Tracy Brown

Approved  Denied
Comment: 

Diana Hamilton

Approved  Denied
Comment: 

Gary Gatch

Approved  Denied
Comment: 

Mike McDonald / James Leonards

Approved  Denied
Comment: 

Dale Martin

Approved  Denied
Comment: 

Student Technology Fee
Grant Proposal

2010.003

2009-10
Student Technology Fee
Grant Proposal Request Form
Fiscal Year 2009-10
Northwestern State University of Louisiana

ALL BLANKS MUST BE FILLED COMPLETELY

Prepared by: Gillian E. A. Rudd, PhD For: Student Tech. Grant 2009-2010

Department/Unit: Chemistry & Physics College: Science & Technology
Campus: Natchitoches

Which NSTEP Goals/Objectives does this project meet? #1, 3, 7 and 8

Requested equipment will be located/installed/housed? Building Fournet Hall Room 211

Are department property policies and procedures in place for requested equipment? Yes

Which individual will be responsible for property control of the requested equipment?

Signature: Date: 26th October, 2009

Grant Proposal Requested Amount: $5,650.00 Budget Attached (circle one): YES NO

Grant delivered to Student Technology located in Watson Library, Room 113. Date

The grant proposal must include all specifications, description, model number, quotation, cost, state contract number, and vendor for each item. If the proposal does not include all requested information, it will be retumed to requestor.

1. Describe target audience.

All Louisiana Scholars’ College and Northwestern students who take the following laboratories sessions: CHEM1091 (pre-nursing); CHEM1031/CHEM1041 (general chemistry); CHEM3011/3021 (organic); CHEM2111 (quantitative analysis); CHEM2141 (inorganic); CHEM4041 (biochemistry) and all physics laboratories.

2. Describe project/initiative for which you are requesting funds.

In the Fall of 2006, the Department of Chemistry & Physics was awarded Student Technology funding to buy a new Fourier Transform Infrared Spectrometer (FT-IR). This instrument does not have any specialized sampling accessories and hence, our samples have been restricted to those that are liquids and/or solids that will dissolve in organic solvents and which can be placed upon sodium chloride plates.
The sodium chloride plates are not robust or inert: they break easily and they react with water from the air and from the student’s samples and so fog up. It also takes about 5-10 mins. per student to prepare their sample between a set of sodium chloride plates (which in a class of x24 students, can quickly add up).

This project proposes to purchase a Thermo Scientific Smart iTR, which is an ultra-high performance, versatile Attenuated Total Reflectance (ATR) sampling accessory with a diamond crystal. This crystal (as opposed to the zinc selenide or germanium configurations) is especially robust and is excellent for the analysis of hard, abrasive, reactive, caustic or corrosive materials. It is fully compatible with our Thermo Scientific Nicolet FT-IR.

The sample is pressed into the ATR crystal using a high pressure tower to provide consistent results (which reduces sample preparation and instrument use waiting time) and samples can include:

- Most solids
- Liquids ranging from pH 1 to 14
- Acidic or alkaline materials
- Fibers
- Hard or oddly shaped samples
- Abrasive, caustic or corrosive materials
- Large or small samples
- Paint chips

The rational for this project encompasses the use of a modern lab FT-IR sampling accessory to improve student technology and the student “feel good factor” because there will no sample preparation time, no frustration over broken sodium chloride plates and a greater variety of sample applications.

3. State measurable objectives that will be used to determine the impact/effectiveness of the project.

(i) Objective 1: Enhancement of Student Instruction in Laboratory Course
FT-IR is an essential component of the organic, biochemistry, analytical and inorganic labs. Since Fall 2006, we have a reliable instrument so that we are able to function at a “basic” standard of teaching and research. However, the new sampling accessory will enable our students to be more competent in a technological workforce by promoting their science and technology skills. Students will see relationships between instrumental analyses and medical tests. They will do detailed and meticulous preparation of samples for analysis and will learn how to gather and interpret data. The named Smart iTR accessory is what they use in modern laboratories e.g. our Student Affiliates American Chemical Society Chapter members, have seen this accessory in action at the Shreveport Crime Laboratory- as one of our former chemistry majors, Alanna Brauer, now works there. Unfortunately for Alanna, we did not order this accessory with the new FT-IR and she had to “learn on the job” with this accessory.

The new sampling accessory will provide more time for quality student instruction and amplification of the student “feel-good” factor.

It will also tie in with the University’s cyberspace summer camp for students in the summer of 2010 (first one was held this summer); in that we can sample say paint chips or fibers-
something that we are not currently able to do.

(ii) Objective 2: Augmentation of Student Abilities in Obtaining and Interpreting Data by Providing Experiences with Organic, Inorganic and Biochemical Compounds

-in the organic and biochemistry labs
Rudd (PI) already has established biochemistry and organic experiments for the use of the FT-IR: the new Smart ITR will allow the students to obtain more reliable results, with no preparation time and spend more time analyzing their results and searching the FT-IR library of databases. They will become proficient at collecting and handling more data and performing repetitive tasks.

-in the general and pre-nursing labs
The new “student-proof” FT-IR accessory will be rugged and easy enough to use, that these students will not have to learn “complex” and possibly off-putting sample preparation techniques. They will simply press their sample onto the ATR crystal, using the high pressure tower, and the rest is computer driven.

