The University of Toledo Center for Materials and Sensor Characterization 1700 North Westwood Ave, Toledo, Ohio 43607

Application and Authorization Agreement ("Agreement") for use of the Center for Materials and Sensor Characterization with The University of Toledo ("University") located at 1700 North Westwood Ave., Toledo, Ohio 43607 (hereinafter the "FACILITY").

Authorized USER Information

Name:	
Position/Title:	
Company:	
Address:	
Phone:	
Email:	

1. **<u>Research Objective</u>**: Please indicate the nature, scope and objectives of your research project. The description should not exceed 100 words and can use additional sheets if necessary. USER's use of the FACILITY and associated instruments shall be limited to the following purpose.

2. <u>Instruments Authorized</u>: The USER shall be authorized to use the following instruments and associated equipment subject to the terms and conditions contained herein.

🗌 Hitachi HD 2300A STEM	Varian Excalibur Series FTIR	Perkin Elmer Diamond DSC
Hitachi S-4800 II SEM	🗌 Jobin Yvon Horiba Raman	TA Instruments DMA
FEI Quanta ESEM/FIB	Thermo Scientific ICP-MS	TA Instruments TGA
Veeco Instruments AFM	🗌 Rigaku Ultima III XRD	SensiQ Discovery SPR
🗌 Bruker Raman	Micromeritics ASAP2020	Agilent LC-MS

3. <u>Schedule of Use</u>: The use of the FACILITY and the instruments shall be limited to the following period (start and end dates):

A web based scheduling of the instruments will be available. The USER must schedule times prior to using the FACILITY. The Director of the Center for Materials and Sensor Characterization ("Director") reserves the rights to restrict any USER's access time. The Director reserves the right to cancel any USER time if the University needs to perform routine or emergency maintenance. The USER's can reschedule at the earliest possible time available. The necessary timeframe needed to install peripheral equipment (such as optional sample stages) will need to be scheduled as well at the extra time needed to reach operational vacuum. The USER will be charged the standard USER fees during this time.

4. **Training and Safety:** The USER must be trained by qualified staff before being allowed to use any of the instruments. The USER must acquire and demonstrate knowledge of the laboratory safety procedures and must be familiar with RGE safe operating procedures for electron microscopes and XRD. Furthermore, the USER must be familiar with the safety procedures for each particular instrument that the USER intends to use. The USER must understand the safety procedures followed by University and should notify campus police at x2600 in case of emergency. An untrained USER may only be present in the FACILITY for observation purposes and may not, in any circumstance, operate the instrument, the USER shall consult a staff member prior to operating the instrument. The USER is not allowed to install or modify any software installed on the instrument computers. Failure to follow appropriate procedures and instructions may result in termination of USER privileges. The USER shall reimburse the FACILITY for any and all damages caused to the FACILITY or associated instruments. USER will be responsible for its personal protective equipment.

5. <u>Fees and Payments</u>: The USER agrees to pay according to the attached Rate Schedule for Industry Users (Exhibit A). Rate Schedules are subject to change effective June 1 of every year including 2009. Each USER must sign-in on appropriate data sheets for the instruments each time the instruments are used. In addition to the hourly USER fees, USER will pay the costs of supplies for sample preparation. The USER is encouraged to bring its own supplies and perishables. The instrument usage time will include the time it takes to ready the instruments before and after the experiments, not just the time of observations/analysis. If particular modifications to instruments are desired, the USER must submit a written request to the Director. The Director will consider such proposal by discussing with the staff, other users, and appropriate sources if necessary before deciding on the request by writing. The cost of such modifications shall be paid by the USER suggesting the modifications. The addition of extra equipment does not grant the USER free instrument usage time. All the time, including the time to ready the instruments with peripheral equipment must be paid by the USER. The training sessions will be charged for instrument use and operator assistance.

6. **Disposal of Biohazardous/Hazardous waste:** USER will not permit any Hazardous Substance to be used, stored, generated or disposed of on, in or about, or transported to or from, the FACILITY, by USER, USER's agents, employees, contractors, invitees, subtenants, concessionaires or USERs without first obtaining the University's Director of Safety and Health's written consent, which University may give or withhold in its sole discretion, or revoke at any time. Any sample of material transported to the FACILITY must be transported from the FACILITY at the conclusion of the USER's analysis. The UNIVERSITY will not be responsible for disposal of any product transported to the facility. If University consents, all Hazardous Substances must be handled at USER's sole cost and expense, in compliance with all applicable state, federal or local governmental requirements, using all necessary

