

# Project Report Title

A concise subtitle if needed

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## Abstract

This report presents [brief background], the aim of the project [objective], methodology used [methods], and a summary of the findings [key results]. The significance of the results is discussed with respect to [context/impact].

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## 1 Introduction

Brief overview of the theoretical background and relevance of the work. State the objective of the project clearly. If applicable, define a hypothesis or scientific question.

## 2 Required Equipment and Materials

### 2.1 Equipment

Table 1: List of Equipment

Device	Model	Manufacturer	Function
Spin Coater	KW-4A	Chemat	Thin film deposition
Oven	Memmert ULE 400	Memmert	Thermal treatment
Multimeter	Fluke 115	Fluke	Electrical measurements

### 2.2 Ingredients / Materials

Table 2: Materials and Chemicals

Name	Purity / Grade	Supplier	Role
Ethanol	99.9%	Sigma-Aldrich	Solvent
Silicon Wafer	p-type, <100>	Wafer World	Substrate
PEDOT:PSS	1.3 wt% dispersion	Heraeus	Conductive layer

### 3 Preparation

Describe any preparatory steps, such as:

- Cleaning of substrates using solvents
- Preheating or calibration of equipment
- Solution preparation or mixing ratios

### 4 Process / Experimental Procedure

Outline each step of the main experimental process. Include:

- Temperatures and durations
- Concentrations and volumes
- Equipment settings and sequences

### 5 Characterisation Techniques

#### Scanning Electron Microscopy (SEM)

**Instrument:** Zeiss Sigma 300

Used for surface morphology imaging. Operated at 5–10 kV.

#### X-ray Diffraction (XRD)

**Instrument:** Bruker D8 Advance

Used to determine crystalline structure. Scanned from  $10^\circ$  to  $80^\circ$  in  $2\theta$ .

### 6 Results and Discussion

Include figures, graphs, or tables of results:

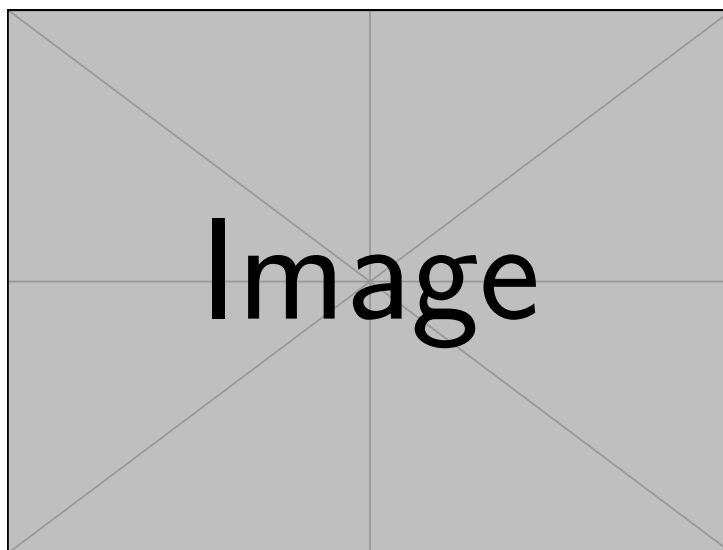


Figure 1: Example result: surface morphology at 10kV SEM

Discuss trends, anomalies, and how the results align with expectations or literature.

## **7 Conclusions**

Summarise:

- Main findings
- Whether objectives were met
- Any limitations or sources of error
- Suggestions for improvement or further research

## **References**

- J. Smith et al., *Journal of Applied Physics*, 2022, 120(3), 1234.
- Equipment manuals and data sheets
- Scientific articles, standards

## **Appendix**

Include raw data, code, calculations, or safety data sheets.