SMF Safety Training Protocol

Shriram Center, Rm 099
Soft & Hybrid Materials Facility (SMF)
Dr. Jeffrey B. Tok

Updated: 8-2018
SMF General Operation Model

1. This facility is for your usage...take good care of the instrument in this facility. Please be a responsible citizen!
2. SMF is unlocked during office hours. I will request off-hour access for you from the bldg. manager. Make sure you sign in with your ID no.
3. This facility is a cost center under the Dean of Research Office. Each academic year, fiscal break-even has to be achieved within +/-5%.
4. I am serving as the director of SMF at only 20% of my time. There is also a part-time facility manager (Ms Lily Pay) and a group of talented student trainers/superusers.
5. Frequent workshop and vendor training sessions.
6. New equipment and accessories acquisition.
7. Contact me via e-mail if you have any questions and needs. (jbtok@)
SMF Undergraduate Access Policy

Per SMF policies, UGs should have his/her mentor working by their side in SMF (policy similar to most research labs). However, I understand that certain UGs are highly experienced and their advisor is best to determine that. Thus, the UG can work alone only if their advisor consent and take full responsibility for your safety in SMF.

Please have your advisor send me the following if your UG student need to have independent access to SMF:
"I am aware that ___student's name________ will have independent access to SMF and I will take full responsibility for this student's safety while working in SMF"

Independent equipment access will be granted only after the above was sent to me via e-mail.
Acknowledgement of Use of SNSF/SMF

Our funding depends on how many research groups we have supported. One the main metric is if SNSF/SMF has helped in your research publication.

If your research at SNSF generates data that appear in any type of publication, we expect you to acknowledge SNSF in that publication.

We recommend the following wording:
Part of this work was performed at the Stanford Nano Shared Facilities (SNSF), supported by the National Science Foundation under award ECCS-1542152.

Ref: http://snsf.stanford.edu/labmembers/policies.html
Training sessions and vendor’s workshops to enhance our users knowledge base
Phone, Emergency Phone Numbers & Emergency Procedures

• Please locate these items before you start work!
A Quick Glance to the Safety Layout in SMF (Shriram Center, Rm 099)

- Fire Extinguisher
- Gas Cylinders (Row)
- Safety Shower & Eye Wash
- Chemical Fume Hood (Spill kit and First Aid kit on the side)
- Solvent safety Cabinet
- Life Safety Box
- Entrance

You are here

We will also do a physical walkthrough after this
Getting Started

• SMF operates under the SNSF umbrella. All users must complete the process to become a lab member of SNSF before and while using SMF (http://snsf.stanford.edu/about/join.html).

• Review and complete the Safety Protocol Training Checklist. Turn in a hardcopy to Dr. Jeffrey Tok.
  • Your ID card number for getting door access to the facilities.
  • External users can obtain an ID card by contacting nanoadmin@lists.stanford.edu

• Do NOT pass your ID or Badger account to other user. Violators will have their account suspended.

• Note: If you intend to use the Fluorometer, you are required to also complete the Laser Safety (EHS-4820) Training course.
Stanford’s EH&S

• Please review the Stanford’s Chemical Hygiene Plan for information and guidelines pertaining to transporting chemicals, working alone and unattended operations prior to working in SMF. It can be accessed via: http://web.stanford.edu/dept/EHS/cgi-bin/lcst/docs/Chemical_Hygiene_Plan.pdf

• Be reminded that certain equipment requires specific Safety PPE and appropriate street clothing to be worn in the at all times. Reference to PPE workplace assessment and lab-specific training: http://web.stanford.edu/dept/EHS/prod/mainrencon/occhealth/Quick_Guide.pdf.

• Stanford’s Chemical Safety Tool Kit. It can be accessed via: http://chemtoolkit.stanford.edu/
General Information and Policies

• Before using any equipment, you must first:
  1. Be properly trained by:
     • SMF-approved trainer, or
     • Existing qualified user.
  2. Remember to put your name and date in the equipment binder (only once) after you are trained.
  3. Be authorized through the lab management system (Badger)

• There will be a charge to the trainer’s time for ALL training sessions.

• Use the Badger lab management system to reserve time, and to log in/out of instrument.
General Information and Policies

• By signing in as a qualified user, it will indicate your full understanding in its safe and proper usage.

• Use Badger system to reserve time, and to log in/out of instrument.

