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## **CERTIFICATE**

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It is certified that the work contained in the thesis titled “*Controlled Magnetic Hyperthermia using  $M_xFe_{3-x}O_4$  ( $M = Zr, Hf, Al, Zn$  or  $Li$ ) nanoparticles*” by “*Manas Srivastava*” has been carried out under our supervision and this work has not been submitted elsewhere for a degree.

It is further certified that the student has fulfilled all the requirements of Comprehensive, Candidacy and SOTA.

**Dr. N. K. Prasad**  
(Supervisor)

**Prof. R. K. Mandal**  
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