

Laboratory course report **Application of Raman spectroscopy**

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1 Introduction

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The assignment, description of the equipment and procedure and further details about the Lab Course are described in the given handbook [1].

2 Theoretical basics

The following theoretical basics are summarized from the standard literature in optics [2]–[5] and more specifically Raman application [6], [7].

- 2.1 Molecule light interactions
- 2.2 Scattering effects
- 2.3 Measurement of different phisical properties RAMAN spectroscopy

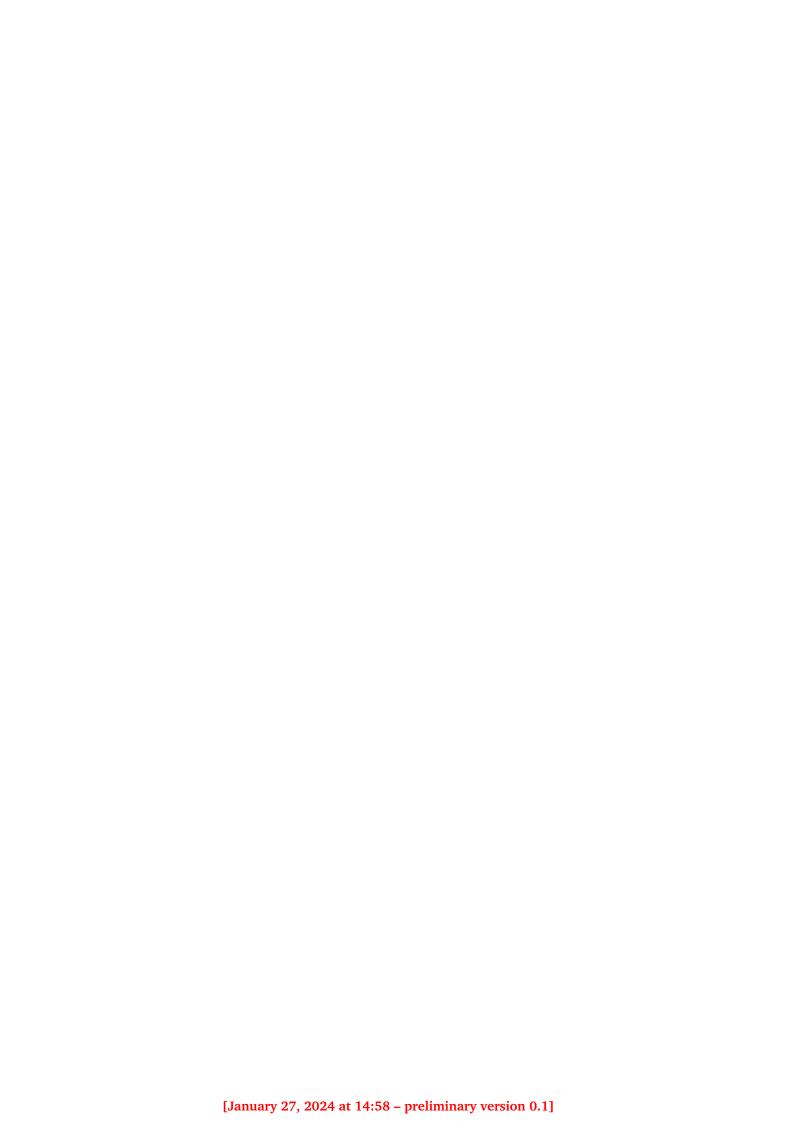
3 Experimental setup

- 3.1 Used equipment
- 3.2 Measurement setup and preparations
- 3.3 Expectations
- 3.4 Execution

4 Results

- 4.1 Data presentation and preparation
- 4.2 Evaluation
- 4.3 Error discussion

5 Summary



Acronyms

SG synchronous generator

Symbols

Complete list of Symbols

 $H_{
m gen}$ s inertia constant of a synchronous generator (SG)

P W Power; electrical or mechanical

[MK1]: Up-date page numbering post-sections; special attention to left/righ page issues

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