A Seminar Report on

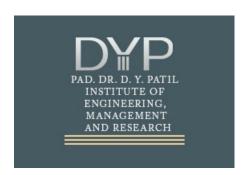
# Advanced Automation in Agriculture - Lateral Move Irrigation Machines

By

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K.K.Wagh Institute of Engineering Education Research

# **CERTIFICATE**

This is to certify that Ms. Mrunalini Vijay Patil, has successfully com-

| ntomation in Agriculture - Lat-<br>pervision, in the partial fulfilment of<br>g, by the University of Pune. |
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Seal

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#### Nomenclature

A = nozzle cross-sectional area

H = nozzle height

M = Mach number

 $NPR = nozzle pressure ratio, P_0/P_a$ 

P = pressure

 $P_0$  = total pressure at the nozzle inlet

T = temperature

u,v,w = velocity components

x = axial direction

y = normal direction

 $\gamma = {
m ratio}$  of specific heats

 $\theta = \text{flow angle}$ 

 $\mu = \text{viscosity}$ 

 $\varphi = \text{shock angle}$ 

a = ambient

c = centerline

e = nozzle exit

t = throat

#### The University of Pune

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#### Abstract

ABSTRACT OF YOUR SEMINAR WORK GOES HERE

### 1 Introduction

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### $1.1 \quad \textbf{Scope \& Methodology}$

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## 2 Literature Review

The review should be conducted from at least five research papers published during last five year.

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# 3 Case study

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#### 4 A Sample Section

#### 4.1 Title of Sample Subsection

For a figure sample with caption and proper reference, see Figure 1 as adopted from [1]. The figure number and reference numbers are automatically generated in a chronological order by LATEX.

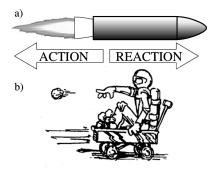


Figure 1: Here Goes Your Figure's Caption.

A sample equation is written as:

$$F_m = \frac{dm}{dt}v_e = \dot{m}v_e \tag{1}$$

where m is the mass flow rate and v e is the exit or exhaust velocity of the propellant.

An another sample equation can be expressed as

$$F_m = \dot{m}v_e + (P_e - P_a)A_e \tag{2}$$

where  $p_e$  and  $A_e$  are the pressure and cross section area at the nozzle exit, and  $p_a$  is the ambient pressure.

# 5 Conclusion

CONCLUSION, IF ANY.

## 6 Future Work

FUTURE WORK, IF ANY

### References

- [1] Humble R W, Henry G N and Larson W J (1995), Space propulsion analysis and design, McGraw-Hill, Inc., ISBN-0-07-031329-6.
- [2] Author First, Author Second *Title of the paper* Name of Journal Pagenumbers, Month Year.
- [3] Sadeghi, M., Yang, S., Liu, F., and Tsai, H. M., Parallel Computation of Wing Flutter with a Coupled Navier-Stokes and CSD Method AIAA Paper 2003-1347, 2003.