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Academic Qualifications:

| Degree | University | Year | Subjects | Class |
|--------|--|------|----------|---------------------|
| B.Sc | Alagappa Govt. Arts College, Madurai Kamaraj University | 1991 | Zoology | First |
| M.Sc | Annamalai University | 1993 | Zoology | First |
| PhD | Bharathidasan University | 2000 | Zoology | Highly Commended |

Administrative Experience: 18 Years

Research Experience: 10 Years

Areas of Research

Aquatic Toxicology, Xenobiotic Metabolism

Honorary Reviewer

Comparative Biochemistry and Physiology (*Elsevier Publications*)

Aquaculture (*Elsevier Publications*)

Toxicological & Environmental Chemistry (*Taylor and Francis*)

Awards/ Fellowships

- IUBS (International Union of Biological Sciences) –1998- Trainee- Singapore
- UNESCO – Post Doctoral Trainee – 1999-Plymouth Marine Laboratory- UK
- CSIR- RA-2000- India
- MyCT (Spanish Government Project) -2002- Barcelona-Spain
- DST SERB Young Scientist Scheme– CECRI- 2004- India
- NSERC Visiting Fellowship - 2001- Government of Canada (Selected)
- DST SERB Young Scientist Scheme – 2002- Government of India (Selected)
- Japan Government Fellowship -2002 (Selected)
- FyCT – Portugal Government Fellowship- 2002- (Selected)

Funded Research Projects

Completed Projects

| S. No | Agency | | | Project Title | Budget |
|-------|--|-------------------|-----------|---|------------------------|
| | | Ref: No | Year | | |
| 1 | UNESCO Project (Biotechnology Action Council, Paris, FRANCE) | SC/LSC/99/MIRCE N | 1999 | Optimisation of CYP1A immunopositive protein as a biomarker of organic pollution in mussels | 4,000 US Dollars |
| 2 | Ministerio de Education y Deporte (SPAIN) | B2000-0302 | 2002-2003 | Development and application of biochemical markers in marine and freshwater organisms. | 21,600 Euros (for PDF) |
| 3 | DST (Department of Science and Technology) FAST TRACK SCHEME | SR/FT/L-52/2003 | 2004-2006 | Cytochrome P450 isoforms in aquatic invertebrates in relation to xenobiotic metabolism: A possible role in pollution monitoring | 10,40,000 Rupees |

| International | | National | | Others |
|---------------|-------------|----------|-------------|---|
| Journals | Conferences | Journals | Conferences | Books / Chapters / Monographs / Manuals |
| 12 | 6 | 5 | - | 6 |

| | | |
|---------------------------------|---|-------------|
| Cumulative Impact Factor | : | 37.2 |
| H-index | : | 11 |
| i10 index | : | 13 |
| Total Citations | : | 913 |

Publications

1. Devi KP, Kiruthiga PV, Pandian SK, Archunan G, **Arun S**. Olive oil protects rat liver microsomes against benzo(a)pyrene-induced oxidative damages: an in vitro study. **Mol Nutr Food Res**. 2008 Jun;52 Suppl 1:S95-102. doi: 10.1002/mnfr.200800047 [IF-4.5].
2. D. Prasad, **S. Arun**, M. Murugesan, S. Padmanaban, R.S. Satyanarayanan, Sheela Berchmans, V. Yegnaraman. Direct electron transfer with yeast cells and construction of a mediatorless microbial fuel cellOriginal Research Article **Biosensors and Bioelectronics**, 2007- 22 :11., 2604-2610 [IF-7.4].
3. **Arun S**, Subramanian P. Cytochrome P450-dependent monooxygenase system mediated hydrocarbon metabolism and antioxidant enzyme responses in prawn, *Macrobrachium malcolmsonii*. **Comp Biochem Physiol C Toxicol Pharmacol**. 2007 May;145(4):610-6. Epub 2007 Feb 21 [IF- 2.5]
4. **Arun S**, Rajendran A, Subramanian P. Subcellular/tissue distribution and responses to oil exposure of the cytochrome P450-dependent monooxygenase system and glutathione S-transferase in freshwater prawns (*Macrobrachium malcolmsonii*, *M. lamarrei lamarrei*). **Ecotoxicology**. 2006 May;15(4):341-6. Epub 2006 May 4. [IF-2.3]
5. Barata C, Varo I, Navarro JC, **Arun S**, Porte C. Antioxidant enzyme activities and lipid peroxidation in the freshwater cladoceran *Daphnia magna* exposed to redox cycling compounds. **Comp Biochem Physiol C Toxicol Pharmacol**. 2005 Feb;140(2):175-86. Epub 2005 Feb 24. [IF-2.5]
6. Barata C, Navarro JC, Varo I, Riva MC, **Arun S**, Porte C. Changes in antioxidant enzyme activities, fatty acid composition and lipid peroxidation in *Daphnia magna* during the aging process. **Comp Biochem Physiol B Biochem Mol Biol**. 2005 Jan;140(1):81-90. [IF-1.6]

