

Prescriptions for Kusaka Lab. –Year 2011

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1. Acquaintance with research

To start with, always keep these in mind and act in the right way: why you have joined Kusaka Lab., what you want to study / discover, and what kind of person you wish to become in the future. At the same time, be conscious of yourself not only as a researcher but also a proper student.

2. Research contents, secret classified, ethics

Through experiments, thermal / fluid / reactive theory (“transport theory” in general) and control theory, research is conducted mainly on to lower pollution and to increase efficiency of auto power system. Most of the experiments and calculation are delegated by the nation or corporations (designated research). Therefore, any information related to research (research directions and topics, equipments, simulation source code, etc.) must be strictly classified in the Lab. For inquiries from outside (including alumni), ask Dr. Kusaka. Especially about software licensing, you should never leak outside.

These years research ethics has been particularly rigorous. Needless to say, data forgery is illegal. Make sure to record the results on experiment notes and data sheets. The basics of science engineering is that other researchers can reproduce the verified experimental / calculation results. Only the data being able to be reproduced, by using the same device under the same situation on the record, is valuable. Furthermore, “Gift Author” (someone who actually is not the first author pretends to be the first one, or adding a non-contributive person to the author list) and plagiarism (presenting someone else’s data as one’s original) are strictly forbidden. Work on thesis and presentation based on the data you have gotten through your own experiments.

3. Experiment Room

Avail yourself of each area on the 1st floor, Bldg. #58. Follow instructions from Thermal Fluid Administration Office. Open hours are 9:00 – 17:00 (until 18:00 with submission of extension notice). During holidays, 9:00 – 17:00 (no extended hours admitted). For other facilities (Environmental Safety Center, Electric Lab, etc), follow instructions given by each office.

4. Laboratory

4.1 Open hours

In principle, our lab is open on Monday through Saturday, from 8:00 to 22:30. During the lock-out, visit General Affairs Office in Bldg. #51 to ask for a form to fill out. Have it stamped by Dr. Kusaka in advance and hand it in to the General Affairs Office. On holidays show your student ID at the portal to enter the campus.

4.2 Entering / Exiting Laboratories

(1) Main Lab, Shinjuku (Bldg. #58, Room #220) - Enter PIN code (4 digits) at the door. Lock the door when nobody will be left inside. To lock, touch a panel to light up, press E (Entry) button, and then pull down the door knob. Check it's locked with a noise before leaving. Along with it, make sure all the windows are closed and the gas is turned off at the main. Expectedly it is supposed to be turned off after each use. If the entry key gets broken, ask the guard at the portal to open the door with a master key.

(2) Branch Lab, Shinjuku (Bldg. #58, Room #228) – Anyone who comes first in the morning should take a key from the main lab and open the branch. Don't enter from Daisho Lab next door. As is the same as the main lab, lock the door when no one is going to be there. The last one to leave should lock the door and bring back the key to the main lab. To go into or out of the main lab, see (1) above.

(3) Lab, Honjo – Glass doors being closed at the entrance of IOCB Bldg, open the card reader cover in the wall and swipe your student ID. They will be unlocked with a noise. Find a key wall in the Bldg. B lobby, swipe your student ID to light up the Kusaka Lab panels (Room # B103, # B211), and press one of them to get a key. The other one can be provided in the same way. # B103 = key #53, # B211 = key #75. In the same way you do to Shinjuku labs, lock before leaving. When going to a class, the last person to leave is responsible for keeping the key. At the end of each day, check windows are closed, lock the door and return the key to where it was in the lobby.

4.3 To keep the lab clean

Organize your desk and around area. The rectangular table next to the sink is also used as a reception table, so it is supposed to be clean all the time. Watch out for the "smell" (especially ramen noodles) from the drain. Smoking is prohibited in the lab. It will be better you throw away garbage like empty bento box or cans into big trash stands in front of the stairs Bldg. #58 on the way to an engine room. Trash boxes in the lab are labeled, so distinguish properly. All groups take turns in cleaning weekly. Grad students in each group are responsible for the weekly cleaning and daily clean-up.

Main Lab: DC, Euro-PD, HEV, HCCI(M), HCCI(S)

Branch Lab: Catalyst, FC, Shock Tube

Apr. 27th, 2011

Use a broom and a dustpan hung by the sink. Drain tea / coffee grounds into the sink strainer. Pay attention to draining ramen noodles so as not to get the strainer clogged. Change “garbage bags” and “strainer nets” frequently, which are kept in drawers of the sink and underneath. In air-conditioning seasons, wash the filters weekly, dry in the shade, then re-equip. Do the same to air-purifier filters. Since air purifiers were newly set (2 in main lab, 1 in branch lab) at the end of Year 2010, maintain them well.

