Declaration by the Candidate

I hereby declare that the work embodied in the present thesis "Study of nuclear reactions for structural materials and investigation of reactor shielding" has been carried out by me under the supervision of Prof. Surjit Mukherjee. This work has been carried out in the Department of Physics, Faculty of Science, The Maharaja Sayajirao University of Baroda, India, approved by Council of Post-Graduate Studies and Research and in active collaboration with Bhabha Atomic Research Centre (BARC), Mumbai, India and Tata Institute of Fundamental Research (TIFR), Mumbai, India and Defence Laboratory Jodhpur (DLJ), Jodhpur, Rajasthan.

I have put in more than two years of attendance with the supervisor at the university. I further declare that to the best of my knowledge neither this thesis nor any part thereof has been submitted for any degree whatsoever.

Date: 18/11/2021

(Bhargav Kamleshbhai Soni)

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