## PERSONAL DETAILS

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| **Name** | Dr. Pavan Kumar Dara |
| **Date and place of birth** | 14-10-1988<br>Kadapa, Andhra Pradesh |
| **Father's Name** | Obulesu Dara |
| **Details for Communication** | Present:<br>Research Associate; Biochemistry & Nutrition Division<br>ICAR-Central Institute of Fisheries Technology,<br>Willingdon Island; Matsyapuri P.O<br>Cochin – 682029; Kerala; India<br>Permanent:<br>1/1824; Appa Rao Buildings<br>Y.M.Palli; Gandhi Nagar P.O<br>Kadapa-516004; Andhra Pradesh; India |
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| **Research ID** | AAD-6814-2021 |
| **Orcid ID** | 0000-0001-9784-6288 |

## EDUCATIONAL QUALIFICATIONS

| Degree | University/Institution | Year | Class |
|---|---|---|---|
| SSC/10th/Matriculation | Board of Secondary Education | 2003 | First |

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| Intermediate | Board of Intermediate Education | 2005 | First |
| Bachelor of Science (B.Sc.) Biotechnology; Biochemistry; Chemistry | Sri Krishnadevaraya University Anantapur, Andhra Pradesh | 2009 | First |
| Master of Science (M.Sc.) Biotechnology | SRM University Chennai, Tamil Nadu | 2011 | First with Distinction |
| Doctor of Philosophy (Ph.D.) Biosciences | Mangalore University Mangalore, Karnataka | 2018 | First |

## DETAILS OF PhD

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| **Title** | Extraction and characterization of proteases from digestive tract of freshwater fish and their application in the preparation of bioactive peptides from fish skin gelatin |
| **Research Supervisor** | Dr. B. A. Shamasundar<br>Former Prof. and Head, Dept. of Fish Processing Tech.,<br>College of Fisheries, Mangalore |
| **Year of Award** | Dec 27, 2018 |

## AREA OF SPECIALIZATION

| | |
|---|---|
| Biochemistry<br>Biotechnology | Protein Chemistry/Process Biochemistry<br>Molecular Biology/Immunology/<br>Nanotechnology |

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| Macromolecular Chemistry | Biomaterials/Marine Biopolymers |

## EMPLOYMENT RECORD

| Position held | Institution | Period |
|---|---|---|
| Assistant Professor (Temporary) | KSRM College of Engineering Kadapa, Andhra Pradesh | 11.09.2011 – 07.01.2013 |
| Research Associate | ICAR-Central Institute of Fisheries Technology, Kochi | 17.12.2018 – Till-to-date |