Team Waseda comes every week (currently Thus. afternoon b/w 14:00 – 14:30) for cleaning. Leave the lab not to disturb them. Pay respect to those “cleaning people”.

For anyone from Branch Lab using the sink right in front, remember it is a public facility and clean after yourself.

In regard to cleaning our Lab on Honjo campus, two M1 students x 4 pairs take turns. For any questions on disposal, contact here:

Kazuo Yanagisawa, Manager (yana@waseda.jp)
Waseda University, Honjo General Business Center
1011 Nishi-Tomita, Honjo-shi, Saitama, 367-0035
Tel: 0495-24-6480 Ext.# 77-2311 Fax: 0495-24-6552

Waseda University, Graduate School of Environment and Energy Engineering / Environmental Research Institute
513 Tsurumaki-cho, Bldg. #120-3
Tel: 03-5286-8354 Ext.# 79-2061 Fax: 03-5286-8359

4.4 Tools and Instruments

Draw the line between public and private affairs.

4.5 Books

In principle, books are only for reference in the lab. The lending period is up to 1 week. Write your name and return date on a book card and submit it in a card pocket at Takahiro Kawada’s desk. That allows you to take a book out. Then, return the book to where it was. Don’t pass it to students from other labs without permission. Ask Dr. Kusaka for books you need for your research but can’t find in the lab or library. Don’t step into Dr. Kusaka’s space in his absence. For books in his space, tell him what you would like to read when he is present. On purchasing books, talk to Dr. Kusaka or Takahiro Kawada (M1 student in charge of books) in order to avoid double-purchase. Once registering the books, hand them to either of them so that they will be displayed on a bookshelf.

4.6 Paper Recycle

Put one-side printed paper into a recycling box, and both-sides printed paper into a recycling bag.

4.7 Computer System

Don't change compositions of PC and surrounding equipments at your discretion. Downloading files from the Internet is prohibited. Only when it is unusually necessary, tell Takanobu Nakano (M1 student in charge of PCs) before you actually do it. Data should be kept in PC folders of each group, and never use other groups'.

Back up on each group's responsibility.

All PCs and LEDs in the labs (including downstairs) are numbered, in order to search locations as well as to prevent loss. In case of the followings, tell Takanobu Nakano – breakdown, purchasing optional items, moving PCs (including internal memory and device) or monitors, and such.

Software we have purchased are copied into CD-R and managed by Takanobu Nakano so ask him for permission to use in the lab and never take it to outside

In Room # B103 on Honjo campus, the latest Engineering Work Station (EWS) is in operation. When an air conditioner is off, shut down the EWS.

Additionally, Kusaka Lab has Internet access through a wireless LAN. Ask Takanobu Nakano for the wireless LAN.

*** Leak of Research Data and Privacy Policy**

Not only companies and public offices but also educational institutions like universities have been bothered by more trouble of leaking research data or personal information. Commonly it is caused by taking out documents and memory media carelessly.

Keep these followings in mind handling documents or memories containing the confidential.

- (1) Don't take them out rashly.
- (2) Keep them in where outsiders can't access.
- (3) File-sharing software, such as Wiiny, WinMx, Share and Torrent, are not to be used. (It could cause virus attack and leaking due to its functional characteristics.)
- (4) Although a member list is distributed, don't give outsiders the personal info – student ID, name, e-mail address and cell phone number.

*** Notice – infected with computer virus**

In order to prevent PCs from getting infected with computer virus, you must install anti-virus software on any computers connecting to our network. **To protect from newly developed viruses, frequent update of the definition file is always recommended.**

The following virus-free software service is unlimitedly available in the campus network:

“A Guide to Sophos Anti-Virus” – IT Center, Waseda University

<http://www.waseda.jp/itc/rental/soft/sophos.html>

4.8 Goods Purchase

Save and economize. Basically items related to research activities for thesis are paid with research expense (except stationary). Anything to be yours after graduation should be at your expense. Here are some important notices on research expenses.

(1) Financial report: every weekend (Friday) a student in charge reports to Dr. Kusaka and his secretary via e-mail. Print out a list of purchase (a certain format on Excel), gather receipts / invoices and submit them in a clear file. They will be paid accordingly. The excel file should be named “Groupname2011****.xls” (**** =date).

(2) Goods purchase: get an estimate from vendor before the actual purchase. Inexpensive items should be paid with cash by students. If possible, tell secretary the price in advance. Get a receipt addressed to “Kusaka Lab, Waseda University”, have the items written on it by the shop staff (ex: IC). On the back of the receipt, write your name with a pencil, show the secretary it, receive cash and write in an account book. These can be done only in the presence of secretary (who shows up 3 days a week). Don't open her drawer to get cash back on your own. To order expensive items over 10,000 yen, consult Dr. Kusaka first. He will sign on a copy of the estimate. Submit a signed estimate to an accountant in each group. Likewise, talk to Dr. Kusaka first on your purchasing expensive items with cash. Regarding bank-transfer to student's account, just like work payment as TA, visit Waseda-net portal to register your bank account.

