

## BIOGRAPHICAL SKETCH

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### Professional Preparation:

Iowa State University, 1973, B.S. in Chemical Engineering  
University of California, Berkeley, 1975, M.S., 1980, Ph.D. in Chemical Engineering

### Appointments:

Associate Dean for Research and Graduate Programs, University of Florida (2003-present)  
Chairman, Chemical Engineering Department, University of Florida (1991-2003)  
Distinguished Professor (2008-present), Professor (1988-2008), Associate Prof. (1983-1988),  
and Assistant Prof. (1978-1983) Chemical Engineering Department, University of Florida  
Visiting Professor, Laboratoire de Thermodynamique et Physico-Chimie Métallurgiques, Centre  
National de la Recherche Scientifique, Grenoble, France (1985-1986)

### Selected Recent Society Activities:

#### Institute of Electrical and Electronics Engineers (IEEE)

- Secretary, 4<sup>th</sup> World Conf. on Photovoltaic Energy Conversion, Waikoloa, HI (2006)
- Program Chair, 33<sup>rd</sup> Photovoltaics Specialist Conference, San Diego, CA (2008)

#### American Institute of Chemical Engineers

- Member, Chemical Engineering Technology Operating Council, Chairman (2002-04)

#### Council for Chemical Research

- Governing Board (1996-1999)
- Graduate Education Action Network Leader (2000-present)

### Selected Publications:

1. "Synthesis and Characterization of Diorganohydrazido(2-) Tungsten Complexes," Jürgen Koller, Hiral M. Ajmera, Khalil A. Abboud, Timothy J. Anderson, and Lisa McElwee-White. *Inorg. Chem.*, **47**, 4457-4462 (2008).
2. "Homogeneous Decomposition Mechanisms of Diethylzinc by Raman Spectroscopy and Quantum Chemical Calculations," Y. S. Kim, Y. S. Won, H. Hagelin-Weaver, N. Omenetto, and T.J. Anderson. *J. Phys. Chem.*, **112** (18), 4246-4253 (2008).
3. "Deposition of  $WN_xC_y$  Using the Allylimido Complexes  $Cl_4(RCN)W(NC_3H_5)$ : Effect of  $NH_3$  on Film Properties," Ajmera, H.M.; Heitsch, A.T.; Bchir, O.J.; Anderson, T.J.; Reitfort, L.L.; McElwee-White, L., *J. Electrochem. Soc.*, **155**(10), (2008).
4. "Ir/TaN as a Bilayer Diffusion Barrier for Advanced Cu Interconnects," L.C. Leu, D.P. Norton, L. McElwee-White, and T.J. Anderson. *Appl. Phys. Lett.* **92**(11), (2008).
5. "Properties of Ta-Ge-N as a Diffusion Barrier for Cu on Si," S. Rawal, D. P. Norton, H. Ajmera, T. J. Anderson, and L. McElwee White. *Appl. Phys. Lett.*, **90**(5), (2007).
6. "Investigation of the Homogeneous Decomposition of Trimethylindium in an Inverted Stagnation-point Flow Reactor by *in situ* Raman Spectroscopy," J. Hwang, C. Park, J. H. Jung, and T.J. Anderson. *J. Electrochem. Soc.*, **155**(2), H124-129 (2008).
7. "Reaction Kinetics of  $CuGaSe_2$  Formation from a  $GaSe/CuSe$  Bilayer Precursor Film," W. K. Kim, E. A. Payzant, S. Kim, S. A. Speakman, O. D. Crisalle, and T.J. Anderson. *J. Crystal Growth*, **310**, 2987-2994 (2008).