## REFEREES

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## AWARDS/FELLOWSHIP

UGC Fellowship received for the period 2013 To 2018

# PUBLICATIONS

| | |
|---|---|
| 1 | Niladri Sekhar Chatterjee, Hema Girija Sukumaran, **Pavan Kumar Dara**, Balaraman Ganesan, Muhamed Ashraf, Rangasamy Anandan, Suseela Mathew, Ravishankar Chandragiri Nagarajarao (2022). Nano-encapsulation of curcumin in fish collagen grafted succinyl chitosan hydrogel accelerates wound healing process in experimental rats. *Food Hydrocolloids for Human Health.* https://doi.org/10.1016/j.fhfh.2022.100061 |
| 2 | Divya K Vijayan, PR Sreerekha, **Pavan Kumar Dara,** Ganesan B, S Mathew, R Anandan, CN Ravisankar (2021). Gastro-Protective Effect of Fish Collagen Peptides (FCP) Against Hydrochloric Acid-Ethanol Induced Gastric Ulcer in Experimental Rats. *Cell Stress and Chaperones*. https://doi.org/10.1007/s12192-021-01245-x (IF: 3.6) |
| 3 | **Pavan Kumar Dara**, Mahadevan Raghavankutty, Karthik Deekonda, Anil Kumar Vemu, S Visnu vinayagam, Suseela Mathew, Rangasamy Anandan, Ravishankar Chandragiri Nagarajarao, Senthilkumar Subramanian (2021). Synthesis of biomaterial-based hydrogels reinforced with Cellulose nanocrystals for biomedical applications. *International Journal of Polymer Science*. https://doi.org/10.1155/2021/4865733 (IF: 2.642) |
| 4 | **Pavan Kumar Dara**, Mahadevan Raghavankutty, GK Sivaraman, Suseela Mathew, Chandragiri Nagarajarao Ravishankar, Rangasamy Anandan. (2021). Biomodulation of poly (vinyl alcohol)/starch polymers into composite-based hybridised films: physico-chemical, structural and biocompatible characterization. *Journal of Applied Polymer Science. 28*(7), 1-12. https://doi.org/10.1007/s10965-021-02578-y (IF: 3.125) |
| 5 | **Pavan Kumar Dara**, Mahadevan Raghavankutty, Ganesan Balaraman, Muhamed Ashraf, Suseela Mathew, CN Ravishankar, Rangasamy Anandan. (2021). Histopathological and Biocompatible evaluation of chitosan nanoparticles-grafted fish gelatin-based bio-nanocomposite membranes. *Iranian Polymer Journal*. 30, 953–964. https://doi.org/10.1007/s13726-021-00947-4 (IF: 1.899) |
| 6 | Divya K Vijayan, PR Sreerekha, **Pavan Kumar Dara**, M Rosemol Jacob, Suseela Mathew, R Anandan, CN Ravisankar (2021). In vivo anti-lipidemic and antioxidant potential of collagen peptides obtained from great hammerhead shark skin waste. *Journal of Food Science and Technology*. 59, 1140–1151. https://doi.org/10.1007/s13197-021-05118-0 (IF: 2.701) |
| 7 | Niladri Sekhar Chatterjee, **Pavan Kumar Dara**, P R Sreerekha, Divya K Vijayan, Suseela Mathew, Chandragiri Nagarajarao Ravishankar, Rangasamy Anandan. |

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| | (2021). Nanoencapsulation in low-molecular-weight chitosan improves in vivo antioxidant potential of black carrot anthocyanin. *Journal of Science of Food and Agriculture*. 101(12), 5261-5271. https://doi.org/10.1002/jsfa.11175 (IF: 3.638) |
| 8 | P R Sreerekha, **Pavan Kumar Dara**, Divya K Vijayan, Niladri Sekhar Chatterjee, Mahadevan Raghavankutty, Suseela Mathew, Chandragiri Nagarajarao Ravishankar, Rangasamy Anandan. (2021). Dietary Supplementation of Encapsulated Anthocyanin Loaded-Chitosan Nanoparticles attenuates Hyperlipidemic aberrations in male Wistar rats. *Carbohydrate Polymer Technologies and Applications. 2*, 100051 https://doi.org/10.1016/j.carpta.2021.100051 |
| 9 | R. Jayarani, Niladri S. Chatterjee, R. G. K. Lekshmi, **Pavan Kumar Dara**, R. Anandan. (2021). Fucoxanthin Content and Antioxidant Activity in Supercritical $CO_2$ , Enzymatic and Natural Hydrophobic deep Eutectic Solvent Extracts of Sargassum wightii Seaweed. *Fishery Technology* 58 (2021): 155 - 159 |
| 10 | **Pavan Kumar Dara**, Krishnamoorthy Elavarasan, Bangalore Aswathnarayan Shamasundar, Rangasamy Anandan, Suseela Mathew, Ravisankar Chandragiri Nagarajarao. (2021). Angiotensin I-converting enzyme (ACE) inhibitory and Antioxidant peptides from sea food processing waste. *Fishery Technology*, 58 (2021): 133 - 142 |
| 11 | **Pavan Kumar Dara**, Anjana Geetha, Upasana Mohanty, Mahadevan Raghavankutty, Suseela Mathew, Chandragiri Nagarajarao Ravishankar, Rangasamy Anandan. (2020). Extraction and Characterization of Myofibrillar Proteins from Different Meat Sources: A Comparative Study. *Journal of Bioresources and Bioproducts*, 6 (4), 367-378. https://doi.org/10.1016/j.jobab.2021.04.004 |
| 12 | Sreerekha P R, **Pavan Kumar Dara**, Divya K Vijayan, Niladri Sekhar Chatterjee, Mahadevan Raghavankutty, Suseela Mathew, CN Ravishankar, R Anandan. (2020). Anti-ulcerogenic potential of anthocyanin - loaded chitosan nanoparticles against Alcohol-HCl induced Gastric ulcer in rats. *Natural Product Research*, 36 (5), 13.6-1310. https://doi.org/10.1080/14786419.2020.1860041 (IF: 2.861) |
| 13 | Edakkukaran Sudhakaran Sumi, **Pavan Kumar Dara**, Rosemol Jacob Mannuthy, Balaraman Ganesan, Rangasamy Anandan, Suseela Mathew. (2020). Antioxidant and hepatoprotective property of squalene for counteracting the oxidative damage induced by methotrexate in experimental rats. *Acta Biologica Szegediensis*. 64(2):111-120. https://doi.org/10.14232/abs.2020.2.199-206 (IF: 0.571) |
| 14 | **Pavan Kumar Dara**, K Elavarasan & B A Shamasundar. (2020). Improved Utilization of Croaker Skin Waste and Freshwater Carps Visceral Waste: Conversion of Waste to Health Benefitting Peptides. *International Journal of Peptide* |

