Curriculum Vitae

Arnold Mejia Guloy

EDUCATIONAL PREPARATION

University of the Philippines	*B. S. Chemistry*	1984
Iowa State University	*Ph.D. Inorganic Chemistry*	1991

PROFESSIONAL APPOINTMENTS

University of Houston	*Professor of Chemistry*	2008 – present
University of Houston	*Graduate Chair, Chemistry*	2008 – present
University of Houston	*Associate Professor of Chemistry*	2000 – 2008
Max-Planck-Institute-*CPfS*, Dresden	*Visiting Professor-Guest Scientist*	2004 – present
University of the Philippines	*Visiting Scientist/Professor*	1997 – 1998
University of Houston	*Assistant Professor of Chemistry*	1994 – 2000
IBM TJ Watson Research Center, NY	*TJ Watson Postdoctoral Fellow*	1991 – 1994

HONORS & AWARDS

UH Award for Excellence in Research and Scholarship (Professor level)	2009
Visiting Scholar Lecturer, Chungnam National University, Daejeon, KOREA	2009
Balik-Scientist Award (Outstanding Visiting Scientist), DOST, PHILIPPINES	2008
Visiting Professor, Institute of Chemistry, University of the Philippines	2008
F.W. Bessel Research Award, A. von Humboldt Foundation, (Germany)	2004
Amando Clemente Memorial Award in Chemistry, (Philippines)	2004
Early Faculty CAREER Award, National Science Foundation, (USA)	1998
Visiting Scientist Award, DOST-ESEP (Philippines)	1997
Excellence in Research and Scholarship Award, University of Houston	1997
Thomas J. Watson Postdoctoral Fellowship, IBM Corp.	1991
Sigma Xi Graduate Student Award, Iowa State University	1991
Graduate Research Excellence Award, Iowa State University	1990

RESEARCH INTERESTS (see http://www.uh.edu/~chembi)

Inorganic Solid State Chemistry: Complex polar intermetallics, alloys and semiconductors; Multifunctional organic-inorganic hybrid materials, and molecular composites.

Chemistry of Main Group Elements: Zintl Phases, Chemistry of Triels,Tetrels and Pnictogens.

Developing New Synthetic Routes to New Materials: Chemical Vapor Transport; Reactions in molten salts and ionic liquids; Biomineralization and biomimicry; *soft chemistry*.

Superconductivity: Layered intermetallics (silicides, borides, carborides); layered metal oxides, halides and oxyhalides; Heavy Fermion intermetallics

Materials Characterization Techniques: X-ray and electron crystallography, Electron microscopy and holography; Optical spectroscopy of solids, Photoelectron Spectroscopy; electron holography.

Electronic Structures and Chemical Bonding of Solids: Electronic band theory of solids.

MEMBERSHIP IN SCIENTIFIC SOCIETIES

Sigma Xi Research Society, *American Chemical Society*, and *Materials Research Society*

10 SELECTED PUBLICATIONS (Total = 96)

1. A.M. Guloy, R. Ramlau, Z. Tang, W. Schnelle, M. Baitinger, Y. Grin " A guest-free germanium clathrate" *Nature*, **2006**, *443*, 320 – 323.
2. K. Sasmal, B. Lv, B.; B. Lorenz, A.M. Guloy, F. Chen, Y. Xue, C.-W. Chu, "Superconductivity up to 37 K in $(A_{1-x}Sr_x)Fe_2As_2$ with A = K and Cs" *Physical Review Letters*, **2008**, *101*(10), 107007/1 – 107007/4.
3. L. Wang, Z.Tang, B. Lorenz, A. M. Guloy* "Remarkable Rare-Earth Metal Silicide Oxides with Planar Si_6 Rings" *Journal of the American Chemical Society*, **2008**, *130*, 11258-11259.
4. C. Lupu, C. Downie, A.M. Guloy, T.A. Albright, J.-G. Mao "$Li_{17}Ag_3Sn_6$: A polar intermetallic π-system with carbonate-like $[AgSn_3]^{11-}$ anions and trefoil aromatic $[Ag_2Sn_3]^{6-}$ layers" *J. Am. Chem. Soc.* **2004**, *126*, 4386-4397.
5. L.M. Castro-Castro, A.M. Guloy "Organic-based Layered Perovskites of Mixed-valent Gold(I)/Gold(III) Iodides" *Angew. Chem. Int. Ed. Engl.* **2003,** *42*, 2771-2774.
6. A.M. Guloy, Z. Tang, P.B. Miranda, V.I. Srdanov "A New Luminescent Organic-Inorganic Hybrid Compound with Large Optical Nonlinearity" *Advanced Materials*, **2001**, *13*, 833 – 837.
7. C. Downie, Z. Tang, A.M. Guloy "An unprecedented $_{1\infty}[Ge_9]^{2-}$ polymer: a link between molecular Zintl clusters and solid-state phases" *Angew. Chem. Int. Ed. Engl.* **2000**, *39*, 338-340.
8. J. Goodey, J.-G. Mao, A. M. Guloy "Ba_2NiSi_3: A One-Dimensional Solid-State Metallocene Analog" *J. Am. Chem. Soc.* **2000**, *122*, 10478-10479.
9. D.B. Mitzi, S. Wang, C.A. Feild, C.A. Chess and A.M. Guloy "Conducting Layered Organic-Inorganic Halides Containing <110>-oriented Perovskite Sheets" *Science*, **1995**, *267*, 1473.
10. D.B. Mitzi, C.A. Feild, W.T.A. Harrison and A.M. Guloy "Conducting Halides with a Layered Organic-Based Perovskite Structure" *Nature*, **1994**, *369*, 467.

SYNERGISTIC ACTIVITIES

1. **Guest Scientist/Visiting Professor**, *Max-Plank-Institute-Chemistry and Physics of Solids*, Dresden, Germany.
2. **Principal Investigator**, *Texas Center for Superconductivity* at the University of Houston.
3. **Research Mentor**, *Welch Summer Scholars Program* for exceptional high school students in Texas.
4. **Mentor/Professor**, *Rice-Houston Alliance for Graduate Education and Professoriate (AGEP) Program* for underrepresented students in the sciences and engineering at the University of Houston.
5. **Research Mentor**, *NSF-Research Experience for Undergraduate Students (REU)*, University of Houston.