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I, **Uma Shankar**, a research scholar under the supervision of **Dr. Akhilesh Kumar Singh**, Associate Professor, School of Materials Science and Technology, Indian Institute of Technology, Banaras Hindu University give undertaking that the thesis entitled “**Crystal Structure, Phase Coexistence and Phase Transitions in Nanocrystalline  $R_{0.5}A_{0.5}MnO_3$  (R=La, Nd, Sm and A=Ca, Sr) Perovskites**” submitted by me for the degree of **Doctor of Philosophy** is a record of first-hand research work done by me during the period of study.

I avail myself to responsibility such as an act will be taken on behalf of me, mistakes, errors of facts, and misinterpretations are of course entirely my own.

Date.....

Place: Varanasi

(Uma Shankar)



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SCHOOL OF MATERIALS SCIENCE AND TECHNOLOGY  
भारतीय प्रौद्योगिकी संस्थान  
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Tel.: +91-9415619018; दूरभाषसंख्या: ९४१५६१९०१८; Fax: +91-542-2368428; फैक्ससंख्या: ९१-५४२-२३६८४२८; E-mail: aksingh.mst@itbhu.ac.in

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वाराणसी-221005, भारत  
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VARANASI-221005,

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Tel.: +91-542-6702741; दूरभाषसंख्या: ९१-५४२-६७०२७४१; Fax: +91-542-2368428; फैक्ससंख्या: ९१-५४२-२३६८४२८; E-mail: coordinator.mst@itbhu.ac.in

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Candidate's Name: **Uma Shankar**

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