

Guidelines
for the preparation of reports for the short
experiments and the technological work

1 General guideline

1.1 Writing the report

The report guidelines follow the latest rules for writing a research paper. The following points should be taken into account while writing:

1) Tables are continuously numbered and **the caption** is **above** the table.

2) Figures are continuously numbered and **the caption** is **below** the figure.

Both the caption for tables and figures should clearly and adequately describe the table or figure, respectively.

3) The symbols and units are applied accordingly to the book “Quantities, units and symbols”, I. Mills, T. Cvitas, K. Homann and K. Kuchitsu, Blackwell Scientific Publication.

The book is available in the Chemistry Library.

The essential points are:

- physical dimensions are written in italic fonts
- units are written in normal fonts
- axis labels are indicated as following: *physical dimension* / unit
e.g. T / K or σ / MPa
- units can be separated as following: MPa s^{-1} or Kg m/sec^2
- numerical values and units are separated by a spacing; mA and m A represent different units! It is advisable the use of “non-breaking space”: Strg+Shift+Space.
- superscript and subscript letters are written in italic fonts; when superscript or subscript letters refer to a physical symbol, they are written in normal fonts
- numerical values are written as following: 1 000 000.00; the decimal point is used instead of the comma
- symbols and units must be used in a consistent manner in the entire report

1.2 Figures

A graph made in Microcal Origin is shown as an example. After the graph is in the final form, it should be inserted in the report.

The font used is Times New Roman. The axis labels are 36 pt, and the numerical values on the axis are 28 pt.

Apply for the axis the following conditions: Thickness: 2, Major and Minor ticks: IN, Grid lines: opposite.

In the case of x-ray diffractograms, all phases should be assigned and graphically illustrated. Figure 1 shows a collection of x-ray diffractograms.

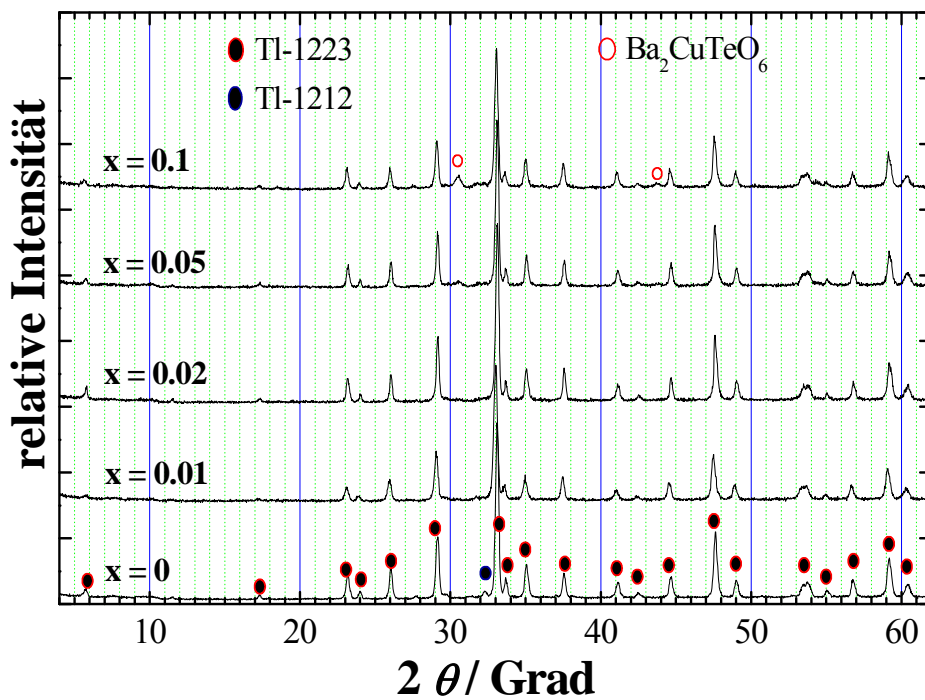


Figure 1: Collection of x-ray diffractograms from $\text{Tl}_{0.56}\text{Pb}_{0.5-x}\text{Te}_x\text{Sr}_{1.7}\text{Ba}_{0.3}\text{Ca}_2\text{Cu}_3\text{O}_y$

In some cases, it is necessary that the Miller indexes (h k l) of the diffraction lines are also indicated.

1.3 Tables

As already described in chapter 1.1, tables are continuously numbered and **the caption is above** the table. An example of such table is shown bellow:

Table 1: Calculated and real weight quantities of the reactants for the undoped $\text{Sr}_{1.7}\text{Ba}_{0.3}\text{Ca}_2\text{Cu}_3\text{O}_y$ material precursor.

Reactants	M / g mol ⁻¹	Desired weight / g	n / mol	Real weight / g
Ba(CH ₃ COO) ₂	255.43	1.277	5.000	1.277
SrCO ₃	147.63	4.182	28.333	4.182
CaCO ₃	100.09	3.336	33.333	3.336
Cu(CH ₃ COO) ₂ · H ₂ O	199.65	9.982	49.999	9.982
Malic acid	134.09	1.579	11.779	1.579

1.4 Format and character style

Writing program: Winword

Character style: Times New Roman 12 pt

Chapter title: 14 pt bold

Following sub-tiles: 12 pt bold

Captions of tables/figures: Times New Roman 12 pt

Spacing: 1.5 rows

Margins: right and left 2.5 cm

top 3 cm

bottom 2.5 cm

Justify

Page numbers are on top of the page, in the center.

References: All authors should be cited. References that contain *et al* are not allowed.

1.5 Model for the first page

Report for the technological work

Work topic

Prepared in winter semester / summer semester 20..
at Institut für Chemische Technologie Anorganischer Stoffe
from Johannes Kepler Universität Linz

Author: Name / Family name

Studienkennzahl, Matrikelnummer

1.6 The layout of the reports is based on the following table of content

1 Presentation of the topic

not more than one page

2 Introduction

3 Experimental part

4 Results

5 Discussion

6 Conclusions

not more than one page

7 References

Example for the reference details:

The reference citations should appear in squared brackets in the text, as well as in the list of references. Every reference has only one number, without multiple numbering of the same reference.

[1] Authors, Title of the work, Name of the journal abbreviated as in Chemical Abstract Service (*italic*), Volume (**bold**), year between parentheses, first page – last page.

Example:

[1] W. T. König und G. Gritzner, Microstructure and Properties of Textured Bulk Phase Tl(Bi)-1223 Superconductors, *Physica C*, **294** (1998) 225 – 232

[2] Books: Author, Title, chapter, publishing house, publication year, page(s)

General suggestion:

Do not write literature citation in superscript and in the table of content.

1.7 Attachment

In case there is a large amount of results or too many figures, it is better place them in the attachment in order not to disrupt the continuity of the report.

2 Report corrections

2.1 Report for the short experiments

The reports for the short experiments are corrected by the advisor. The reports must be improved by the student and resubmitted to the advisor in the corrected version.

2.2 Report for the technological work

The reports for the technological work are corrected by Prof. Hassel and the laboratory leader. The report must be improved by the student and resubmitted in the corrected version.

2.3 Correction marks used

∨	superscript
∧	subscript
#	space
δ	leave out
¶	break
⊥ ⊥	mistake
Y ¥	insert
∩	connect
∪	connect
[shift to the left side
]	shift to the right side
–	italic
~	bold
∩ U	turn around
/	lower case
≡	capital letter
	perpendicular