TERMS AND CONDITIONS OF USE

Terms and Conditions of Use for the Schapiro Center for Engineering and Physical Science Research Clean Room, the Electron Microscopy Lab in the Chandler Building and the Shared Materials Characterization Lab in the Havemeyer Building (together hereinafter referred to as the "Shared Lab") at Columbia University by ______, an employee of ______("User").

1. Access to Shared Lab.

a.User understands that access to the Shared Lab is subject to availability, which is determined in Columbia's sole discretion, and if access is granted, such access and use is subject to the terms and conditions set forth herein.

b.User understands and acknowledges that as a non-Columbia researcher, student or employee, the following individuals shall have priority over User's access to equipment or instrument in the Shared Lab in the following order: (i) Columbia researchers conducting research funded by a current government grant shall have first priority at all times on any equipment or instrument purchased by that grant in the Shared Lab; (ii) Columbia researchers conducting research funded by a federal grant to Columbia shall have priority on any equipment or instrument purchased by a federal grant; and (iii) Columbia researchers conducting research within the scope of their service to Columbia.

c.User understands that the period of time in which s/he may access the Shared Lab will be determined by Columbia and may be terminated by Columbia in its discretion.

2. User Obligations.

a.The User represents and warrants that s/he has read, understood and agreed to the terms and conditions set forth herein and has been provided with information by Columbia regarding the use of the Shared Lab, including safety training, equipment training and the rules and safety manual for the specific Shared Lab. The User represents that s/he is trained in general chemical safety before using such chemicals in the Shared Lab, and in the operation of particular equipment and instruments required by his/her work and further represents that his/her knowledge of laboratory practices is sufficient to permit the safe pursuit of the work in conjunction with User's research project in Shared Lab. Notwithstanding the foregoing, User will abide by the usage and safety provisions set forth by Columbia and will comply with any training or testing required by Columbia for access to the Shared Lab. User assumes sole responsibility the personal safety of the User and Columbia will not be responsible for any medical expenses that the User may incur.

b.Prior to accessing the Shared Lab, User will notify Columbia if any work to be conducted in the Shared Lab (i) is funded by a federal grant and the federal agency providing such funding or (ii) is subject to U.S. export control laws or other applicable laws that may require special conditions regarding access and use (e.g., to comply with deemed export regulations). User understands that Columbia may, in its sole discretion, deny access to the Shared Lab if the research to be performed by User is subject to export control laws. User will be responsible for ensuring that if User is not a citizen, permanent residents, or asylees/refugees of the U.S., that such User is authorized under his/her visa to have access to the Shared Lab (including any technology, as applicable) and for reviewing if equipment and technology brought to the Shared Lab are subject to U.S. export control laws or other applicable laws that may require special conditions regarding access and use. User will reasonably cooperate with and provide any information (including information regarding citizenship and permanent residency of its researchers) that is reasonably requested by Columbia in order to ensure User's compliance with this provision. Where required by Columbia, User will collaborate with Columbia to ensure that an appropriate plan to meet applicable regulatory requirements is in place prior to access to the Shared Lab. Columbia may prohibit User from bringing equipment or items to the Shared Lab facility.

c.User agrees that, where appropriate, Columbia will be acknowledged in publications or presentations resulting from substantive work performed in the Shared Lab facility.

d.The User will use his/her best efforts to operate all equipment and instruments in a safe and professional manner. User acknowledges that User is responsible for the progress and results of his/her project and NO WARRANTY OR PROMISE HAS BEEN MADE BY COLUMBIA THAT ANY SPECIFIC OR USEFUL RESULT OF ANY WORK PERFORMED IN THE SHARED LAB FACILITY WILL BE ACHIEVED.

e.The User will not under any circumstances schedule time for use of the Shared Lab by any other user in the User's name, give out the User's user name and/or password for use of the Shared Lab by other users, or assist other users with access to the Shared Lab. Failure to comply with this provision will result in immediate termination of User's rights to use the Shared Lab.

