DEPARTMENT OF BIOLOGICAL & AGRICULTURAL ENGINEERING





RONALDO G. MAGHIRANG

Professor of Biological & Agricultural Engineering

Ph.D., Agricultural Engineering, Pennsylvania State University (1992) M.S., Agrometeorology, University of the Philippines at Los Baños (1986) B.S., Agricultural Engineering, University of the Philippines at Los Baños (1982)

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TEACHING

ATM 511 Agricultural Building Systems (3 credits)
BAE 535 Structures & Environment Engineering (3 credits)
BAE 651 Air Pollution Engineering (3 credits)
BAE 811 Particle Technology (3 credits)

CURRENT RESEARCH PROJECTS

Characterization and measurement of air emissions from large open cattle feedlot, USDA NIFA, 2009-12.

Measuring and modeling of fugitive dust emissions from off-road DoD activities, DoD (thru USDA ARS), 2010-14.

Impacts of water sprinkler systems on air quality at cattle feedlots, USDA NIFA, 2007-10.

Air quality: Reducing emissions from cattle feedlots and dairies, USDA NIFA (thru Texas AgriLife Research), 2009-11.

Establishing new grain packing factors, USDA ARS (M. Casada, ARS PI), 2009-13.

Modeling insect movement during grain handling in bucket elevators, USDA ARS (M. Casada, ARS PI), 2009-10.

RECENT PUBLICATIONS

Guo, L., R. Maghirang, E. Razote, J. Tallada, J. Harner, and W. Hargrove. 2009. Field comparison of PM₁₀ samplers. *Appl. Engg Agric.* 25: 737-744.

Almuhanna, E., R. Maghirang, J. Murphy, and L. Erickson. 2009. Laboratory scale electrostatically assisted wet scrubber for controlling dust in livestock buildings. *Appl. Engg Agric*. 25:745-750.

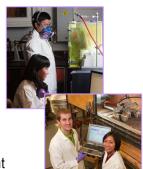
Yang, X., C. Cao, L. Erickson, K. Hohn, R. Maghirang, and K. Klabunde. 2009. Photo-catalytic degradation of Rhodamine B on C-, S-, N-, and Fe-doped TiO₂ under visible-light irradiation. *Appl. Catal. B: Environ.* 91: 657-662.

Boac, J., R. Maghirang, M. Casada, J. Wilson, and Y. Jung. 2009. Size distribution and rate of dust generated during grain elevator handling. *Appl. Engg Agric.* 25: 533-541.

Maghirang, R., and E. Razote. 2009. Smoke dissipation by solid particles and charged water spray in enclosed spaces. *Fire Safety J.* 44: 668-671.

RESEARCH TEAM

Orlando Aguilar, Ph.D. student
Josephine Boac, Post-doctoral
research associate
Henry Bonifacio, Ph.D. student
Howell Gonzales, M.S. student
Li Guo, Ph.D. student
Curtis Leiker, M.S. student
Jeremy Meeks, M.S. student
Edna Razote. Research assistant



PROFESSIONAL & INSTITUTIONAL ENGAGEMENT

Editor, Structures & Environment Div., *Trans. ASABE; Appl. Engg in Agric.* (2009-present)
ASABE Publications Council (2009-present)
International Activities Council, Member, KSU (2008-11)
Teaching Coordinator, BAE Department, KSU (2009-10)
Undergraduate Programs Assessment Committee Chair, BAE Department (2003-10)

HONORS & AWARDS

Professorial Performance Award, KSU (2010) ASABE Paper Awards (total of 4, 2004-2010)

Texas Environmental Excellence Award – Team Award (Texas AgriLife Research, Texas AgriLife Extension Service, West Texas A&M University, Kansas State University, USDA ARS), Texas Commission on Environmental Quality (2010)

Myers-Alford Memorial Teaching Award, College of Engineering, KSU (2009)

Outstanding Advisor, BAE Department, KSU (2007-2009)

Making a Difference Award, Women in Engineering & Science Program, KSU (2007, 2008)

Frankenhoff Outstanding Research Award, College of Engineering, KSU (2005)

James L. Hollis Memorial Award for Excellence in Undergraduate Teaching, College of Engineering, KSU (2000)

Young Member of the Year, MidCentral Conference of ASAE (2000)

Young Member of the Year, ASAE Kansas Section (1999)