Acknowledgements

My sincere thanks are to the learned Gurus, Ustaads and Writers whose inspiration and the great works in the subject of Musicology form the subject matter of my present work. I am also grateful to all of them who had been instrumental in bringing me to the great field of Indian Classical Music, which was so alien to me though I had some basic interest in Film Music/Bhajans/Kirtans right from my childhood through my mother, who herself was very fond of Bhajans & Kirtans and also used to sing herself quiet often.

To start with I would like to be extremely thankful to my dear friend and a great music lover himself , **Sri Ramesh Chand Malhotra, New Delhi** , who had introduced me in the year 1995 to the seven basic swaras i.e Sa, Re, Ga... & three Saptaks i.e. Mandra, Madhya and Taar which are used in making/writing all our music . It was he who had presented me the first book on Indian Music I had ever seen in my life i.e Kramic Pustak Malika-Part-1, by the great scholar & writer Pt.V.N.Bhatkhande. He had also introduced me to his friend **Sri N.K.Solanki, New Delhi**, who had given me the first lessons on Indian Classical Music and that way he became my first formal guru on the subject in April, 1997, though earlier I had been given some preliminary exposure to the light music by my Guru Madam (Mrs) Maya Sharma in 1977-78, while doing my engineering graduation in University of Roorkee, Roorkee-Uttrakhand, now I.I.T, Roorkee.

I extend my sincere thanks to Sri Solanki, who by his inspiring lessons, had created an urge inside me to learn more and more about the intricacies of Raaga system of Indian Music. I am thankful to **Pt Manjit Singh, Madam Archana Singh & Madam Anita Roy of Sri Ram Kala Centre, New Delhi,** under whose tutelage I received the formal lessons on various established Raagas. I am especially thankful to Madam Archana Singh of Sri Ram Center, New Delhi, who had introduced me to the great library of Sahitya Natak Academy, Copernicus Marg, New Delhi. The knowledge gained through the great collection of books there on Indian, Carnatic and Western Music sowed in me the germs of deep study of musicology. It was in the year 2001, when the idea of Inverse Raagas struck to my mind, which was discussed with Pt. Manjit Singh, New Delhi, who had asked me to go deeper in to the subject before making any conclusions. I am thankful to the then library incharge, who was very

kind and helpful to me in searching the study materials and making the same available to me and by allowing me to photo copy the crucial ones.

I am thankful to Sri T.N Bhataacharya, N.F. Railway, New Jalpaigudi-West Bengal, a great musician himself and a Grade A artist of AIR, who himself had given me the lessons on the classical & light music and had further inspired me to continue my endeavour of the present research He had also introduced me to the Late Madam Mausumi Nag and Sri Pradeep Nag of New Jalpaigudi, who had taught me some of the great bandishes of various Raagas and also inspired me to join Rabindra Bharti University, Kolkata in the year 2004. I am especially thankful to Pt. Alok Chatterji, Head of the Dept, Indian Classical Music, Rabindra Bharti University, along with other faculty members of the dept of Music, who had always been very kind and encouraging to me in my present endeavour.

I am also thankful to Sri Nagdeve, Head of Music Dept-Mumbai University & Madam Dr Manisha Kulkarni, who had introduced me to Dr Sandhaya Kathavate and also to the great library at National Centre of **Performing Arts, Nariman Point, Mumbai**. It was the blessings and guidance of Dr Kathavate and the vast exposure to the subject I got through the wonderful collection of Asia's biggest Liberary on Indian Music and Arts at NCPA that I got the strength to further go deep in to the subject matter of the study. The inquisitive questions/objections to my study by Madam Shruti Sidolikar Katkar, ex Professor, Dept of Music, Mumbai University & encouraging suggestions by Dr Savarkar of Megha Engineering college, Thane, Mumbai, also gave me further courage and strengthened my conviction to go ahead further in my present endeavor for which I will always be indebted to them. My sincere thanks are also to all the staff members of the library at NCPA, who had always been ready to help me in searching the study material and making the same available to me, especially the photo copies of the critical papers, when I needed them so desperately. I am thankful to Dr Ashoke Ranade, Pt Arvind Parikh, Dr Swarna Lata Rao of Indian Musicological Society , Mumbai, who had given me the opportunity to attend the IMS seminars in the years 2008, 2009 & 2010 and make a poster presentation on the subject in IMS Seminar at NCPA in Jan' 2010, where I got the opportunity to interact with various great personalities on the subject like Pt Vidya Dhar Vyas-ex Vice Chancellor of Bhatkande Music College, Lucknow, Madam Shubha Mudgal-Indian Classical Music, Madam Anitha Sairam, Carnatic Music, Chennei & also the world's renowned Musicologist,

Madam Dr. SAS Durga, of Chennei University, Chennei , senior legendry Ustaad F.Dagar-Indian Classical Music (Dhrupad), Mumbai, which has made me fully confident about the existence of the Inverse Raagas and to go ahead for the present work of study.

