

**“ENVIRONMENT FRIENDLY SOLAR VEHICLE”**

*A Thesis Submitted  
in partial fulfillment of the requirement for the Degree of*  
**MASTER OF TECHNOLOGY**

**IN  
MECHANICAL ENGINEERING  
BY**

**VIKAS TRIVEDI**

**ROLL No.- 191030212004**

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**Under the Supervision of**

**Dr. GAURAV YADAV**

**ASSOCIATE PROFESSOR OF DEPARTMENT  
OF MECHANICAL ENGINEERING**



**DEPARTMENT OF MECHANICAL ENGINEERING**

**J.S. UNIVERSITY**

**5KMS. MILE STONE, MAINPURI ROAD SHIKOHABAD, FIROZABAD (U.P.)**

**(Session: 2019 - 21)**

**J.S. UNIVERSITY SHIKOHABAD, FIROZABAD**  
**DEPARTMENT OF MECHANICAL ENGINEERING**



**CERTIFICATE**

Certified that VIKAS TRIVEDI has carried out the research work presented in this Thesis entitled "ENVIRONMENT FRIENDLY SOLAR VEHICLE" for the award of **Master of Technology in Mechanical Engineering** from J.S. University, Shikohabad under my supervision. The Thesis embodies result of original work and studies carried out by Student himself and the contents of the Thesis do not form the basis for the award of any other degree to the candidate or to anybody else.

Dr. Gaurav Yadav  
Supervisor  
Associate Professor  
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Mr. Jitendra Kumar  
Assistant Professor & Head of  
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J.S. University, Shikohabad

**J.S. UNIVERSITY SHIKOHABAD, FIROZABAD**



**J. S. UNIVERSITY, SHIKOHBAD, FIROZABAD, U.P.**

**A**

**DISSERTATION REPORT**

**ON**

**Based on Shock Absorber, Solar Panel, Sound & Wind Energy**

Submitted in partial fulfillment of the requirement for the award of Degree of

**MASTER OF TECHNOLOGY**

**IN**

**MECHANICAL ENGINEERING**

**Under the Supervision of**

**Mr. Jitendra Kumar**  
**ASSISTANT PROFESSOR**



**SUBMITTED BY-**

**GAURAV KUMAR**  
**Roll No.- 191030212001**

**(Session: 2020-2021)**



# J. S. UNIVERSITY, SHIKOHBAD, FIROZABAD, U.P.



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## CERTIFICATE

This is to certify that thesis entitled, “ Based on Shock Absorber,Solar Panel,Sound & Wind Energy” submitted by **MR. ARUN KUMAR** in the partial fulfillment of the requirement for the award of Master of Technology in Mechanical Engineering during the session of 2020-2021 in the department of Mechanical Engineering Shikohabad (Uttar-Pradesh).

It is authenticate work carried out by him under my supervision and guidance. To the best of my knowledge, the matter embodied in this thesis has not submitted to any other University/ Institute for award of any Degree or Diploma.

Mr. Jitendra Kumar  
Assistant Professor  
Department of Mechanical Engineering  
J S UNIVERSITY SHIKOHABAD



**J. S. UNIVERSITY, SHIKOHBAD, FIROZABAD, U.P.**

**A**

**DISSERTATION REPORT**

**ON**

**Environment Friendly Solar Vehicle**

Submitted in partial fulfillment of the requirement for the award of Degree of

**MASTER OF TECHNOLOGY**

**IN**

**MECHANICAL ENGINEERING**

**Under the Supervision of**

**Mr. Sanjeev Kumar Verma**  
**ASSISTANT PROFESSOR**



**SUBMITTED BY-**

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(Session: 2020-2021)



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**CERTIFICATE**

This is to certify that thesis entitled, “ Environment Friendly Solar Vechicle” submitted by **MR. MANOJ KUMAR YADAV** in the partial fulfillment of the requirement for the award of Master of Technology in Mechanical Engineering during the session of 2020-2021 in the department of Mechanical Engineering Shikohabad (Uttar-Pradesh).