- 8 "Thermodynamic analysis and growth of ZrO<sub>2</sub> by chloride chemical vapor deposition," V. G. Varanasi, T.M. Besmann, E.A. Payzant, T.L. Starr, and T. J. Anderson. *Thin Solid Films*, 516, 6133–6139 (2008).
- 9 "Growth of InN Films and Nanorods by H-MOVPE." H.J.Park, O. Kryliouk, T.J. Anderson, D. Khokhlov, and T. Burbaev I, *Physica E: Low Dimensional Sys. & Nanostructures*, 37 (1-2), 142-147 (2007).
- 10 "Growth of ZrC Thin Films by Aerosol-Assisted MOCVD," Y. S. Won, Y. S. Kim, V. G. Varanasi, O. Kryliouk, T. J. Anderson, Ch. Sirimanne, and L. McElwee-White. *J. Crystal Growth* 304, 324-332 (2007).

**Refereed Publications:** 203

**Conference Presentations:** 299 (31 invited)

**Synergistic Activities:**

***Journal Editorial Activities:***

- Editor, *Chemical Engineering Education Journal*
- Associate Editor of *Journal of Phase Equilibria*
- Editorial Adv. Board, *J. SMET Ed.*
- Consulting Editor, *AIChE Journal*

***Education-related Activities:***

- Director of the NSF SUCCEED Engineering Education Coalition – 1997-2003
- Conducted over 20 New Faculty Career Development workshops

**Collaborators and Co-Editors within the last 48 months:** R. Ahrenkiel (NREL), S. Asher (NREL), T. M. Besmann (ORNL), W. Birkmire (U. Del.), T. Burbaev (Lebedev Phys. Inst.), A. Davydov (NIST), A. Delahoy (EPV), S. Easwaran (U. Arkansas), J. A. Freitas (NRL), B. Holloway (William & Mary), J.H. Jung (Yeungnam U.), V.K. Kapur (ISET), B. Keyes (NREL), D. Khokhlov (Moscow St U), J. Kim (Seoul National U.), O.Kryliouk (Applied Mat.), G. Labrosse (U. Paris), Z. Liliental-Weber (LBL), O. Manasreh (U. Arkansas), G. McGuire (ITC), R. Noufi (NREL), M. Ohland (Purdue), A. Payzant (ORNL), W.N. Shafarman (U Del.), J. Shen (Beijing Inst. Metals), S.A. Speakman (ORNL), T.M. Razykov (Uzbek Acad. Sci.), P. Wankat (Purdue)

**Dissertation Advisor:** Professor L.F. Donaghey, retired

**Thesis Advisor and Postgraduate-Scholar Sponsor last five years:** Ph.D. (47 chaired, 4 co-chair career total): M. Monroe (Intel), H. Ajmeri (Intel), Y.S. Kim (Washington St. Univ., Postdoc), J. Mangum (Cree Research), H. Park (Samsung Corning Precision Glass), K. Kim, (Lam Research Corporation), Y. Won (National Institute of Standards and Technology), W. Kim, (Univ. Delaware Postdoc), T. Kim (Samsung SDI), S. Yoon (LG Chemicals), S. Kang (Samsung Electro-Mechanics), O. Bchir (Intel), V. Varanasi (UC San Francisco), J. Hwang (LG Chemicals), L. Kerr (Miami Univ.), M. Huang (Tongji Univ.), S. Kim (Fairchild Semiconductor), R. Lowrey (FIT Postdoc), M. Ider (Afyon Kocatepe Univ.), D. Crunkleton (Univ. Tulsa), M. Reed (II-VI, Inc.) M.S. (27 career total): E. Zapp, T. Cloud Post-doctoral scholars (18 career total)

**Awards last five years:**

- 2007 Warren K. Lewis Award for Chemical Engineering Education (AIChE)
- 2007 Professional Achievement Citation in Engineering (PACE) Award, Iowa State University
- 2006 Elected Fellow of the American Society for Engineering Education (ASEE)
- 2005 Elected Fellow of the American Institute of Chemical Engineers (AIChE)
- 2005 ConocoPhillips Lectureship (39<sup>th</sup>): Oklahoma State University
- 2004 Benjamin J. Dasher Award FIE Conf. (with M. Ohland, G. Zhang, and B. Thorndyke)
- 2003 Recipient Vanderbilt University Tis Lihiri Lectureship
- 2003 George Lappin National Program Committee Service Award, AIChE