



DEDICATED TO

---

**My**

***Beloved Parents***



## DECLARATION

I hereby declare that the thesis entitled, “**Chemical synthesis of extremely thin film consisting of nanoparticles onto TiO<sub>2</sub> and their light sensitization for solar cell applications**” submitted for the award of degree of Doctor of Philosophy (Ph.D.) in Physics under the faculty of science at North Maharashtra University, Jalgaon is completed and written by me, has not previously formed the basis for the award of any degree or diploma or other similar title of this or any other University in India or any other country or examining body to the best of my knowledge.

**Place:** Jalgaon

**Research Scholar**

**Date:**

**(Mr. Dipak Bharat Salunkhe)**

# North Maharashtra University



Grade-B (2.88)  
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## Department of Physics

### Certificate

This is to certify that the thesis entitled "**Chemical synthesis of extremely thin film consisting of nanoparticles onto TiO<sub>2</sub> and their light sensitization for solar cell applications,**" which is being submitted herewith for awarding the degree of **Doctor of Philosophy (Ph.D.) in Physics**, under the faculty of science at North Maharashtra University, Jalgaon, is the result of original work completed by **Mr. Dipak Bharat Salunkhe** under our supervision and guidance. To the best of our knowledge the work embodied in this thesis has not been formed earlier on basis for the award of any degree or similar of this title in other university. Materials obtained from other sources have been duly acknowledged.

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**Date:**

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# ACKNOWLEDGMENTS

Working on the Ph.D. has been a wonderful and often overwhelming experience. It is hard to say whether it has been grappling with the topic itself which has been the real learning experience with how to write papers and proposals, work in a group, stay up until the birds start singing and stay focus. In any case, I am indebted to many people for making the time working on my Ph.D. an unforgettable experience.

First of all, I would like to express my gratitude to my supervisor and guide, Dr. B. R. Sankapal, whose expertise, understanding, and patience, added considerably to my post graduate experience. He provided me with direction, psychological support and became more of a mentor and friend, than a professor. I appreciate his vast knowledge and skill in many areas (vision, aging, ethics, interaction with participants) and his assistance in writing reports and this thesis, which have on occasion made me "GREEN" with envy.

A special thanks goes to Dr. J. V. Sali, Co-guide and Head Department of Physics, North Maharashtra University, Jalgaon, without whose motivation and encouragement, I would not have considered a career in research.

My sincere appreciation to Prof. P. P. Patil, Director, Department of Physics, North Maharashtra University, Jalgaon for their encouragement and for providing me well furnished laboratory. Also, all of my teachers, Dr. S. T. Bendre, Dr. R. B. Gore, Mr. S. S. Ghosh, Dr. V. P. Shinde and all non teaching staff for their help and encouragement during my research work.

My special thanks goes to Dr. J. B. Zhang, Dr. W. W. Tan from China, Dr. D. P. Dubal, Dr. K. V. Gurav, Dr. J. H. Kim, W.B. Kim from South

Korea and Dr. V. Gupta, Dr. S. Chand from New Delhi (India) for their support in characterization of my samples and providing important references throughout my research.

I am grateful to my colleagues, Dr. Prashant. Baviskar, Dr. Ravindra Ladhe, Mrs. Pratibha didi, Ganesh Lonkar, Dr. Yogesh Chaudhari, Mr. Deepak Marathe, N. B. Sonawane, Anil khairnar, Ulhas Sonawane, Yougesh Mhaisagar, Mrunal Mahajan and all other research scholars of the Physics and Electronics Department for their constant support and co-operation during my research work. I also would like to extend my thanks to all my friends and my juniors who helped me with all possible ways during my work.

The thanks are reserved to the Department of Atomic Energy (DAE) - Board of Research in Nuclear Sciences (BRNS), Mumbai for awarding the Junior and Senior Research Fellowships during the course of my work.

I wish to express my deep sense of appreciation towards Mrs. Sunita Sankapal Madam for her homely behavior at every moment of my Ph. D. study. She was always there to help and encourage me so that I could resume my confidence in spite of frustrations and continue to work. A special thanks to Balaji and Eshwari for their love.

My heartfelt gratitude goes to my father Dr. Bharat, my mother Sunanda and beloved brother Umesh for their constant support and encouragement rendered and their love and affection towards me to sail through the difficulties to bring me at this position.

Place: Jalgaon

Date:

Mr. Dipak Bharat Salunkhe

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