and appropriate precautions. If USER breaches these obligations, or if the presence of Hazardous Substances on, in or about the FACILITY caused or permitted by USER results in contamination of any part of the FACILITY, or if contamination by Hazardous Substances otherwise occurs in a manner for which USER is legally liable, then USER will be responsible for any and all claims, actions, damages, fines, judgments, penalties, costs, liabilities, losses and expenses (including, without limitation, any sums paid for settlement of claims, court costs, attorneys' fees, consultant and expert fees) arising during or after the expiration or termination of this Agreement as a result of any breach or contamination. Without limitation, if USER causes or permits the presence of any Hazardous Substance on, in or about the FACILITY and this results in contamination of any part of the FACILITY, USER will promptly, at its sole cost and expense, take all necessary actions to return the FACILITY and any adjacent facility to the condition existing prior to the presence of any Hazardous Substance; provided, however, USER shall first obtain University's approval for any such remedial action. "Hazardous Substance" means any substance regulated by any local government, the State of Ohio or the United States government. "Hazardous Substance" includes any material or substances which are defined as "hazardous material," "hazardous waste," "extremely hazardous waste" or a "hazardous substance" pursuant to state, federal or local government law. "Hazardous Substance" includes but is not restricted to asbestos, polychlorobiphenyls and petroleum. If requested, the USER must provide the hazard and safety data such as MSDS of any samples being used in the FACILITY within two (2) business days.

7. **Insurance and Liability:** USER agrees to conduct its activities in the FACILITY in a careful and safe manner. As a material part of the consideration to University, USER agrees to assume all risk of damage to and loss or theft of USER's property while at University, damage to the FACILITY, and injury or death to persons related to USER's use or occupancy of the FACILITY in, upon, or about the FACILITY from any cause with the exception of electrical and storm-related damages resulting in fire, and USER waives all claims against University. USER further agrees to be responsible for all claims, suits, liabilities, costs, damages and expenses (including attorney's fees) arising out of or in connection with: (i) USER's use or occupancy of the FACILITY, or any activity or thing done, performed or suffered by USER, its agents, its employees, USER's invitees or persons attending or participating in USER's activities in or about the FACILITY by reason of any act, omission or negligence of USER, or any of its agents, its contractors, its employees, USERs, or invitees; or (iii) any breach or default in the performance of any obligation on USER's part to be performed under the terms of this Agreement. USER's obligations will not extend to any liability to the extent caused by the negligence of University or its agents or employees.

The USER agrees to obtain, at its own expense, public liability insurance in the amount of \$2 Million per Occurrence/\$4 Million Aggregate. The USER will provide the Director with proof of such insurance at the time of entering into this Agreement, and shall name The University of Toledo as an additional insured.

8. **Indemnity:** The USER shall comply with any state, federal, or University regulations pertaining to the use of hazardous materials, controlled substances, or genetically altered materials and will defend, indemnify and hold The University of Toledo harmless from any damages, penalties, or other claims made as a result of the USER's failure to comply.

9. <u>Patent Rights</u>: Any invention made solely by the USER while using the FACILITY shall be the property of the USER. If the research undertaken is a joint work between the USER and a University employee/student, that work must be covered under a different agreement prior to commencing the

joint research. The agreement will describes the patent agreement between the University and USER for that particular work.

10. <u>Termination</u>: The university and the USER shall each have the unilateral unrestricted right to cancel the proposed research and terminate this Agreement for any reason upon 30 days written notice to the other party. Upon termination, USER shall surrender the rights to the use of the FACILITY and shall immediately remove all the items and possessions from the FACILITY.

11. <u>Assignment and Subletting</u>: USER does not have the right to assign this Agreement or allow any other person or entity to use or occupy any of the FACILITY without the prior written consent of University, which consent may be granted or withheld in University's sole discretion.

12. **Nondiscrimination:** The parties agree to comply with all applicable state and federal laws, rules, regulations and executive orders governing equal employment opportunity, immigration, nondiscrimination, including the Americans with Disabilities Act, and affirmative action.

IN WITNESS WHEREOF, the	undersigned, d	duly authorized	d representatives,	accept and	agree to
the above provisions as of	day of				

USER:	
Authorized signature:	
Name:	
Title:	
Date:	
The University of Toledo	÷
Authorized signature:	
Name:	
Title:	

Date:

EXHIBIT A

Rate Schedule for Industry Users

Instrument	User fees
Hitachi HD 2300A STEM	\$210/hr
Hitachi S-4800 II SEM	\$210/hr
FEI Quanta ESEM	\$210/hr
FEI Quanta FIB	\$235/hr
Veeco Instruments AFM	\$110/hr
Varian Excalibur Series FTIR	\$130/hr
Jobin Yvon Horiba Raman	\$130/hr
Thermo Scientific ICP-MS	\$160/sample
ICP-MS with Sample Digestion	\$320/sample
Rigaku Ultima III XRD	\$130/hr
Perkin Elmer DSC (High temp)	\$130/hr
Perkin Elmer DSC (Cryo mode)	\$160/hr
TA Instruments DMA	\$130/hr
TA Instruments TGA	\$130/sample
SensiQ Discovery SPR	\$130/hr
Sputter Coater	\$20/use