



Acknowledgments

At this very important juncture of my life, when I am submitting my Ph.D. thesis, I would like to express my gratitude to all those who have supported me in many ways to make this dream a reality.

As rightly described in the Sanskrit *sloka*, mentioned below, the teacher (*Guru*) is considered equivalent to GOD. Hence, along with the god almighty, I would like to acknowledge the contributions of my Gurus before anyone else

गुरु ब्रह्मा गुरु विष्णु गुरु देवो महेश्वरः
गुरु साक्षात् परम ब्रह्मा तस्मै श्री गुरवे नमः

I feel myself blessed with three of great professors who have guided me throughout this process in various ways.

First of them, I would like to express my deep sense of gratitude to my guide Prof. V. D. Pathak for accepting me as his Ph.D. student and giving me enough confidence to practice his great philosophy of life which is captured in the following lines :

श्रद्धा ज अमारी मंजीवे वरि जरि
रस्तो भूखी जयां तो दिशाओ इरी जरि

My will/self confidence took me to the destination,
If I missed the route, the directions have changed themselves.

He has always been a source of inspiration in academic, personal and professional life. Despite of his great knowledge and recognition among peers across the globe, he is always down to earth and ready to clear any doubts at any time. His constructive criticism and comments have improved my knowledge to a great extent. I thank him from the bottom of my heart for all the support and guidance he has extended to me.

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The meaning of the following *shloka*

जननि जन्मभूमिश्च जाह्नवीश्च जनार्दनः।
जनकः पञ्चमश्चैव जकाराः पञ्च दुर्लभाः॥

Janani(Mother), *Janmbhumi*(Mother land), *Jahnavi*(River Yamuna), *Janardana*(Lord Krishna), *Janak*(Father) are five J's which are rare to find match of.

has been realized in my life. Not only my parents, but also my grand parents have played a major role in nurturing me to be what I am now. My grandfather who was a great teacher while living and even after his death (he donated his body for students of medical college), taught me to dream big. His words inspire me even now. My parents are the ones who supported me to make the dreams, like this one, which I saw with help of my grand father come true. They kept me away from all the social and financial responsibilities so that I can pursue my dreams and realize them. A big chunk of credit for my success goes to this set of people in my family.

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