

Lab reports, references, correct word order to make the phrases [1-8]

References:

1. YDI339 Technical English For Chemical Engineers Ders Notları (2012)
2. Akar N. Z., Özkan Y., Tarhan Ş. (2005) "Language and Communication Skills After Graduation"
3. Öniz A.S. and Cross T.M. (1981)"Physical Science Reader Series" Volume I, Middle East Technical University Ankara, Turkey.
4. Glendinning E. and Mantell H., (1983), "Write Ideas", Longman Group Limited
5. Shreve N.R., Brink J. A. Jr. (1977),"Chemical Process Industries, Mc Graw-Hill, London
6. Shreve N.R., Brink J.A.Jr. (Çeviri: Çataltaş A.İ.), 1985 Kimyasal Proses Endüstrileri I, İnkilap Kitabevi, İstanbul
7. McCabe W.L., Smith J.C. and Harriott P., 1985, Unit Operations of Chemical Engineering, Mc.GrawHill Book Company, NewYork.
8. Kimya Mühendisliği Ünit Operasyonları, 1981, McCabe-Smith'den Çeviren: Prof. Dr. Emir Gülbaran, İ.T.Ü.Mühendislik Mimarlık Fakültesi Yayınları,sayı 137, Matbaa Tek. Koll. ŞTi, İstanbul

Sections in the lab report

Title

Abstract

Table of Contents

Introduction

Equipment and Procedure

Results and Discussion

Conclusions

Appendix:

Rewrite the sentences below with the correct word order to make the phrases.

experiment will depend performed.

on the experiment

The report for each

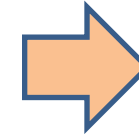


«The report for each experiment will depend on the experiment performed.»

come with a thorough instruction.

experiments already

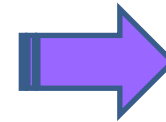
Some of the



Some of the experiments already come with a thorough instruction.

open-ended with no instruction.

Other experiments are



Other experiments are open-ended with no instruction.

experiments the report

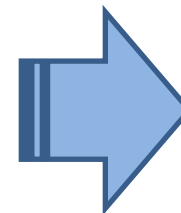
sections containing the

Results, Discussion, and

will consist of the

Conclusions.

For the first category of



For the first category of experiments the report will consist of the sections containing the Results, Discussion, and Conclusions.»[20]

Conclusions

Did the data match theory?

How do you explain any observed trends?

Were any correlations derived?

.....

«This should expand slightly on the conclusions you presented in your abstract, but should still only be only one to two paragraphs. Again, be sure that your conclusions are related to your stated objectives, and relevant for your chosen audience.»[20]

«Briefly state what conclusions can be drawn from the experiment. Some of these conclusions may simply be factual statements like: The efficiency increased as the agitator speed increased. However, you should also include some of your own opinions (for consideration by your supervisor) concerning the experiment. For example: The energy lost in the distillation column in heating the feed to a saturated liquid caused less methanol to be produced than indicated in the McCabe-Thiele analysis. Therefore, the feed should be preheated. This is a conclusion because you have decided (concluded) that one thing out of many potential causes produced a given effect.»[20]

[20] (1998, Chem. Eng. Dep't, University of Illinois at Chicago, All Rights Reserved)

Last update: 8/31/98

«Reference from a book:

McKinney M, Schoch R. 1998. Environmental science: systems and solutions. Sudbury (MA): Jones and Bartlett Publishers; 988p.

Authors; last name and initials – no periods, Publication year, Title of book, Where published, Publisher, # of pages in book

Chapter of an edited book:

Crabbé J, Barnola P. 1996. A new conceptual approach to bud dormancy on woody plants. In: Lang G., editor. Plant dormancy. Wallingford, Oxon (GB): CAB International; p. 83-113.»[18]

«From a journal

Smith AB, Jones CD, Banks EF. 1994. Effects of absenteeism on student grades in biology. American Journal of Biology Class Attendance 123(4): 19-23.

Authors and year of publication, Title of article, Name of journal, Volume (issue): pages in which article appears»[18]

Citations

«(Author(s), year of publication, page #)

If the source has a single author, then the citation is written as:

For example: (Smith, 1992, 97)

If the source has two authors, then the citation is written as:

For example: (Smith and Jones, 1997, 184)

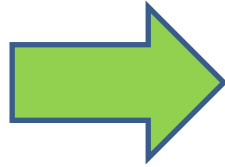
If the source has three or more authors, the abbreviation

‘et al.’ is used after the first author’s name:

For example: (Smith et al., 1997, 184)»[18]

Procedures section

«Sentences should be written in the third person passive voice.»[1,18]



“The number and width of tree rings were measured in cross-sections of 9 spruce trees.”

