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EDUCATION

Ph.D. Plant Health and Biochemistry. May 1991.
Louisiana State University, Baton Rouge.

M.Sc.(Ag) Agronomy. August 1980.
Tamil Nadu Agricultural University, Coimbatore, India.

B.Sc.(Ag) Agriculture. August 1978.
Tamil Nadu Agricultural University, Coimbatore, India.

TEACHING EXPERIENCE

Senior Lecturer 1998 – present. School of Biological Sciences**.** The University of Texas at Austin. Teaching BIO 211 Introductory Cell Biology, BIO 212 Genetics and Evolution and BIO 331 Laboratory Studies in Molecular Biology. Developed and used interactive class room performance system and home work system for introductory biology classes.

Lecturer (August 92 - 1998)

Department of Botany and Division of Biological Sciences, The University of Texas at Austin. Taught BIO 302 (Cellular and Molecular Biology), BIO 301L (Introductory Biology to Non-Majors), BIO 205 (Cellular and Molecular Biology Lab for majors) and BIO 331L/395 Laboratory Studies in Molecular Biology).

Have taught over 5000 students at UT-Austin on cellular and molecular biology lecture and lab courses. Developed two laboratory manuals on molecular biology and two course guides on cellular and molecular biology. Actively participated in discovery learning projects and in incorporating technology and multimedia tools in teaching.

Independent Research Study Supervisor

Supervised over 50 undergraduate students doing independent research in molecular biology. Many of the undergraduates joined M.D. or graduate schools. Currently, supervising 14 undergraduate students in independent research.

RESEARCH AND DEVELOPMENT EXPERIENCE

Research Associate

Department of Botany, The University of Texas at Austin. June 1992 to 1996. Co-Principal Investigator of a Department of Energy grant to investigate cellulose biosynthesis in Arabidopsis.

Postdoctoral Research Fellow

Department of Botany , The University of Texas at Austin. August 1990-May 1992.

Graduate Research Assistant

Department of Plant Pathology and Crop Physiology,
Louisiana State University, Baton Rouge. August 1985- July 1990.

Product Manager, Acetanilides (South Asia)

Monsanto Singapore Private Limited, Singapore. August 1983-July 1985.

Product Development Executive (South India)

Monsanto Chemicals of India Limited, Coimbatore. April 1980- July 1983

CURRENT RESEARCH

Current projects focus on elucidating plant genomes; understanding the mechanisms of abiotic stress; developing heat-tolerant, disease-resistant and higher quality plants; exploring novel crops and new pest control strategies for organic farming.

PATENTS

K. Sathasivan and N. Murai, Louisiana State University. Patents issued; one in 1998 and another in 2000 for a mutant acetolactate synthase gene from *Arabidopsis thaliana* conferring imidazolinone herbicide resistance.

HONORS AND AWARDS

- **Texas Exes Teaching Excellence Award, 2005.** College of Natural Sciences, The University of Texas at Austin
- **Dad's Association Centennial Teaching Fellowship Award, 2005.** The University of Texas at Austin
- **Teaching Excellence Award, 1999:** School of Biological Sciences**.** The University of Texas at Austin.
- **Prentiss E. Schilling Award** for the Outstanding Dissertation in the College of Agriculture, Louisiana State University. **1992.**
- **Edgerton award** for the outstanding contributions made as graduate student in Crop Physiology during Ph.D. program. **1990.**
- **Plant Pathology and Crop Physiology Department Head's Award** for excellence in research and course work in Ph.D. program. **1986.**
- **Achievement Award** from Monsanto Singapore for developing a research data base management system in personal computers. **1985.**
- **Indian Overseas Bank Gold Medal** and R.C. Broadfoot Endowment prize for securing the highest grade point average in Masters Degree. **1980**
- **Indian Council for Agricultural Research Fellowship** for M.Sc. (Ag) program **1978-80.**

RESEARCH/TEACHING GRANTS

- Biology Leadership – Catalytic grant from Benjamin Cummings to develop Interactive Teaching Ideas for introductory biology courses.
- FastTex grant for developing interactive teaching resources for biology faculty and students 2004-2005.
- Undergraduate research Fellowship for 5 of my students from the University of Texas and University CoOp Society. 2004-2005.
- Support Grant from McGraw-Hill publications to develop biology home work service data bank for introductory biology major course 2004-2005.
- Collaborative research project with Brazil on the effect of herbicides on the soil microorganisms. 2002-2004.
- Information Technology grant at UT-Austin to upgrade PAI 3.02 with multimedia facilities to enhance teaching effectiveness in this general purpose class room. July 1998 - 2003
- Awarded a Department of Energy Grant for $ 261,000 for a period of 3 years to study cellulose biosynthesis in *Arabidopsis thaliana*. as a Co P.I. with Dr. R. Malcolm Brown, Jr. (1994 - 1997)
- Obtained $ 40,000 to Louisiana State University by the licensing of the mutant ALS gene cloned and characterized during Ph.D. research. 1992.

RESEARCH PUBLICATIONS

- A rapid method for high quality RNA isolation from jute: *Corchorus capsularis* and *C. olitorius*. 2004 Farhan Khan, Ahmad Islam and K. Sathasivan. Plant Tissue Cult. 14:63-68
- RNA interference and its applications in crop improvement. 2004. Matt Williams, Gregory Clark, K. Sathasivan and Ahmad Islam. Plant Tissue Cult. 14:79-99.
- Clark, G.,K. Sathasivan and A. S. Islam, 2003. Valuable Internet Resources for Plant Molecular Biology Research. Plant Tissue Cult. 13: 85-97.
- Mehdy, M., Y.K. Sharma, K. Sathasivan and N.W. Bays, 1996. The role of activated oxygen species in plant disease resistance. *Physiol. Plantorum* 98:365-374.
- Mehta, N., K. Sathasivan and R.M. Brown. 1996. Characterization of a full length annexin cDNA from *Arabidopsis thaliana*. *Plant Physiol.* 111:148.
- Shet, M., K. Sathasivan, M.A. Arlotto, M.C. Mehdy and R. Estabrook.1993. Purification, characterization and cDNA cloning of cytochrome P-450 reductase from mung bean .*Proc. Natl Acad. Sci.U.S.A.* 90: 2890-2894.
- Sathasivan, K., G.W. Haughn and N. Murai. 1991. The molecular basis of imidazolinone herbicide resistance in *Arabidopsis thaliana* var. Columbia. *Plant Physiology.* 97:1044-1050.
- Sathasivan, K., G.W. Haughn and N. Murai. 1990. Nucleotide sequence of a mutant acetolactate synthase gene from imidazolinone-resistant *Arabidopsis thaliana. Nucleic Acids Research.* 18:2188.