• **Remember to log out of Badger after use!** You will be responsible for the time you are logged into Badger.

• Do not share your Badger account with other users.

• Comply with SMF and SNSF policies, including those posted at [http://snsf.stanford.edu/labmembers/polices.html](http://snsf.stanford.edu/labmembers/polices.html)
General Safety

• **Long pants and closed-toed shoes must be worn in the lab at all times.** Lab coats and safety glasses are also highly recommended.
• Label every items you bring into SMF with a description, date, and your name and lab.
• All samples/reagents brought into SMF must be properly stored in secondary containers.
• The samples/reagents are to be removed from SMF after completion of experiment, i.e. no waste is to be left behind in SMF.

**Remember:**
• **NO animal tissues, parts etc., and NO toxic and contagious chemicals or biologicals are to be brought into this lab. Ask me when in doubt.**
• Remove what you bring into the facility!
• Sashes to the laboratory fume hood must be kept closed when not in use.
• No evaporation of waste/solvent is allowed in the fume hood.
• No storage of any chemicals, glassware, etc. in fume hoods overnight.
• No extension cords in series with others or power strips (daisy chains)
• **No food/drink in the lab. Put your drinks by the tray at the entrance.**
• Gloves are allowed to touch the computers and equipment. However, no gloves to be worn outside of user facility.
Lab Cleanliness / Courtesy

• If any consumable, e.g. DSC pans, gas cylinders, kim-wipes etc., is almost empty, alert Dr. Jeffrey Tok such that he can promptly replace it.

• Make sure your working area is clean after completion of equipment usage.

• Remember that we all work in this lab. As such, disruptive or offensive behavior, including language or music, is prohibited.
Signing up for Training Classes

- Click on the equipment you want to be trained on, and please put in your name, e-mail etc.

### Training Calendar & Equipment Superusers

**Soft & Hybrid Materials Facility (SMF): Shriram Bldg, Rm 099**

**Updated: July 2017**

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Superuser/Trainer</th>
<th>Training Calendar</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMF Safety Orientation for new members</td>
<td>Jeffrey Tok</td>
<td>click here</td>
<td>Click here for: (1) rates and (2) setting up Badger acct</td>
</tr>
<tr>
<td>AFM</td>
<td>Andrey Malkovski| click here</td>
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<tr>
<td>Biacore X100</td>
<td>Gillie Agmon</td>
<td>click here</td>
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<tr>
<td>Confocal Raman Microscope</td>
<td>Andrey Malkovski| click here</td>
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Rates and setting up Badger acct

Example: Click here if your wish to be trained on Biacore X100, then follow the instructions on the document
**DSC Training Session**

Location: SMF; Shriram Bldg, Rm 099
Trainer: Jeff Lopez; llopez12@stanford.edu

*DSC Q2000 Complete Manual: [link](#).*
*DSC Q2000 Abbreviated Guide: [Link](#).*

*Video on Q2000 SOP: [link](#). Watch if you are a new user.
*Video on Calibration of DSC Q2000: [link](#).

**"If you wish to attend the indicated session, please put your name, e-mail & your PI under the ‘Attendees’ column.**

**NOTE: TOP ROW INDICATES THE LATEST DATE/TIME**

<table>
<thead>
<tr>
<th>Dates</th>
<th>Time</th>
<th>Attendees: Names, E-mail &amp; PI</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday, 2/18</td>
<td>10:00 am</td>
<td>Steven Shuken, <a href="mailto:shuken@stanford.edu">shuken@stanford.edu</a>, Burns Lab, Frank Moss, <a href="mailto:mossfr@stanford.edu">mossfr@stanford.edu</a>, Boxer Lab, Francesco Ruta, <a href="mailto:fruta@stanford.edu">fruta@stanford.edu</a>, PI: Robert Feigelson</td>
<td></td>
</tr>
<tr>
<td>Wednesday, 4/22</td>
<td>10:30 am</td>
<td>no one</td>
<td>Cancelled; re-scheduled</td>
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</tbody>
</table>
A glimpse into the Badger Window

Materials Characterization

Spectroscopy & Microscopy

Preparation & Fabrication
Emergency Equipment and Information (5 mins)

- Let’s walk to the fume hood and take note of locations of shower, fire extinguisher, spill kit, first aid kit etc.

Demo of Badger system (5 mins)