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INDIA

### **BACKGROUND / EXPERTISE**

- ✓ Regulatory toxicology
- ✓ Mammalian Toxicology Ecotoxicology, Reprotoxicology , inhalation toxicology
- ✓ Risk assessment of agrochemicals
- ✓ Screening House hold Exposure toxicity

### **EDUCATIONAL QUALIFICATION:**

<b>Degree</b>	<b>Year</b>	<b>Area of Specialisation</b>	<b>Institution/ University</b>
Ph.D	2013	Toxicology	IIBAT /University of Madras
M.Sc	2004	Environmental Toxicology	IBMS University of Madras Taramani Campus
B.Sc	2000	Microbiology	Prof Dhanapalan college for Women /University of Madras
PGDMLT	2001	Medical Lab Technology	Stella Maris College / University of Madras
PGDBI	2005	Bioinformatics	Bioinformatics Institute of India Noida

### **EXPERIENCE**

- ✓ Microbiologist cum lab coordinator in Apollo Hospitals
- ✓ More than a decade of experience in art of GLP certified CRO (IIBAT) from German GLP certification to Indian GLP cortication (NGCMA ) authority.
- ✓ Conducted several types of Mammalian toxicology studies in various routes of administration with laboratory animals
- ✓ Remain abreast of changes in global testing requirements, both implemented and proposed, send samples, coordinate and ensure follow through with GLP / FDA / EPA
- ✓ Liaison with all guidelines FDA, EPA, OECD,OPPTS,EEC,MAFF, and
- ✓ other accredited agencies for country specific registration of agrochemicals

- ✓ Act as technical expert & participate in regulatory agency interactions during finalizing the reports
- ✓ Overall responsibilities include expert toxicology consultation, report writing, literature searches, data gap analysis, product risk assessments.
- ✓ Conducted and participated several workshops internally and externally for the awareness of GLP sensitization and role of toxicology in CRO setup.

#### **RESEARCH ARTICLES PUBLISHED:**

1. YV Murkunde, TN Sathya, N. Subashini and PB Murthy, Transplacental genotoxicity evaluation of cypermethrin using alkaline comet assay. Human and Experimental Toxicology, 2011.
2. N Subashini, G Chandrasekar, S Ayyappan, T Chithirika, A Goparaju, PB Murthy. Studies on the effect of Metalaxyl 4% + Mancozeb 64 % WP a Combinational Fungicide on certain species. International journal of Innovative research and studies, 2014.

#### **RESEARCH EXPERIENCE:**

- ✓ Toxicity profile of pesticide mixtures and transplacental carcinogenesis.
- ✓ Endocrine disruptor chemical assays
- ✓ Comet assay & other Genetic toxicity studies
- ✓ Ecotoxicology studies in Algae, Lemna and fishes for certain Agrochemicals
- ✓ Developmental Neurotoxicity of Agrochemicals in Rodents

#### **STUDENTS GUIDED FOR RESEARCH:**

- ✓ Guided Ph.D scholars for study design and rationale of experiments in conduct of toxicology
- ✓ M.Sc Zoology students guided for toxicology internships for short term duration

#### **TRAINING**

##### **External**

- ✓ GLP sensitization workshop held at NGCMA during May 29- June 2<sup>nd</sup> 2019
- ✓ FELESA training held at TANUVAS Chennai during September 13<sup>th</sup> - 23<sup>th</sup> 2017
- ✓ Challenges and opportunities in Toxicology research, Education and Product Safety assessments. STOX Annual Conference. November 18<sup>th</sup> to 21<sup>th</sup>, 2015, Hyderabad.

##### **Internal**

- ✓ Training on Neurotoxicity by Dr T.P.Suresh October 03<sup>rd</sup> -04<sup>th</sup>, 2017.
- ✓ Training on ADME Studies and Pharmacokinetics by Dr T.P.Suresh October 05<sup>th</sup>, 2017.
- ✓ Techniques in in vitro and in vivo Genetic toxicology by Dr.G.P.Meshram October 06<sup>th</sup> -07<sup>th</sup>, 2017.

