



J.C. Bose University of Science and Technology, YMCA, Faridabad
(A Haryana State Government University)
(Accredited 'A+' grade by NAAC)

Department of Physics

Certificate

This is to certify that **Megha Sardana** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752001** has successfully completed the sixth month project under the title **Green synthesis: Harnessing neem power for making silver nanoparticles** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Aanchal wadhwa** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752002** has successfully completed the sixth month project under the title **High energy storage capacity of mxenes** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Aarti** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752003** has successfully completed the sixth month project under the title **Comprehensive analysis of magnetic properties in bismuth ferrite and cobalt hexaferrite composite multiferroic ceramics** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Chanchal** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752007** has successfully completed the sixth month project under the title **Variation of band gap in CeO₂ using quantum espresso** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Jaishree Jainth** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752010** has successfully completed the sixth month project under the title **Synthesis and characterisation of Bismuth Telluride by thermal evaporation** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Jyoti** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752011** has successfully completed the sixth month project under the title **Synthesis of cerium oxide nanoparticles and characterization** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Kajal** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752012** has successfully completed the sixth month project under the title **Sodium - ion battery reviewing past , present and future aspects** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Kajal Adhana** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752013** has successfully completed the sixth month project under the title **Black hole - past, present and future aspects** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Kalpana bhardwaj** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752014** has successfully completed the sixth month project under the title **Microstrip patch antenna application textile antenna** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Kanak** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752015** has successfully completed the sixth month project under the title **Review on acclerating expansion of universe** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Kanika** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752016** has successfully completed the sixth month project under the title **Czts based heterostructure diode fabrication and characterization** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Kanika** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752017** has successfully completed the sixth month project under the title **Non-linear wave interaction in ionosphere** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Kanika Garg** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752018** has successfully completed the sixth month project under the title **UV-Visible spectroscopy** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Kunika goyal** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752020** has successfully completed the sixth month project under the title **Structural analysis of multiferroic composite materials** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Lisha Yadav** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752021** has successfully completed the sixth month project under the title **Biodegradable plastic from Algae** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Mamta** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752022** has successfully completed the sixth month project under the title **Variation in band gap by using quantum espresso** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **MANISHA BHARDWAJ** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752023** has successfully completed the sixth month project under the title **MAGNETOELECTRIC PROPERTIES EVOLUTION IN COMPOSITE MULTIFERROICS CERAMICS BASED ON FERRITE AND COBALT HEXAFERRITE** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia

(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **MANSI VATS** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752025** has successfully completed the sixth month project under the title **A theoretical study of the interferometric fiber sensor** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



J.C. Bose University of Science and Technology, YMCA, Faridabad
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Department of Physics

Certificate

This is to certify that **Monica** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752026** has successfully completed the sixth month project under the title **Transition metal based electro catalysts for alkaline water splitting for oxygen evolution reaction** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Neetu** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752027** has successfully completed the sixth month project under the title **Synthesis and characterization of Magnetite Nanoparticles by coprecipitation method and its application in removal of heavy metals from wastewater** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Neha** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752028** has successfully completed the sixth month project under the title **Al/czts schottky-diode** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **NIKKU MAHALA** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752029** has successfully completed the sixth month project under the title **DYE SENSITIZED SOLAR CELLS : FUNDAMENTALS AND MODELING** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Pragya Dangwal** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752030** has successfully completed the sixth month project under the title **Synthesis and characterisation of Germanium Antimony Telluride** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Preeti** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752032** has successfully completed the sixth month project under the title **Dielectric properties of bismuth ferrite and copper ferrite** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Rakesh Kumar** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752034** has successfully completed the sixth month project under the title **Study of X-Ray Diffraction Technique** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Rishant** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752035** has successfully completed the sixth month project under the title **Black hole , Singularity and Galaxy formation** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Ritika kaushik** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752036** has successfully completed the sixth month project under the title **Recycling of lithium ion battery** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Saloni choudhary** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752037** has successfully completed the sixth month project under the title **Theoretical Study of Manufacturing and Fabrication of Nitinol alloy and its use in Variable Geometry Chevron for Jet Noise Reduction** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Sanjana** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752038** has successfully completed the sixth month project under the title **Role of MXenes in different applications** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



J.C. Bose University of Science and Technology, YMCA, Faridabad
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Department of Physics

Certificate

This is to certify that **SHASHI PRABHA** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752039** has successfully completed the sixth month project under the title **Synthesis and characterization of cerium dioxide** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Shruti Sharma** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752040** has successfully completed the sixth month project under the title **Czts based thin film solar cell fabrication and characterization** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



J.C. Bose University of Science and Technology, YMCA, Faridabad
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Department of Physics

Certificate

This is to certify that **Shruti chhawari** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752041** has successfully completed the sixth month project under the title **Rotational tokamak plasma** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Shruti** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752042** has successfully completed the sixth month project under the title **Stellar Evolution** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



J.C. Bose University of Science and Technology, YMCA, Faridabad
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Department of Physics

Certificate

This is to certify that **Sikha** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752043** has successfully completed the sixth month project under the title **Variation of band gap of CeO₂ when doped with Sm** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Sujal Yadav** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752045** has successfully completed the sixth month project under the title **Mxenes-A 2D material and its application in photocatalysis** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Tanu** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752046** has successfully completed the sixth month project under the title **Synthesis and characterization of CZTS nanoparticles as thermoelectric material** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



J.C. Bose University of Science and Technology, YMCA, Faridabad
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Department of Physics

Certificate

This is to certify that **Upasana Singh** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752047** has successfully completed the sixth month project under the title **Aluminium ion battery** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Urmila** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752048** has successfully completed the sixth month project under the title **Lead acid battery** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



J.C. Bose University of Science and Technology, YMCA, Faridabad
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Department of Physics

Certificate

This is to certify that **Vivek Gupta** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752049** has successfully completed the sixth month project under the title **Synthesis Time and Temperature Effects on Magnetoelectric Properties of Bismuth Ferrite and Cobalt Hexaferrite Composite Multiferroic Ceramics** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Vivek Kumar** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752050** has successfully completed the sixth month project under the title **MONO CRYSTALLINE SOLAR CELL** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **Yogita** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752051** has successfully completed the sixth month project under the title **Vacuum Pumping system for various potential applications** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)



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Department of Physics

Certificate

This is to certify that **YUKTI** a student of M.Sc. (Physics) session 2022-2024 under the Roll No. **22001752052** has successfully completed the sixth month project under the title **STUDY OF ENERGY GAP FOR SUPERCONDUCTORS** in fulfilment of M.Sc. Degree in Physics in J.C. Bose University of Science and Technology, YMCA, Faridabad.

Dr. Sonia
(Chairperson, Physics)