(3) Bills: use bills and delivery slips issued by each company. Since different documents can be required depending on the sum, either a secretary or the accounting section will check. Bills should be addressed to “Kusaka Lab, Waseda University”. Just as receipts, hand them to an accountant in your group. Until you submit, keep them to yourself with responsibility.

(4) When you place an order to a vender, tell the vender your full name. Ask the sum, delivery date and name of the person you have talked with. Have the orderer's name written on the order form.

(5) Many consumption goods are stored in Thermal Fluid Admin. Office, so ask the staff. Because research expense is limited, try to save and economize.

(6) If you attended a congress or a training session, hand the textbook to either Dr. Kusaka or an M1 student in charge of books (Takahiro Kawada). They will be displayed on the bookshelf after registration. Also, make a report covering the presented contents - thesis, speakers, presentation titles and

experimental equipment – so others can know.

4.9 Address & Phone numbers

Address:

Shinjuku

3-4-1 Okubo, Bldg. #58, Room #220, #228

Shinjuku-ku, Tokyo 169-8555

Department of Modern Mechanical Engineering,

Faculty of Science and Engineering,

Waseda University

Main lab: Tel/Fax: 03-5286-3917 ext.# 73-3146

Branch lab: Tel/Fax: 03-3209-3211 ext.# 73-3121

(Between main and branch lab, dial extension.)

Honjo

1011 Okubo-yama, Nshi-tomita, Bldg. IOCB #211, B #103

Honjo-shi, Saitama 367-0035

Waseda University

Dr. Kusaka's e-mail: jin.kusaka@waseda.jp

Tel: 090-4946-1836 (cel), 03-3941-9770 (home)

Answering phone calls is, so to speak, the first impression of Kusaka Lab. Watch your words carefully. Picking up the phone, speak clearly "Hello, this is Kusaka Lab, Waseda University". There is no hurry. When you want to transfer a phone call to Dr. Kusaka, press "hold" and then either 1 or 2. In his absence, tell the caller that he is not at the desk (or, outside) and will be back around ... (or, won't be back today). Take the caller's name, messages and contact. Jot them down on a memo with your (=receiver's) name. You can find a pen and a memo pad near the Tel/Fax machine. Put a pen back. Don't bring it with you. Depending on a situation you may want to refer to Dr. Kusaka's schedule copied on a diary.

For the phone numbers starting with 03 and 04, dial "0" before dialing the phone number. For the other numbers to call / fax, dial "105". Tell the operator that it's an official call and follow her / his instructions. For private purpose, use your own cell phone or a public pay phone. Since a call transfer is available only within our lab, give a caller the number s/he would like to reach and ask him/her to redial.

4.10 Copy

Use a copy machine in the lab for copying or printing out from PCs. Don't use it for private purpose. Because it costs 6.5 yen per copy, it will be better to select size A3 when copying two A4 pages. Both-side printing is also economical. Refer to a manual on the side of copy machine. Try to avoid color

copy as it costs 23 yen per copy. Instead, if you need to color print from PC, use HP Officejet Pro K5400, Canon MP990 or Canon iP4600.

Phone calling and faxing cannot be used simultaneously. Therefore, starting to fax can cut off the existing phone line. Make sure no one is on the phone before faxing. (It is impolite to cut off a phone conversation.)

4.11 Job Hunting

Don't hesitate to consult with Dr. Kusaka about your career path. You are in an important season to decide your career path and future, so you are more than welcome. Undergrad students thinking of master program should talk to Dr. Kusaka as well.

5. Thesis

Every month or two, each group should update their research in a meeting. Dr. Kusaka gives the directions as a part of the thesis advice. The meeting is held on every Tue. in the 6th period during spring semester and Wed. in the 6th period during fall semester, respectively.

6. Others

(1) Paper cutter, stapler (big), stationary

A paper cutter and staplers (big) are on top of the magazine rack. Be careful with your fingers.

Stationery supplies (scissors, staplers, gummed tapes, etc) are on the desk of Kusaka Lab server.

Put them back to the right place after yourself.

(2) Dr. Kusaka's Title

Faculty of Science and Engineering (Professor)

Belongs to School of Creative Science and Engineering,

Department of Modern Mechanical Engineering (Undergraduate)

Concurrent: Graduate School of Environment and Energy (Master's and doctoral courses)

Graduate School of Creative Science and Engineering (Master's and doctoral courses)

Post on campus: Classroom Accounting, School of Creative Science and Engineering

Home room teacher of senior students (Job-hunting advisor)

(3) Secretary

Masae Koyama (m.koyama2@kurenai.waseda.jp)

Apr. 27th, 2011

~memo~