7. Barata C, **Solayan A**, Porte C. Role of B-esterases in assessing toxicity of organophosphorus (chlorpyrifos, malathion) and carbamate (carbofuran) pesticides to *Daphnia magna*. **Aquat Toxicol**. 2004 Feb 10;66(2):125-39. [IF- 3.557]
8. **Arun S**, Thirumurugan R, Visakan R, Balamurugan S, Arunachalam V, Subramanian P. Optimal analytical conditions for catalase in fresh water prawn, *Macrobrachium malcolmsonii*. **Biotech Histochem**. 2003 Feb;78(1):1-4 [IF- 1.078].
9. **S.Arun**, R.Thirumurugan and P.Subramanian. Enzymatic defense mechanism to oxygen toxicity in freshwater prawn *M.malcolmsonii* and *M.lamarrei lamarrei*. **Indian Journal of Environmental Sciences**, 2002, 6(2):125-130
- 10.**S.Arun** et al. Toxicity induced biochemical modulations and phase II xenobiotic conjugating enzyme (GST) in *Oreochromis mossambicus*. **Asian Jr. of Microbiol Biotech Environmental Sci** 2000., 2: 225-230.
- 11.**S. Arun**, P. Krishnamoorthy and P. Subramanian. . Properties of glutathione peroxidase from the hepatopancreas of freshwater prawn, *Macrobrachium malcolmsonii* . **International Journal of Biochemistry and Cell Biology**. 1999 31: 725 – 732 [IF- 3.905].
- 12.**S. Arun** and P. Subramanian. Antioxidant enzymes activity in subcellular fraction of freshwater prawn *Macrobrachium malcolmsonii* and *Macrobrachium lamarrei lamarrei* . **Applied Biochemistry and Biotechnology**. 1999. 75(2-3): 187-192 [IF- 1.606]
- 13.**S.Arun** and P. Subramanian. Antioxidant enzymes in freshwater prawn *Macrobrachium malcolmsonii* during embryonic and larval development. **Comparative Biochemistry and physiology Part B: Biochemistry and Molecular Biology** 1998 121(B):273-277 [IF- 1.651]
- 14.**S. Arun** and P. Subramanian. . Glutathione s-transferases enzymes in fresh water prawn *Macrobrachium lamarrei lamarrei* during embryonic and larval development. **Current Science**. 1997 73:107-109 [IF- 0.967].
- 15.P. Krishnamoorthy, **S. Arun** and P. Subramanian. Commercially important meroplankton production and fishery potential in the Gulf of Mannar. **Indian J. Mar. Sci.**,1999 28:216 – 218
- 16.C. Maruthanayagam, N. Ravi, **S. Arun** and P. Subramanian . Impact on Detergent : Survival and biochemical constituent in freshwater prawn *Macrobrachium lamarrei lamarrei*. **Environ. Ecology**. 1997 15: 79 -82
- 17.C. Maruthanayagam, **S. Arun** and P. Subramanian . Acute toxicity of synthetic detergent to *Macrobrachium lamarrei lamarrei* : Effect of survival , oxygen consumption and weight loss. **Bulletin of Pure and Applied Sciences**. 1994 13(2): 71 -76

Books/ Chapters / Monographs/Manuals

1. **S.Arun** (2016) Biomonitoring of Coral Bleaching - A Glimpse on Biomarkers for the Early Detection of Oxidative Damages in Corals In "Invertebrates - Experimental Models in Toxicity Screening", (edited by Marcelo L. Larramendy and Sonia Soloneski, **INTECH publishers**. USA
2. **S.Arun** and P. Subramanaian (2011) Ethoxyresorufin -O- deethylase activity in oil effluent exposed prawn. *M.Malcolmsonii*. In An anthology of articles on aquatic research. (edited by P.Subramanian) **Nitheeshpraba Padhippagam**, India Pp 24-30
3. **S.Arun**. (2010) The Aromatic Hydrocarbon Receptor mediated Cytochrome P450 1A induction in aquatic animals: Biomonitoring of organic pollution in Aquatic Environment. In Impact, Monitoring and management of Environmental Pollution. **Nova Science Publishers**, Inc- New York pp 517-535
4. **S.Arun** (2010) Drug metabolism and Detoxification. In Advances in Environmental Biology (edited by G.Tripathi, B.M.Sharma and T.K. Ghosh) **Oxford Book Company**, New Delhi pp184-198
5. **S.Arun** and P.Subramanian (2003) Cytochrome P450 and other biotransformation activity in aquatic organisms: potential biomarkers to environmental pollution. In Potentials of Living Resources (edited by G. Tripathi and A. Kumar). **Discovery Publishers, New Delhi**. pp 459-488
6. **S.Arun** and Subramanian P. (2002) Antioxidant enzymes in aquatic organisms, particularly in freshwater prawn *M.malcolmsoni*. In Bioresource and Environment.(Editor, G.Tripathi and Y.Tripathi) **Campus Books International** , New Delhi., India. pp 341-348.