# Karthik Shankar Polani

**Mobile:** +91 73972 98112 | **E-mail:** [kartzzsha86@gmail.com](mailto:kartzzsha86@gmail.com) | **Location:** Chennai, India

# Applying for job

An exceptionally investigative and research-oriented professional with first class academic credentials in Molecular Biology, Development Biology, Advance Zoology and biotechnology, Stem Cells. Strong interactive, legislative, and multitasking facilities; exceptional thoughtfulness to doorway and problem-solving skills; self-motivated and establishes initiative, hands-on, and efficiency. Obsessive nearby forceful oneself to new heights to conclude exceptional and associated disorders by means of RNA biology to decipher the Molecular Heritages of human Disease using RNA biology.

* **Programming Languages**: Python Scripting Language, MS Office, Windows, big data related things
* **Technical Skills**: Western Blot, Dot Blot, cancer Cell Culture, MTT assay, 'SDS Phage Gel Electrophoresis, Stem Cell Culture, Agarose Gel Electrophoresis. PCR, DNA extraction,

**Advance diploma in Stem Cell Regenerative Medicine** 2019–2022

**Auto Stem Labs A+ Distinction**

**Project**: Pluripotent stem cells are endowed with the ability to differentiate into various types of cells found in the human body. Multiple studies isolated mesenchymal stem cells (MSCs) from human tissues, bodily fluids, and peripheral blood. To better understand their phenotypic nature, molecular and cellular markers illustrate these stem cells. Due to their inherent inclination and neural crest origin, human dental pulp stem cells (hDPSCs) are a gripping target for therapeutic applications. HDPSCs possess the MSC phenotype and are classified as cardiomyocytes, neurons, osteoblasts, liver cells, chondrocytes, and pancreatic beta cells. As a result, HDPSCs demonstrated more significant potential in regenerative medicine for pick up the check various human dental diseases.

**Techniques:** HUMAN DENTAL PULP STEM CELLS culture, characterization.

**MSc Molecular Biology** 2009 – 2011

**University of Madras, CGPA: 6.551**

**Thesis:** Collagen was immobilized in PVA is publicized to be effective antimicrobial activity in vitro. It is inflexibly to putative that the superficial of a biomaterial is where the first interface between the biomaterial and biological system occurs. Therefore, the shallow belongings of a biomaterial play an essential role in influential its biocompatibility and strongly influence biological response to it. It also defines its long-term recital in vitro. This study exhibited that the enzyme is astoundingly unchangeable and obliges as a suitable model enzyme for further studies of immobilized enzyme therapy.

* **Techniques:** MIC, MBC, PVA-Collagen Hydrogel, SEM Analysis.

**BSc Advance Zoology and Biotechnology** 2006 – 2009

Vivekananda College,

University of Madras, CGPA: 7.2

**Final year project**: **OXYGEN ESTIMATION IN WESTERN GHATS AGUMBE FOREST**

* **TRIMS LAB VIZAG (10TH OF JUNE 2011-10TH OF SEP 2011)**
* **PROJECT:** To govern an Anticancer bustle of cancer cell lines (skmel 28, KB-chr85, NCI-H23), these cell lines be positioned to upheld in MEM medium cells were endangered to Sub cultured, cryopreserved and imperiled to the MTT assay and IC 50 PRISM .
* **TECHNIQUES: Methanol Extracts, SKMEL28, NCI-H23 Cell Culture, MTT assay (Cytotoxicity, IC50 prism**
* **SRM MEDICAL RESEARCH CENTER KATANGALATHUR** 25TH OF MARCH 2013 TO 25TH OF JUNE 2013 **(MOLECULAR BIOLOGY LAB)**
* **POSTION: JUNIOR RESEARCH FELLOW**
* **PROJECT**: “EICLUCIDATION OF MECHANISM BY WHICH PTU CLEARS LEASONS IN PSORIATIC PATIENTS YOUNG SCIENTIST FAST TRACK SCHEME DEPARTMENT OF SCIENCE AND TECHNOLOGY GOVERNMENT OF INDIA “. ALL PATICIPANTS SIGNED AN INFORMED CONCENT FORM.
* **TRPVB** (AUGUST 2014 – OCT 2014)
* **PROJECT**: PPRV VACCINE DEVELOPMENT
* **TECHNIQUES**: DOT BLOT, SDS PAGE, WESTERN BLOT AND MEM CELL CULTURE
* **Virtusa consultant private ltd (BIG DATA assistant Consultant) (JAN 2019-OCT 2021)**
* **PROJECT**: NYL MICROFLEX DEVOPS PLEX
* **TECHNIQUES:**
* **BIG DATA FLATFORMS LIKE KAFKA, ELK, AWS, DATA MININING AND PYTHON SCRIPTING**
* **TRANS-CELL BIOLIFE (Stem cell biobank)** 1ST JUNE 2022 -16 JULY 2022
* **POSITION**: PROCESS ASSISTANT
* WORKED CORD BLOOD SAMPLES CENTRIFUGE, BUFFY COAT Storage
* Charusat International Conference on Molecular Medicine (Molmed - 2011 International Conference on Molecular Medicine - Metabolic Disorders and Mini-Symposium on Ageing)
* Online Hands-onTraining on NGS – RNA – SEQ Analysis QSTATIX Auto Stem Laboratory,4th Sep 2020-10th of sep 2020.
* Participated in Workshop on RNA Sequence Data Analysis, Bionivid Technologies, Aug 2020
* Srm medical college hospital and research Centre Indian academy of tropical parasitology “HOW TO SUCCEED IN PUBLISHING SCIENTIFIC PAPERS” ON 14TH OF JAN 2013

Evaluation of Antioxidant and Anticancer Properties of Methanolic Extracts of Abutilon Indicum and Blumea Mollis, February 2012, Journal of Pharmacy Research h 20125:2373-23, **Authors:** Srikanth.P, Karthik PS, Raaj, Sirisha