f.USER UNDERSTANDS AND AGREES THAT COLUMBIA SHALL HAVE THE RIGHT TO IMMEDIATELY PROHIBIT USE OF THE SHARED LAB IF COLUMBIA, IN ITS SOLE DISCRETION, BELIEVES THAT THE USER HAS BREACHED ANY OF THE TERMS, REPRESENTATIONS AND/OR WARRANTIES OF THIS SECTION 2. 3.**Intellectual Property.** User understands and acknowledges that Columbia shall make no claim to intellectual property created by the User based solely on the User's use of the Shared Lab and without (i) the contribution of Columbia researchers, staff or other personnel and/or (ii) the use of Columbia confidential information. User acknowledges that any intellectual property developed in the Shared Lab is subject to the existing intellectual property rights of Columbia and other third parties and Columbia makes no guarantee or warranty that any intellectual property developed in the Shared Lab is not covered by Columbia's or any third party's existing intellectual property rights. Except as otherwise expressly provided herein, no right or license has been provided by Columbia to User, under any tangible or intellectual property, materials, patent, patent application, trademark, copyright, trade secret, know how, technical information, data or other proprietary right.

4.**Payment.** User acknowledges the responsibility for payment to Columbia for (i) Shared Lab facility use fees, which shall be determined in Columbia's sole discretion; (ii) costs of supplies and materials provided by Columbia; and (iii) fees for Shared Lab staff time related to instruction and support of Shared Lab equipment and processes incurred by the User for use of the Shared Lab. Payment will be made in full by User for such costs and payment within thirty (30) days of receipt of an invoice by Columbia. No terms in any invoice or form provided by Columbia shall be construed to change any of the terms and conditions herein, which shall govern in case of any inconsistency.

5.**Insurance.** The User is not an employee of Columbia and understands and acknowledges that Columbia does not provide worker's compensation or other liability coverage for the User's benefit. User shall have his/her own health and accident insurance and will carry business liability insurance in the minimum amount of coverage of \$2,000,000.

6. Security of User Property; Confidentiality. The User acknowledge sole responsibility for his/her personal property, which may include but is not limited to materials, devices, notebooks, chemicals, glassware, and other supplies, and any intellectual property or proprietary/confidential information that resides therein. The User acknowledges that Columbia has no obligation to preserve the confidentiality of any information User may disclose to Columbia faculty, researchers, students, staff or other employees or other users of the Shared Lab.

7.**Conduct.** While on Columbia's premises, User shall comply with all security practices and workplace policies and procedures prescribed by Columbia. User acknowledges that Columbia may require him/her to leave Columbia's facilities, which is not limited to the Shared Lab, if the User has violated Columbia policies or procedures or if Columbia reasonably believes that User's conduct is inappropriate.

8.Liability; Indemnification. The User assumes all risks and liability arising from his/her use of and access to the Shared Lab. User acknowledges that s/he will be financially liable for damage to equipment or other property resulting from the negligence or willful misconduct of the User. The User understands that use of the Shared Lab facility may involve exposure to potentially hazardous conditions including but not limited to chemical, mechanical, electrical, thermal and radiation hazards. User will release, indemnify, and hold harmless Columbia, its faculty, officers, researchers, students, agents and employees from any and all claims, damages, costs (including responsible attorney fees) and liabilities arising out of User's use of the Shared Lab, except to the extent that a court of competent jurisdiction determines that such claims, damages, costs and liabilities directly arise from the gross negligence or willful misconduct of Columbia.

9.**Use of Name.** Except to acknowledge in publications and presentations that the User's work was performed in the Shared Lab as set forth in Section 2b above, User will not use Columbia's name in any manner without the prior written consent of Columbia. User will not use the logos or symbols of Columbia or any of its departments or facilities for any reason whatsoever without Columbia's prior written consent.

10. **Governing Law.** These terms and conditions will be construed in accordance with and governed by the laws of the State of New York without giving effect to any choice of law rule that would cause the application of the laws of any jurisdiction other than the internal laws of the State of New York to the rights and duties of the Parties.