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| | *Research and Therapeutics.* 26, 2641–2651. https://doi.org/10.1007/s10989-020-10053-3 (IF: 1.931) |
| 15 | **Pavan Kumar Dara**, Mahadevan Raghavankutty, Nomy Sebastian, Niladri Sekhar Chatterjee, Suseela Mathew, CN Ravishankar, Rangasamy Anandan. (2020). Rheological, Physico-chemical and functional properties of gelatin extracted from Bigeye tuna (*Thunnus obesus*) skin waste. *Journal of Aquatic Food Product Technology. 29*(5), 428-444. https://doi.org/10.1080/10498850.2020.1749745 (IF: 1.767) |
| 16 | **Pavan Kumar Dara**, K Elavarasan & Bangalore Aswathnarayan Shamasundar. (2020). Characterization of antioxidant and surface-active properties of gelatin protein hydrolysates obtained from croaker fish skin. *International Aquatic Research.* 12:116-126 https://doi.org/10.22034/IAR(20).2020.1892203.1006 (IF: 0.984) |
| 17 | **Pavan Kumar Dara**, R. Mahadevan, Digita P. A. S. Visnuvinayagam Lekshmi R. G. Kumar, Suseela Mathew, C.N. Ravishankar, R. Anandan. (2020). Synthesis and biochemical characterization of silver nanoparticles grafted chitosan (Chi-Ag-NPs): In vitro studies on antioxidant and antibacterial applications. *SN Applied Sciences*. 2(4), 665. https://doi.org/10.1007/s42452-020-2261-y |
| 18 | **Pavan Kumar, D.**, Chandra. M.V., Elavarasan, K., & Shamasundar, B. A. (2018). Structural properties of gelatin extracted from croaker fish (*Johnius sp*) skin waste. *International Journal of Food Properties,* 1-14, VOL. 20, NO. S3, S2612–S2625. https://doi.org/10.1080/10942912.2017.1381702 (IF: 2.727) |
| 19 | **Pavan Kumar, D**., Elavarasan, K., & Shamasundar, B. A. (2017). Functional properties of gelatin obtained from croaker fish (*Johnius sp*) skin by rapid method of extraction. *International Journal of Fisheries and Aquatic Studies*, *5*(2), 125-129. |
| 20 | **Pavan Kumar, D**., Elavarasan, K., & Shamasundar, B. A. (2017). Isolation of Crude Proteases from Freshwater Fishes *Catla catla* and *Labeo rohita*: Optimizing the Hydrolysis Conditions of Crude Proteases. *International Journal of Pure and Applied Bioscience*, 5(1), 667-673. |
| 21 | **Pavan Kumar. D** & D. Sankari. Detection of Autoantibodies in Lada patients and their siblings and HLA Typing of these patients (2013). *International Journal of Pure Applied Biosciences* 1 (4): 42-50. |
| 22 | Sivam Visnuvinayagam, **Pavan Kumar Dara**, Rangsamy Anandan. (2022). Nanoparticle approach towards the control of AMR. Handbook on Antimicrobial Resistance: Current Status, Trends in Detection and Mitigation Measures. **(Under Review**) Book Chapter |

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