It is authenticate work carried out by him under my supervision and guidance. To the best of my knowledge, the matter embodied in this thesis has not submitted to any other University/ Institute for award of any Degree or Diploma.

Mr. Sanjeev Kumar Verma  
Assistant Professor  
Department of Mechanical Engineering  
J S UNIVERSITY SHIKOHABAD



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**A**

**DISSERTATION REPORT**

**ON**

**Mechanical Design and Analysis: High-Precision Microcontact Printhead  
for Roll-to-Roll Printing of Flexible Electronics**

Submitted in partial fulfillment of the requirement for the award of Degree of

**MASTER OF TECHNOLOGY**

**IN**

**MECHANICAL ENGINEERING**

**Under the Supervision of**

**Mr. KAUSHALENDRA YADAV  
ASSISTANT PROFESSOR**



**SUBMITTED BY-**

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**J. S. UNIVERSITY, SHIKOHBAD, FIROZABAD, U.P.**



**CERTIFICATE**

This is to certify that thesis entitled, “ Mechanical Design and Analysis: High-Precision Microcontact Printhead for Roll-to-Roll Printing of Flexible Electronics” submitted by **MR. DIXIT KUMAR** in the partial fulfillment of the requirement for the award of Master of Technology in Mechanical Engineering during the session of 2020-2021 in the department of Mechanical Engineering Shikohabad (Uttar-Pradesh).

It is authenticate work carried out by him under my supervision and guidance. To the best of my knowledge, the matter embodied in this thesis has not submitted to any other University/ Institute for award of any Degree or Diploma.

Professor

Mr. KAUSHALENDRA YADAV  
Assistant

Department of Mechanical Engineering  
J S UNIVERSITY SHIKOHABAD





**J. S. UNIVERSITY, SHIKOHBAD, FIROZABAD, U.P.**

**A**

**DISSERTATION REPORT**

**ON**

**Extensional-flow-induced Crystallization of Polypropylene**

Submitted in partial fulfillment of the requirement for the award of Degree of

**MASTER OF TECHNOLOGY**

**IN**

**MECHANICAL ENGINEERING**

**Under the Supervision of**

**Mr. Harshit Dixit**  
**ASSISTANT PROFESSOR**



**SUBMITTED BY-**

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This is to certify that thesis entitled, “ Extensional-flow-induced Crystallization of Polypropylene” submitted by **MR. RITESH GIRI** in the partial fulfillment of the requirement for the award of Master of Technology in Mechanical Engineering during the session of 2020-2021 in the department of Mechanical Engineering Shikohabad (Uttar-Pradesh).

It is authenticate work carried out by him under my supervision and guidance. To the best of my knowledge, the matter embodied in this thesis has not submitted to any other University/ Institute for award of any Degree or Diploma.

Mr. Harshit Dixit  
Assistant Professor  
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**DISSERTATION REPORT**

**ON**

**Advanced Blade Testing Methods for Wind Turbines**

Submitted in partial fulfillment of the requirement for the award of Degree of

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**IN**

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**Under the Supervision of**

**Mr. RamManohar Singh Yadav**  
**ASSISTANT PROFESSOR**



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(Session: 2020-2021)



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**CERTIFICATE**

This is to certify that thesis entitled, “ Advanced Blade Testing Methods for Wind Turbines” submitted by **MR. KARAN KUMAR SINGH** in the partial fulfillment of the requirement for the award of Master of Technology in Mechanical Engineering during the session of 2020-2021 in the department of Mechanical Engineering Shikohabad (Uttar-Pradesh).

It is authenticate work carried out by him under my supervision and guidance. To the best of my knowledge, the matter embodied in this thesis has not submitted to any other University/ Institute for award of any Degree or Diploma.

Professor

Mr. RamManohar Singh Yadav  
Assistant

Department of Mechanical Engineering  
J S UNIVERSITY SHIKOHABAD



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