Minerals, Metals & Metals Society, Warrendale, PA, pp. 143-158 (2001).
- G.Y. Kim, L. He, J.D. Meyer, and W.Y. Lee, "Effects of Hf Pre-Deposition on the Morphology of an Aluminide Coating Produced on Single Crystal Ni Super Alloy by Chemical Vapor Deposition," <u>Surface Engineering in Materials Science I</u>, Edited by S. Seal, N.B. Dahotre, J.J. Moore, and B. Mishra, The Minerals, Metals, & Materials Society, Warrendale, PA, pp. 69-78 (2000).

- J.D. Meyer and W.Y. Lee, "High-Temperature Stability of Amorphous Al₂O₃ Deposited on Si and CeO₂-Stabilized ZrO₂ by Metalorganic Chemical Vapor Deposition," pp. 103-107 in <u>Properties and</u> <u>Processing of Vapor-Deposited Coatings: Mat. Res. Soc. Symp. Proc.</u>, Vol. 555. Edited by R.N. Johnson, W.Y. Lee, and M.A. Pickering, and B.W. Sheldon, Materials Research Society, Pittsburgh, PA (1999).
- C. Dubourdieu, G.Y. Kim, J.D. Meyer, and B. Gallois, "Characterization of a Solid-Source Delivery System for Metal-Organic Chemical Vapor Deposition by *In-situ* Laser Reflectance," <u>MRS</u> <u>Symposium Proceedings</u>, V502, 89-94 (1997).

POSTERS:

"Hf Doping of an Aluminide Bond Coat for Single Crystal Jet Engine Turbine Blades" J.D. Meyer, L.M. He, G.Y. Kim, and W.Y. Lee.

"Alpha-Al₂O₃ Nanotemplate as a Novel Method of Improving the Oxidation Life of Thermal Barrier Coatings" Y.-F. Su, L.M. He, J.D. Meyer, and W.Y. Lee.

"Building Global Leadership in Fuel Cell Research Through Partnerships in NJ", A. Aguero, K. Becker, H. Chen, M. Enever, R. Gajadhar, A. Lawal, W. Lee, J. Meyer, S. Park, K. Walsh, Z. Zhu.

CONFERENCES:

MRS – F'97, F'98, F'00, F'02, F'04	Fall meeting, Materials Research Society
TMS – S'00	Spring meeting, The Minerals, Metals & Materials Society
MURI Princeton Workshop – F'00, F'01	Multi-disciplinary Univ. Research Initiative day conference
AIMS – S'01	Assoc. Institutions for Mat. Sci. in NJ: day conference

RESIDENCE LIFE PRESENTATIONS:

"Management of Electronic Resources for Residence Life Student Staff", MACUHO, 2004.

"Role Modeling, Professionalism, and Ethics", RA Training, SIT, 2001, 2002, 2003.

RESIDENCE LIFE CONFERENCES:

NJ-CORE (ACUHO-I) – F'01, F'02, F'03	NJ area Resident Directors and Directors (2 ¹ / ₂ days)
MACUHO – F'98, F'99, F'00, F'02, F'03, F'04	Mid-Atlantic states' regional RA day conference