«All procedures should be presented clearly and accurately. The instructions of the lab manual should be rearranged to form well-structured paragraphs.» [1,18]

«Include all parts of the procedure that you performed, leaving out unnecessary, trivial details.»[1,18]

«Explain precisely how the data were collected.»[1,18]



“The width of the tree rings was measured in millimeters using calipers while viewing the tree sections under a microscope.”

«Explain how calculations were performed.»[1,18]



“The width of the tree rings was averaged for a 10 year span for all 9 trees.”

Results section

«**The scientific data is presented in this section.**

This includes both qualitative observations and quantitative measurements.

You should include any observations that have bearing on the interpretation of the results (interpretation of the data are presented in the Discussion section).

»[1,18]

TRANSLATIONS

«Refrigeration is the process of producing cold, particularly referring to cooling below atmospheric temperature. It is a vital factor in many chemical processes where cold or the removal of heat is necessary for optimum reaction control. Examples are the manufacture of azo dyes, the separation of an easily frozen product from liquid isomers or impurities, and the food and beverage industries. Further examples are the catalytic manufacture of ethyl chloride from liquid ethylene and anhydrous hydrogen chloride under pressure and at -50C, the production of “cold” rubber by polymerization at 410F or lower, and the freezing of mercury at -1000F into complex moulds which are coated by repeated dipping in a ceramic slurry, the mercury then being allowed to melt and run out. Refrigeration operations involve a change in phase in a body so that it will be capable of abstracting heat, exemplified by the vaporization of liquid ammonia and the melting of ice. Mechanical refrigeration can be divided into two general types: the compression system and the absorption system. Both systems cause the refrigerant to absorb heat at the low temperature by vaporization and to give up this heat at the higher temperature by condensation. The absorption system is used mainly in house-hold units, but it finds economical industrial application where exhaust steam is available.

An ammonia refrigerating plant is a typical illustration of the vapour-compression system. ...»[5-6]

«Soğutma, özellikle atmosfer temperaturünün altında soğutmayı kapsamak üzere, soğukluk üretim prosesidir. Optimum reaksiyon kontrolü için, soğukluğun elde edilmesi veya ısının uzaklaştırılması, pek çok kimyasal prosesde çok önemli bir faktördür. Yiyecek ve içki endüstrileri, kolayca donan bir ürünü sıvı haldeki yabancı maddelerden ve izomerlerden ayırma ve azo boyar maddelerinin üetimi buna örnektir. Basınç altında ve -50C da, sıvı etilen ve anhidr hidrojen klorürden etilen klorürün katalitik üretimi, +50C de veya daha düşük bir temperaturde yapılan polimerizasyon ile “soğuk” lastiğin üretimi, bir seramik çamuruna tekrar tekrar daldırılarak kaplanmış kompleks yapılı döküm kalıpları içerisindeki cıvanın -730C da dondurulması ve sonradan cıvanın eritilip akıtılması, diğer örnekleri oluşturur. Soğutma işlemlerinde, ısı atma (çıkarma) özelliğine sahip bir faz değişimi, yeralır. Örneğin amonyağın buharlaşması ve buzun erimesi gibi. Mekanik soğutma iki genel tipe ayrılabilir: bastırma (kompresyon) sistemi ve absorpsiyon sistemi. Her iki sistem de, soğutucu akışkanın (refrijerant) düşük temperaturde buharlaşma ile ısı absorplanması ve daha yüksek temperaturde, yoğunlaşma (kondenzasyon) ile bu ısıyı geri vermesi esasına göre çalışır. Absorpsiyon sistemi daha çok ev cihazlarında kullanılır, fakat çürük (egzost) buharın bulunabildiği yerlerde, endüstriyel uygulamaları da ekonomik olmaktadır.

Buhar-bastırmak sistemin tipik bir örneği, amonyak soğutmalı cihazdır.
.....»[5-6]

[5]Shreve N.R., Brink J. A. Jr. (Çeviri : Çataltaş A. İ.), 1985 Kimyasal Proses Endüstrileri I, İnkilap Kitabevi, İstanbul

[6]Shreve N.R., Brink J. A. Jr., 1977, Chemical Process Industries , Mc Graw-Hill, London