- ✓ Training on Neurotoxicity by Dr T.P.Suresh October 03<sup>rd</sup> -04<sup>th</sup> , 2017.
- ✓ Contemporary Topics in Pathology, Laboratory Animal Science and Safety Assessment. Dr.Monique Y.Wells, TOXPATH , Dr.Deepa Rao, NIEHS, November 11, 2011.
- ✓ Preclinical GLP Study Directors Workshop. Dr .William J.Brock,Brock Scientific Consulting, October 8<sup>th</sup> to 10<sup>th</sup> , 2012.
- ✓ CPD Workshop in Toxicologic Clinical Path ology. Dr Robert Herbert, (NIEHS) November 6<sup>th</sup> to 10<sup>th</sup> , 2011.
- ✓ GLP issues in toxicology studies. Dr. David F. Moore, Former Director, GLP Monitoring Auth ority, United Kingdom. December 3<sup>rd</sup> , 2010.
- ✓ OECD Principles of Good Laboratory Practice and Quality Assurance. Dr. Deepak. K. Agarwal, DABT, IITR, April 28<sup>th</sup> to 30<sup>th</sup> , 2008.
- ✓ Animal Welfare and Eth ical Issues in Research. Dr. David M. Moore, Associate Vice President for Research Compliance, Virginia Tech USA, April 9, 2008.
- ✓ Infectious Diseases of Laboratory Rats and Mice. Charles B. Clifford, Director, Path ology and Technical Services, Charles River Laboratories, Inc., USA, April 7<sup>th</sup> to 8<sup>th</sup> , 2008.
- ✓ Training Course on Good Laboratory Practice. Dr. Juerg P Seiler, Toxi Conseil March 4 to 6, 2008.
- ✓ International GLP Programmes. Dr. David F. Moore, Former Director, GLP Monitoring Auth ority, United Kingdom. December 5<sup>th</sup> to 8<sup>th</sup> t 2007.
- ✓ Roles and Responsibilities of Study director in GLP. David Moore October 10<sup>th</sup> to 15<sup>th</sup> , 2005.
- ✓ Issues of GLP and non clinical safety testing. Dr. Juerg P Seiler (ToxiConSeil ) November 14<sup>th</sup> -16<sup>th</sup> , 2006.
- ✓ Statistical Analysis. Mr. Venkaiah ,National Institute of Nutrition (ICMR), January 4<sup>th</sup> to 5<sup>th</sup> t, 2007.
- ✓ GLP Implications for th e Toxicologic Path ologist. Dr. Monique Y. Wells, Eurotox Registered Toxicologist, January 16<sup>th</sup> , 2007.
- ✓ One day Training Programme on ISO 17025. Mr. D.S.Tewari, Feb 6<sup>th</sup> , 2007.
- ✓ An Introduction to Quality Assurance Procedures. Dr. David F. Moore, Former Director, GLP Monitoring Auth ority, United Kingdom. December 5<sup>th</sup> to 8<sup>th</sup> , 2007

### **SYMPOSIUM/SEMINARS ATTENDED**

- ✓ 4<sup>th</sup> Annual conference of Society for Animal Experimentation 11<sup>th</sup> -12<sup>th</sup> Decembers 2021
- ✓ Toward Replacement of animals for scientific purpose Feb 2<sup>nd</sup> - 3<sup>rd</sup> 2021
- ✓ Traditional and Artificial Intelligence Based Training Program on Handling and Care of Laboratory Animals Feb 9<sup>th</sup> - 13<sup>th</sup> 2021
- ✓ Health based exposure Limits in Risk Assessment Feb 13<sup>th</sup> 2021

- ✓ Traditional and Artificial Intelligence Based Training Program on Handling and Care of Laboratory Animals Feb 9<sup>th</sup> - 13<sup>th</sup> 2021

### **INVITED SPEAKER IN NATIONAL SEMINARS**

- ✓ Invited as a speaker in IMIT conference to deliver a talk on Endocrine disruptors November 24 to 25, 2017, Bangalore.

### **PAPERS PRESENTED IN NATIONAL/INTERNATIONAL SEMINARS**

- ✓ Presented a scientific paper in the National conference on “GLP and ISO /IEC 17025 Emphasis on Regulatory Affairs and Application in Academic Research

### **THESIS WORK DONE DURING POST GRADUATION/PHD**

- ✓ Effluent treatment inplant training in CPCL Manali
- ✓ Forensic analysis of samples in poisoning
- ✓ HET CAM, invitro skin ethic models
- ✓ Endocrine disruptor assays
- ✓ Comet assay and Invitro genotoxicology assays
- ✓ Combined Reproduction Developmental Neurotoxicity And Transplacental Genotoxicity Evaluation Of A Combinational Pesticide Metalaxyl 8% Mancozeb 64 % WP Ready Mix Formulation

### **Projects handled**

- ✓ Industry Sponsored projects for registration of products for sale of agrochemicals, feed additives, cosmetics, raw materials, biopesticides, plant growth hormones etc
- ✓ Household products exposure in humans, toxicology studies and post marketing surveillance

### **AWARDS RECEIVED**

- ✓ Best employer Achiever Award 2011
- ✓ Best Team Leader Award 2016
- ✓ Best speaker in IMIT Toxgurukul 2016

### **INNOVATIVE ACTIVITIES/INTERVENTIONS IN THE AREA OF EXPERTISE**

- ✓ Integration of OECD 423, OECD 471, OECD 422, with Endocrine disruptor assay with reduction of animals combination protocol in Ph.D thesis work (OECD 422)
- ✓ Toxicity profile of pesticide mixtures and transplacental carcinogenesis

## **MEMBERSHIP**

### **Membership of Professional Societies**

- ✓ STOX (Society of Toxicology) , India, Since 2011
- ✓ SNCI (Society of Neurochemistry), India, Since 2013
- ✓ FASC (Fellow of Animal Welfare Science), Since 2012
- ✓ EMSI( Since 2012)

### **Member of the Institutional Committees,**

SRIHER IAEC – Internal member