

ACKNOWLEDGEMENT

It is my high privilege to owe my thanks to the almighty without whose grace it would not have been possible to study and explore these aspects of nature.

The words would be less to thank my guide Dr. Kauresh D. Vachhrajani who promoted me to work in this field and guided me during my research from initial to final phase. His constant endeavor to explore the new avenues in research helped me to strengthen my ideas of research. I thank him for offering freedom to use my potential and ever friendly healthy interactions. Finally I owe my gratitude to him being a friend, philosopher and guide.

I am thankful to Prof. A. V. Ramachandran, Prof. P. V. Patel and Dr. (Ms) G. S. Padate, who remained as Head, Department of Zoology during the time frame of initiation of work till its completion and permitted me to work at the department availing the necessary facilities.

I knew that benthic forms are resident of estuary but I understood why they are there and what they do there only with the guidance and teaching of the following members whom I would like to thank with deepest sense of gratitude:

I thank to Dr. P. C. Mankodi for his suggestions and help whenever needed. I thank his elderly and experienced guidance during the study period. I am thankful to Prof. L. S. Chamyal of Geology Department, who has made available his support in a number of ways and was ever encouraging. I would like to show my gratitude to Dr. Satish Patel and Dr. Nilesh Bhatt of Geology Department, for their healthy interactions and guidance in studying geological component. I thank Prof. S. R. Dave, Head Microbiology Department, Gujarat University, Ahmedabad for helping in exploring some microbiological aspects and pollution studies. I thank Dr. Anupam Sharma, Scientist, Birbal Sahani Institute of Paleobotany, Lucknow for interactions and guidance during field studies. I thank Prof Rajamani, Department of Environmental Sciences, Jawaharlal Nehru University, New Delhi for encouragement and making me understand the need for interdisciplinary research. It would be my pleasure to thank Dr. V. Kumar, Head, Dept. of Geology, National College, Trichy for training me in microfossil separation and identification.

I thank Prof Aimal Khan, Centre for Advance Studies in Marine Biology, Annamalai University, Dr. M. K. Dev Roy, ZSI, Dr. C. Raghunath, ZSI, Port Blair, Prof. Peter Ng, Singapore University, Singapore for confirming the crab identification and to Dr. Rafel Lemaitre, Curator of crustacean section, Smithsonian Institute, Washington, USA, to Dr. Frank Fiers, Royal Belgian Institute of Natural Sciences, Belgium, for identification of herpecticoid copepode plankton, Dr. Chen Qing Chao, China for plankton identification keys and some very useful reprints, to Dr. Ronaldo Sausa, Portughese and to Dr. Gerber, Curator, Australian Museum of Natural Hisotory for the identification of mollusca. I am grateful to Natural History Museum, London, Dr. Jasmine Richards, Senior Scientist at the crustacean section of the Museum, Dr. Ronald Jenner, Scientist at the Museum and Dr. Miranda Lowe curator at the Museum for allowing me to freely review their crustacean collection at the museum for specimen identification and permitting to use their library facility for referencing. I thank Dr. Mark, Curator, Department of Zoology, Cambridge University, Cambridge, UK for being very good host and permitting me to go through entire repository at the department.

I owe my gratitude to Dr. Desai (Nishil Radiological Laboratory, Vadodara) and Bhailal Amin General Hospital, Vadodara (Mr. Hipesh) for facilitating radiological studies in their laboratory and sparing their busy time.

Students of all these academicians/scientists, especially Mitesh, Dinakaran, Kamlesh, Shashi Shukla, deserve special thanks for explaining me the basics of their science and specialty which made my task easier.

I part my gratitude to my collegues Virag, Pradeep, Chandresh, Mrs. Seema Veram, Ms. Kiran Morya and Ms. Ankita Parikh for their support. I am also thankful to Manan Shukla, Bhavik Patel, Mayurdan Gadhvi, Mahendra Sinh Gohil and students of M. Sc. who helped me during field studies in one or other ways.

With sense of gratitude, I thank all my teahacers who educated me to reach to this stage. I also thank all the research scholars of the department for their good wishes.

I thank the non teaching staff of the Department, the Faculty and the University for their co-operation and friendly attitude.

The people of various villages along the entire Mahi estuary and those who helped in collection of some of the benthic forms deserve special thank. Actually many of these people brought me closer to our culture and inculcated further the human approach in me. This training probably I would have never got any where else.

I can never miss to thank my parents, all my family members for their patience and constant support and especially my wife Rachana for her kind support, cooperation and even helping me during field visits and bearing up with long outstation visits. I owe my hearty gratitude to Diptididi and baa for ever homely welcome and support during my work. I would like to share my feelings with my dear friends Gaurang, Hardik, Parth and Deepak for their keenness in completion of my work.

I am highly indebted to Department of Science and Technology, Govt. of India, for awarding me research fellowship in the project.

It might appear an exhaustive list however, many people moulded the situations in my favor and helped me during this significant part of my life. Without naming, I thank one and the all of them with sense of respect and gratitude.

(Pranav J. Pandya)