

Kory J. Goldammer, Ph.D.

## CURRICULUM VITAE

### Education

#### **Ph. D.** 1998

University of Oklahoma

Specialization: Physics

Thesis: "Molecular Beam Epitaxy and Characterization of InSb/Al<sub>x</sub>In<sub>1-x</sub>Sb Heterostructures"

Thesis Advisor: Dr. Michael B. Santos

#### **M.S.** 1998

University of Oklahoma

Specialization: Engineering Physics

#### **Bachelor of Arts**, 1992

Augustana College

Major: Engineering Physics

Minor: Mathematics

GPA: 3.82

### Graduate Research Assistant Experience

#### **Molecular Beam Epitaxy Lab, University of Oklahoma** 1995-1998

- Performed the crystal growth and studied electron transport in InSb/Al<sub>x</sub>In<sub>1-x</sub>Sb heterostructures, leading to the creation of the highest room temperature electron mobility structures ever measured
- Assisted in constructing \$1 Million lab from the ground up
- Performed and Led research efforts resulting in 12 authored and co-authored papers to date and 6 conference presentations

### Work Experience

**FormFactor, Inc.**, Sr. Technology Manager, 2008-2010

**TestChip Technologies, HPL Technologies, Synopsys Inc.**, Sr. TestChip Design Manager, 1998-2008

### Publications

- "Considerations for a 32nm Yield Ramp: Putting the Mask into DFM," Kory Goldammer, Sagar A. Kekare, J. Tracy Weed, Semicon Japan STS, November (2006).
- "Spectroscopy of Rashba Spin Splitting in InSb Quantum Wells," G.A. Khodaparast, R.E. Doezema, S.J. Chung, K.J. Goldammer, and M.B. Santos, 70, 156322, Phys. Rev. B (2004).
- "Spin resonance probe of zero-field spin splitting in InSb quantum wells," G.A. Khodaparast, R.E. Doezema, S.J. Chung, K.J. Goldammer, and M.B. Santos, Proc. NGS 10, IPAP Conf. Series 2, 245 (2001).

- "Studies of the Integer Quantum Hall to Quantum Hall Insulator Transition in InSb Based 2DESs," S.Q. Murphy, J.L. Hicks, W.K. Liu, S.J. Chung, K.J. Goldammer, and M.B. Santos, *Physica E* 6, 293 (2000).
- "Electronic Characterization of InSb Quantum Wells," S. J. Chung, N. Dai, G.A. Khodaparast, J. Hicks, K.J. Goldammer, F. Brown, W. K. Liu, R. E. Doezema, S. Q. Murphy, and M. B. Santos, *Physica E* 7, 809 (2000).
- "Improving the surface morphology of InSb quantum-well structures on GaAs substrates," S. J. Chung, M. A. Ball, S. C. Lindstrom, M. B. Johnson, and M. B. Santos, *Journal of Vacuum Science & Technology B*, 1583 (2000).
- "A study of factors limiting electron mobility in InSb quantum wells," S.J. Chung, K.J. Goldammer, S.L. Lindstrom, M.B. Johnson and M.B. Santos, accepted by *Journal of Vacuum Science and Technology B* 17, 1151 (1999).
- "High-mobility electron systems in remotely-doped InSb quantum wells," K.J. Goldammer, S.J. Chung, W.K. Liu, M.B. Santos, J.L. Hicks, S. Raymond, and S.Q. Murphy, accepted by *Journal of Crystal Growth* 201/202, 753 (1999).
- "Determination of the concentration and temperature dependence of the fundamental energy gap in Al<sub>x</sub>In<sub>1-x</sub>Sb," N. Dai, F. Brown, R.E. Doezema, S.J. Chung, K.J. Goldammer, and M.B. Santos, *Applied Physics Letters* 73, 3132 (1998).
- "Electrical properties of InSb quantum wells remotely-doped with Si," K.J. Goldammer, W.K. Liu, G.A. Khodaparast, S.C. Lindstrom, M.B. Johnson, R.E. Doezema and M.B. Santos, *Journal of Vacuum Science and Technology B* 16, 1367 (1998).
- "Surface segregation and compensation of Si in delta-doped InSb and Al<sub>x</sub>In<sub>1-x</sub>Sb grown by molecular beam epitaxy," W.K. Liu, K.J. Goldammer, and M.B. Santos, *Journal of Applied Physics* 84, 205 (1998).
- "Observation of excitonic transitions in InSb quantum wells," N. Dai, F. Brown, P. Barsic, G.A. Khodaparast, R.E. Doezema, M.B. Johnson, S.J. Chung, K.J. Goldammer, and M.B. Santos, *Applied Physics Letters* 73, 1101 (1998).
- "MBE growth and characterization of InSb/Al<sub>x</sub>In<sub>1-x</sub>Sb strained layer structures," M.B. Santos, W.K. Liu, R.J. Hauenstein, K.J. Goldammer, W. Ma, and M.L. O'Steen, *Materials Research Society Symposium Proceedings* 450, 97 (1997).

## Conference Presentations

- "Growth of InSb/Al<sub>x</sub>In<sub>1-x</sub>Sb Strained Layer Structures by Molecular Beam Epitaxy", 38th Electronic Materials Conference, Santa Barbara, CA, June, 1996.
- K.J. Goldammer, M.B. Santos, "MBE Growth and Characterization of InSb/Al<sub>x</sub>In<sub>1-x</sub>Sb Strain Layer Structures", 44th Midwest Solid State Conference, Lincoln, NE, October 18-19, 1996.
- 1997 Materials Research Society Symposium: "MBE growth and characterization of InSb/Al<sub>x</sub>In<sub>1-x</sub>Sb strained layer structures", Materials Research Society Fall Meeting, Boston, MA, December 2-6, 1996.
- K.J. Goldammer, W.K. Liu, M.B. Santos, "Effect of Substrate Temperature on Si Autocompensation in delta-doped InSb", American Physical Society Meeting, Kansas City, MO, March 17-21, 1997, J12.11 .
- K.J. Goldammer, W.K. Liu, G.A. Khodaparast, F.W. McKenna, and M.B. Santos, "High-Mobility InSb Quantum Wells Remotely-Doped with Si", American Physical Society Meeting, Los Angeles, CA, March 16-22, 1998, X27.09.
- K.J. Goldammer, S. J. Chung, W.K. Liu, and M.B. Santos, "High-mobility Electron Systems in Remotely-doped InSb Quantum Wells", 10th International Conference on Molecular Beam Epitaxy, Cannes, France, August 31-September 4, 1998, PT5.9.

## Relevant Graduate Coursework

- Statistical Physics/Thermodynamics
- Mathematical Methods of Physics

- Classical Mechanics
- Quantum Mechanics I, II
- Nuclear and Particle Physics
- Electrodynamics I, II
- Solid State Physics
- Advanced Solid State Physics
- Atomic and Molecular Physics
- Quantum Electronic Devices
- Solid State Electronics I, II