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| Aarthi **Phone: C/o 0502360357****Email:** aarthi.264355@2freemail.com **Nationality: Indian** |   |

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| **Professional Overview** | Postgraduate (M.Sc) in Molecular Medicine from University of East Anglia, UK with more than three years of research and laboratory experience specializing in Microbiology, Molecular Biology, Biochemistry and Analytical techniques.Deft in designing, development, interpretation and conducting laboratory techniques based on methodology, with appropriate procedures and laboratory standards.An effective communicator with excellent relationship building and interpersonal skills and ability to sustain a positive work environment towards the accomplishment of organizational goals. |
| **Education** | University of East Anglia, Norwich, UKMaster of Science in Molecular Medicine — Sep 2011 – Sep 2012Sri Venkateswara College of Engineering, Anna University, Chennai, India Bachelor of Technology in Biotechnology — Aug 2005 – May 2009  |
| **Professional Experience** | Research Assistant, Khalifa University of Science and TechnologyAbu Dhabi, UAE — September 2016 – August 2017* Spectroscopic characterization of Gallium Arsenide/bio- electrolytes interface
* Advanced literature survey of patents and publications on microscale NMR devices
* Trained users in FTIR at KU Core Nano characterization Facilities
* Encapsulation of Vitamin D in lamellar vesicles
* Spectroscopic characterization of the effect of Vitamin D on model membranes and lamellar phase systems
* Assisting with the research, editing and preparation of manuscript.

Research Assistant, University of MadrasChennai, India — February 2015 – December 2015* Formulation of solid lipid nanoparticles with pleiotropic drugs using homogenization and sonication techniques
* Optimization, physico-chemical parameters, drug loading, release, encapsulation efficiency and cytotoxicity were investigated

Laboratory Assistant, University of MadrasChennai, India — August 2013 – December 2014* Collecting literature data, preparing project dossier and producing manuscripts according to the protocols.
* Planning and organizing day-to-day lab and research activities and resolving procedural problems as appropriate to the timely completion of objectives.
* Setting up, calibrating, operating and maintaining laboratory equipment.
* Provide support for undergraduate students with their research projects.

Project Assistant, University of East AngliaNorwich, UK — August 2012 – January 2013Designed and validated nanoparticle hazard assessment protocol combining cytotoxicity data with embryonic vertebrate abnormality scoring to determine an overall toxicity index. |
| **Laboratory Skills** | Characterization techniques: UV-Vis, FTIR Micro spectroscopy, Raman Spectroscopy, AFM, Electron Microscopy (SEM, TEM) along with sample preparation techniques, Particle Size Analyzer (DLS, Zeta Potential).Aqueous based gold, silver and iron oxide nanoparticles synthesis and functionalization, Liposome synthesis by thin film hydration, extrusion and sonication and designed quantum dots for biological applications Cell Biology Techniques: Cell culture, cryo-preservation, microbial contamination tests, cell counting (hemocytometer), Fluorescence microscopy, Confocal microscopy, Flow Cytometry, Cell proliferation and viability assaysMolecular Biology Techniques: Plasmid preparation, DNA, RNA extraction, PCR, RT-PCR, Site-directed mutagenesis, DNA sequencing, Blotting and Immunotechniques Computer Skills: Bioinformatics Tools (GenBank searching BLAST, Protein sequencing, Multiple sequence tools, Next Gen Sequencing), Flow cytometry data analysis using Flow-Jo and WinMDI software, Statistical analysis (Origin, IBM SPSS, GraphPad Prism), EndNote, Mendeley, Adobe Photoshop and Image J |
| **Awards** | University of East Anglia, Faculty of Science International Scholarship Fund Award for Postgraduate taught program, 2011-2012 |
| **Conference Presentations** | Structural Modification of Unilamellar and Multilamellar Vesicles in the presence of Vitamin D (E16.00012)American Physical Society (APS) March Meeting, New Orleans, LA, USA 2017 Development of Engineered Nanocarriers for the Treatment of Metastatic Melanoma (LB10)NCRI Cancer Conference, London, 2012Hazard Assessment of Engineered Nanocarriers using *in vitro* and *in vivo* Toxicity Studies COST ACTION TD1004 Annual Meeting: Theranostics Imaging and Therapy, London, 2012  |
| **Seminar Presentations** | Vitamin D - Characterization and Delivery7th Annual KAIST-KUSTAR Research Symposium, Khalifa University, Abu Dhabi, 2016 Synthesis and Characterization of Liposomal Vitamin D for Therapeutic ApplicationsApplied Mathematics and Science (AMS) Research Seminar, Khalifa University, Abu Dhabi, 2016  |