

Joel R. Coats, Ph.D.
President, ENTOX, Inc.

and

Distinguished Professor of Entomology and Toxicology
Pesticide Toxicology Laboratory, Department of Entomology
Iowa State University, Ames, Iowa 50011
Tel. 515-290-1653 (mobile); 515-294-4776 (office)
Email: joelrcoats@gmail.com; jcoats@iastate.edu

AREAS OF SPECIALIZATION:

Insecticide Toxicology & Environmental Toxicology and Chemistry of Pesticides: fate and effects of pesticides in organisms, soil, water, crops, fumigation, bioremediation, metabolism, mobility, residue analysis, mode of action, natural products as pesticides.

EDUCATION:

Ph.D.-Entomology (Insecticide Toxicology) Minor in Chemistry, University of Illinois, Urbana-Champaign, IL (1974)
M.S.-Entomology, University of Illinois, Urbana-Champaign, IL (1972)
B.S.-Zoology (with distinction) Minor in Chemistry, Arizona State Univ., Tempe, AZ (1970)
Resident student, Ohio Northern University, Ada, Ohio (1966-1968)

EXPERIENCE:

Department of Entomology-Iowa State University, Ames, Iowa 50011

--Distinguished Professor: 2011, Professor: 1986-2011, Associate Professor: 1981-1986, Assistant Professor: 1978-1981
--Research-Environmental toxicology and insecticide toxicology; toxicity, degradation, bioremediation, movement, mechanisms of toxic action, natural products, metabolism, selectivity, synthesis, and residue analysis.
--Teaching-"Insecticide Toxicology"(ENT 675), and portions of "Principles of Toxicology" (TOX 501), "Toxicology Methods" (TOX 502), and "Pesticides in the Environment" (ENT 550)

Department of Environmental Biology, University of Guelph, Guelph, Ontario, Canada
Visiting Professor: 1976-1978

Department of Entomology, University of Illinois, Urbana-Champaign, Illinois 61801
Postdoctoral Research Associate: 1974-1976

HONORS

Alumni Achievement Award, College of Liberal Arts and Sciences, University of Illinois, Urbana-Champaign, IL (2013)
Charles F. Curtiss Distinguished Professor (2011)
Fellow, Entomological Society of America (2007)
International Award for Research in Agrochemicals, American Chemical Society – Agrochemicals Division (2006)
Best Ecological Risk Assessment Paper Award, Human & Ecological Risk Assessment(2002)
Newsmaker Award – American Chemical Society (8/2000)
Guest Scientist Fellowship, Research Center - Jülich, Germany (9/97-2/98)
Entomology Recognition Award, North Central Branch, Entomological Society Amer. (1995)
Fellow, Agrochemicals Division of American Chemical Society (1992)
Mid-career Award for Research Achievement, Iowa State University Foundation (1992)
Excellence in Applied Research Award, Iowa State University College of Agriculture (1989)
Fellow, American Association for the Advancement of Science (1987)
Phi Kappa Phi Honor Society (1981)
Gamma Sigma Delta Agriculture Honorary (1979)
Sigma Xi Research Honorary Society (1976)
Beta Beta Beta Biology Honorary (1967)

SCIENTIFIC ORGANIZATIONS

American Association for the Advancement of Science
American Chemical Society
Entomological Society of America
Pesticide Science Society of Japan
Society of Environmental Toxicology and Chemistry
Society of Toxicology

PATENTS

U.S. Patent No. 7,939,091; 2011. Biorational Repellents Obtained from Terpenoids for Use against Arthropods - B2
U.S. Patent No. 7,524,888; 2009. Biorational Repellents Obtained from Terpenoids for Use against Arthropods
U.S. Patent No. 6,545,043; 2003. Compounds Related to Natural Sources and Their Use as Biopesticides
U.S. Patent No. 6,524,605; 2003. Biorational Repellents Obtained from Terpenoids for Use against Arthropods
U.S. Patent No. 6,207,705; 2001. Novel Biopesticides Related to Natural Sources
U.S. Patent No. 6,099,850; 2000. Termite and Boring Insect Barrier for Protection of Wooden Structures
U.S. Patent No. 4,594,360 ; 1986. Chloronitroalkane Insecticides
U.S. Patent No. 4,118,424 ; 1978. Biodegradable Insecticides
U.S. Patent No. 4,003,950; 1977. Diphenylmethyl Biodegradable Insecticides

SCIENTIFIC PUBLICATIONS (Total 207)

BOOKS (11)

REVIEW ARTICLES (7)

BOOK CHAPTERS (46)

REFEREED JOURNAL ARTICLES (143)

SUMMARY OF PUBLICATIONS

- a. Environmental toxicology and chemistry of pesticides
- b. Pesticides in soil
- c. Pesticides in aquatic systems
- d. Pesticide disposal, residue analysis, methodology
2. Insect toxicology
 - a. Mode of action, quantitative structure-activity relationships, synthesis
 - b. Metabolism, selectivity, natural products, repellents, methods

EXTRAMURAL RESEARCH FUNDING

Total during 36 years at Iowa State University: \$6.3 million, from USDA, EPA, DOD, and numerous other sources

INVITED PRESENTATIONS

International – 30

National – 73

Regional and State – 33

GRADUATE STUDENTS ADVISED

Major Professor for:

25 Ph.D. degrees conferred

25 M.S. degrees conferred

3 Ph.D. students currently

POSTDOCTORAL RESEARCH ASSOCIATES TRAINED – 13

ENTOX, Inc.

Pesticide Expertise - Environmental Toxicology

Joel R. Coats, Ph.D.

Technical Consultant - Expert Witness

Toxicity, Environmental Effects, Pesticides & Residues

Environmental Toxicology & Chemistry

Insect Repellents, Insect Pest Problems

Tel. 515-290-1653 (mobile)

Tel: 515-294-4776 (office)

Tel. 515-232-3989 (leave message)

Email: joelrcoats@gmail.com

Email: jcoats@iastate.edu

ENTOX Inc. home page at www.ENTOX.com

Iowa State University web page at <http://www.ent.iastate.edu/people/joel-coats>