USER

Name:

Title:

Date:

Price list:

Machine	Hourly Rate- Other Academic (Ş)	Hourly Rate-			Set-Up Charge (Ş)	Staff Rate per Hr - Other Academic (\$)	Staff Rate per Hr- Indusrty (\$)
		industry (Ş)	Max Hours	Min Hours			
Acid Hood	0	0	0	0	0	40	100
Agilent 8453 UV-vis. spectrophotometer	18	45	12	0.5	0	40	100
Agilent GPC	24	60	5	0.5	Ø	40	100
Agilent SEM	36	90	3	0.75	0	40	100
Agilent SuperNova SCXRD	36	90	10	0.5	0	40	100
Angstrom Metals Deposition System	36	90	5	1	35	40	100
Autofinder	18	45	5	0.5	0	40	100
Bal-Tec Critical Point Dryer	18	45	6	0.5	٥	40	100
Beamer	18	45	6	1	O	40	100
Bruker Dimension FastScan AFM	42	105	10	0.5	5	40	100
Cambridge NanoTech ALD	36	90	3.5	1.5	D	40	100
Cressington Sputter Coater	30	75	3	0.5	0	40	100
Cryogenic R-700X SQUID Magnetometer	36	90	6	0.5	0	40	100
Dektak Profilometer	18	45	2	0.5	0	40	100
Diamond Saw	24	60	6	0.5	0	40	100
Dicing Saw	24	60	8	0.5	0	40	100
Diener Plasma Etch	36	90	2	1	0	40	100
Dimple Grinder	24	60	6	0.5	0	40	100
Edwards Thermal Evaporator 1	18	45	3	2	o	40	100
FEI E-Beam Writer	42	105	4	0.5	0	40	100
FEI Talos F200X S-TEM	90	225	6	1	0	40	100
Grinder-Polisher	24	60	5	0.5	σ	40	100
Heidelberg (3 um) Laser Writer	30	75	4	1	0	40	100
Horiba micro-Raman	18	45	4	0.5	0	40	100
Horiba XploRA	0	0	4	0.5	0	40	100
JEOL 100CX TEM	36	90	4	1	0	40	100
Laurell spinner 1	18	45	2	0.5	5	40	100
Light Zeiss Microscope	24	60	4	0.5	0	40	100
Malvern Nano-ZS zeta potential analyzer	24	60	10	0.5	0	40	100
Microtome	18	45	5	0.5	0	40	100
Nanobeam	60	150	10	1	0	40	100
NanoMagnetics ezAFM	18	45	5	0.5	0	40	100
Nanonex Imprinter	30	75	3	0.5	0	40	100
Oxford ICP RIE	42	105	3.5	1	0	40	100
Oxford PECVD	54	135	10	1	0	40	100
PANalytical XPert3 Powder XRD	24	60	12	0.5	0	40	100
Parylene Coater	18	45	4	1.5	0	40	100
Phi XPS	36	90	12	1	0	40	100
PIPS II	24	60	6	0.5	0	40	100
Plasma Cleaner	24	60	6	0.5	0	40	100
Renishaw InVia Raman microscope	18	45	10	0.5	0	40	100
Semicore E-Beam Evaporator	24	60	4	1	35	40	100
Signatone Transfer Station	18	45	4	0.5	0	40	100
Suss MA6 Mask Aligner	30	75	2	0.5	0	40	100
TA Instruments Q500 TGA	18	45	10	0.5	0	40	100
UVOCs UV Ozone Cleaner	0	-+5	0	0.5	0	40	100
Westbond Aluminum Wire Bonder	24	60	3	0.5	0	40	100
Westbond Gold Wire Bonder	30	75	3	0.5	0	40	100
Woollam Alpha-SE ellipsometer	-	45			0	40	
Wyko NT9100 Optical Profiler	18		8	0.5			100
ZEISS SEM	24	60 60	4	0.5	0	40	100