I am extremely thankful to Dr Mahesh Champak Lal & Dr I.K Pandit, both ex Dean, Dept of Music, Faculty of Performing Arts, The M.S University of Baroda, Vadodara, who had introduced me to Dr Rakesh J.Mahisuri of the Dept. of Inst.Music, Faculty of performing Arts, The M.S Unvisersity of Baroda-Vadodara and the guide of my present study. Dr Mahisuri had always encouraged me for my present endeavour and he had been the source of inspiration to me in the difficult times. He had also introduced me to Padma Bhushan Prof. Dr (Mrs) N.Rajam, the legendry violinist and ex Dean, the Department of Music, BHU-Varanasi & Padma Bhushan Prof R.C.Mehta, ex President Indian Musicological Society-Vadodara and ex Principal-Dept of Music, Faculty of Performing Arts, MSU of Baroda, Vadodara. I am especially thankful to both of them as without their guidance and kind blessings I could not have got the opportunity to carry out my further studies in MSU, Vadodara. I am also thankful to **Dr R.G.Kelkar, Head of the** Dept, vocal Music, FPA, MSU of Baroda, Vadodara, who has encouraged me from the very begining of my above endeavour. He has also been supporting me by giving his valuable suggestions during the course of my above study and has been instumental in getting my research paper published in paper published in the various publications including the in Vol 4 issue of 'Review of Research Journal' (ISSN No: 2249-894X) in June, 2015.

I am thankful to my bosses in Central Railway, especially, **Sri R.C Agrawal**, **Chief Signal & Telecom. Engineer, CSTM, Mumbai**, who had kindly allowed me to pursue my study and very often bore my absence from office during the lunch hour, when I was required to go to NCPA library for the literature survey for my present work as the library used to open only in office times on working days. I am also thankful to Sri K.K.Atal, Retd General Manager, North East Railway , Gorakhpur & Sri H.K.Agrawal, CSTE, N.E. Railway, Gorakhpur , who had been very kind to grant me leaves which were very frequent, especially, during June'2013 to sep, 2013, when I needed them so very desperately to attend to my classes at MSU-Vadodara. I am also thankful to **Mr Ajay Shukla, the great writer of the award winning legendry play Tajmahal Ka Tender , presently the Member Traffic, Railway Board, New Delhi** and also my very old friend & like a elder brother to me .He had always inspired me in my life and has been a long time guide to me. It was during the long sittings with him, which were very frequent, especially in the year 2002-2004 while working with him in Northern Railway, New Delhi that the various issues involved in the beginning of the present study got deliberated and resolved and the blue print of the present study was prepared in the year 2003.

I am thankful to my friend **Sri Aditya Kumar, Chief Workshop Manager, Central Railway, Byculla & Sri H.K.Gupta of U.O.R, Roorkee (now in Boston, U.S.A)** whose probing and encouraging questions had helped me to a very great extent in strengthening my confidence in the findings of the present study.

My sincere thanks are also to my friends **Mr S.S Malgi, Senior Section Engineer of Central Railway**, who had taken lot many pains to write programs on the computer in C++ for processing the huge data involved, especially for identifying the Inverse matching strings of Hindustani and Carnatic Raagas .I am also thankful to **Mrs Vijaya, Confidential Assistant to CSTE/Palnning in Central Railway**, who had always been happily ready to put the study material on the computer. The present work of mine was not possible to be presented in the present form without these two friends of mine. I am also thankful to **Mrs Maya Mahendra Shirke and Mr Sajal Kumar**, who helped me a lot at home, when I was writing the initial papers of the present work of study.

I am also sincerely thankful to all my other Gurus, Ustaads, friends, who have helped and supported me in completion of my study directly or indirectly.

Lastly, I am thankful to my wife Mrs Sadhana Khera Mittal and my two sons Shaival Mittal & Atishay Mittal, who had always supported and encouraged me to carry out this study, which was very huge to me in terms of energy and time required. I know that at times it was at the cost of them all that I did various efforts to complete the present work of study but, I am extremely thankful to them that they had never complained about the same and always extended their helping hand to me smilingly.

Above all I am thankful to the almighty, who had given me the courage to take up the present work, which is totally different from my basic trade which was Electronics Engineering so far. Only he will decide whether the work is completed or it is just a beginning.

Praveen Kumar Mittal