

Curriculum Vita P. A. Bennett

Professional Preparation

U. Minnesota, Duluth	Physics	BS, 1974
U. Wisconsin, Madison	Physics	PhD, 1980
KFA Julich	Electronic structure of metallic alloys	Postdoc, 1981
Bell Labs	Surface structure w/ synchrotron radiation	Postdoc, 1983

Appointments

2013	Department Chair	Physics Department, ASU
2006-09	Director Graduate Programs	School of Materials, ASU
1996	Full Professor	Physics Department, ASU
1990	Associate Professor	Physics Department, ASU
1984	Assistant Professor	Physics Department, ASU
1983	Research Scientist	Center for Solid State Science, ASU

Professional Membership

American Physical Society (Fellow); Materials Research Society; American Vacuum Society
American Association of Physics Teachers

Five Related Publications:

- ¹ Tobler, S. K., Smith, D. J., and Bennett, P. A., *In situ resistivity of endotaxial FeSi₂ nanowires on Si(110)*. in preparation (2014).
- ² Tobler, S. K. and Bennett, P. A., *Scanning Field-Emission Imaging for Rough or Insulating Surfaces*. (in preparation) (2014).
- ³ Bennett, P. A., Smith, D. J., He, Z., and Ross, F. M., *Endotaxial Silicide Nanowires: A Review*. Thin Solid Films v519 p8434-40 (2011).
- ⁴ Liang, S., Islam, R., Smith, D. J., Bennett, P. A., O'Brien, J. R., and Taylor, B., *Magnetic Iron Silicide Nanowires on Si(110)*. Appl. Phys. Lett. v88 p113111-4 (2006).
- ⁵ Okino, H., Matsuda, I., Bennett, P. A., and Hasegawa, S., *In Situ Resistance Measurement of Epitaxial Silicide Nanowires*. App. Phys. Lett. v86 p233108 (2005).

Five Other Publications:

- ¹ Bennett, P. A., Smith, D. J., He, Z. A., Reuter, M. C., Ellis, A. W., and Ross, F. M., *In situ observations of endotaxial growth of CoSi₂ nanowires on Si(110) using ultrahigh vacuum transmission electron microscopy*. Nanotechnol. v22 p305606-12 (2011).
- ² Huang, Z., Chen, F., D'Aosta, R., Bennett, P. A., DiVentra, M., and Tao, N., *Local ionic and electron heating in single molecule junctions*. Nature Nanotech v2 p698-703 (2007).
- ³ Lin, J. F., Bird, J. P., He, Z., Smith, D. J., and Bennett, P. A., *Signatures of quantum transport in self-assembled epitaxial nickel silicide nanowires*. App. Phys. Lett. v85 p281-83 (2004).
- ⁴ He, Z., Smith, D. J., and Bennett, P. A., *Endotaxial Silicide Nanowires*. Phys. Rev. Lett. v93 p256102-6 (2004).
- ⁵ Lin, J. F., Bird, J. P., Rotkina, L., and Bennett, P. A., *Classical and quantum transport in FIB deposited Pt nano-interconnects*. App. Phys. Lett. v82 p802-4 (2003).

Synergistic Activities:

1. Organized workshop on Multi-tip STM nanoprobes, at the Center for Functional Nanomaterials, Brookhaven Lab (May, 2008), with over 80 attendees. See <http://www.nsls.bnl.gov/users/meeting/2008/workshops/workshop1.htm>
2. Implemented “Experimental Bootcamp” (advanced lab projects) for graduate students.
3. Site visit to Mexico City as ASU delegate for CONACYT graduate fellowship program.
4. Director of Graduate Programs in Materials Science.
5. Director of Undergraduate Programs in Physics.

Collaborators:

S. Hasegawa (Tokyo University), F. J. Himpsel (U. Wisconsin, Madison), I. K. Robinson (University College, London), F. Ross (IBM), P. Sutter (CFN-BNL), R. M. Tromp (IBM), G. Kellogg (Sandia Lab).

Advisors:

M. B. Webb, M. G. Lagally, J. E. Rowe

Advisees:

Completed degrees: Physics (5 PhD, 3 MS); Materials science (3 PhD, 1 MS); Postdoc (1). Prof. Bennett regularly supervises undergraduate students in the lab, through REU, hourly wage or senior projects. Recent student/postdoc advisees: Dan Waters, PhD, 2000; Tim McDaniels, PhD, 2000; Jerry Nivison, PhD, 2000; Zhian He, PhD, 2004; Annick Rougee, MS, 2004; Mike Stevens, postdoc 2003; Shengde Liang, PhD, 2006; Lifeng Hao PhD 2008; Samuel Tobler 2011.