-in the analytical and inorganic labs
The new FT-IR sampling accessory will enable these instructors to make the inorganic and analytical laboratories to be more instrumentation proficient and friendly.

4. Indicate how each project objective will be evaluated.

The goals and objectives of any educational program must include cognitive and attitudinal assessments. We will assess improvements in cognitive skills with pre-testing and post-testing, using tests that we will develop. We will use ACS exams as guidelines only (bearing in mind the strict rules governing ACS exams), to establish an appropriate level of testing. Attitudinal assessments will be conducted using a 5-point Likert scale. All pre-tests will be implemented in the general, organic, inorganic and biochemistry laboratories in January 2008 with post-testing scheduled for May 2008.

Furthermore, the effectiveness of this project will be determined by the student retention between general chemistry I and II, whereby the lab is a pre and/or co-requisite to the course.

5. If funded, which NSTEP http://www.nsula.edu/nstep/NSTEP.pdf objective(s) will this funding of this project advance. How will funding of the project advance the University and College/unit technology plan?

(i) University Goals
University Goal # 1, “to attain accreditation for each eligible degree program by a Board of Regents’ approved national accrediting agency,” and #5 “to develop and implement a system of resource, commitment and allocation in order to increase excellence in academic and professional programs,” are both encompassed by this project. We are required by American Chemical Society (ACS) professional standards to maintain a reliable FT-IR instrument for laboratories as well as all associated sampling accessories which are required for the successful running of most laboratories. It will be shown that more fulfilled students who attain hands-on experience with modern instrumentation, will make for a better future work-force.

(ii) NSTEP objectives
Objectives #1, 3, 7 and 8 are encompassed by this project. i.e. #1 states “to improve access to technology by students, faculty, and staff at NSU”; #2 states “to upgrade student technology
laboratories with modern technology”; # 7 states “to establish processes that encourage technology initiatives by faculty, staff, and students” and # 8 states “to encourage innovation and research.” All four objectives emphasize the importance of technology based research, and it is important to keep updating our laboratories to keep in-line with equipment used in the workplace (e.g. Shreveport Crime Laboratory): without this, the quality of our students’ learning environment is significantly diminished, the frustration factor increases and more time is spent on unnecessary and sometimes lengthy sample preparation.

6. Provide a justification for funding of this project. Estimate the number of student that will be served per academic year and in what ways. Please indicate also any unique needs of the target group.

(i). Impact on Curriculum and Instruction
The students will receive a higher quality laboratory experience during their first year chemistry and they will utilize tools important for their education, which includes the Smart iTR accessory to analyze materials that we are currently not able to sample (e.g. paint chips, fibers, oddly shaped samples etc), obtain decent data and then interpret the data. These students will receive a laboratory experience not focusing on the short-term knowledge, but will develop an inquiry skill to propel them through their careers as a scientist.

Beyond the general chemistry, the project will continue to develop the students understanding and appreciation of chemistry. These students will: be exposed to a more in-depth laboratory inquiry skill in inorganic chemistry with the alteration of their procedures to include more and varied sampling with the FT-IR; have a better understanding of the investigation tools for analysis using the Smart iTR and obtain decent results from upper level biochemistry labs using the new accessory as well. All of these improvements will help to build the students confidence in chemistry as well as their understanding of it as a career.

It is also hoped that our 2000 level practicum for chemistry teaching course (a supervised experience in teaching in the chemistry lab, which is recommended for secondary education chemistry majors) will be involved in educating all other students on the functioning and operation of the easier to use sampling accessory for the FT-IR.

(ii). Impact on Quality of Students
We expect the new approach described in this proposal to significantly improve student understanding and retention of the course material. This in turn will help to improve student satisfaction, which will have the effect of encouraging more college students to pursue a career in mathematics, science and engineering. The introduction of modern technology aiding in the collection of data, should inspire all of our students. After all, what student, if given the choice, would decide to take their major in an outdated department?

(iii). Impact on Faculty Development
This project will offer faculty the basis on which to develop new forensic-style laboratories and the opportunity to study projects in a more challenging manner with their students. Faculty will be teaching skills required for successful inquiry based problems, which our students will then learn and utilize. Enhancement of chemical pedagogy, will take the students from the mediocre experience of chemistry to a more in-depth understanding of the field. The same can be said for having more efficient sampling accessories for our instrumentation that enables faculty to carry out research, obtain concluding results and present successful research.
7. List those individuals who will be responsible for the implementation of the project/initiative and indicate their demonstrated abilities to accomplish the objectives of the project.

PI Rudd, Associate Professor of Chemistry, holds the Ph.D. in organic medicinal chemistry from the University of Warwick (England). She spent two years as a post-doctoral fellow for F. G. A. Stone at Baylor University, where she gained significant experience in $^{11}$B-$^1$H NMR, $^{11}$B-$^1$H HETCOR and FT-IR. Since joining the NSU faculty (1998) she has taught upper level biochemistry, organic chemistry, and instrumental analysis, as well as lower level introduction to chemistry and biochemistry courses for pre-Nursing and other pre-Health students and general majors' chemistry.

8. Describe any personnel (technical or otherwise) required to support the project/initiative.

None required.

9. Provide a schedule for implementation and evaluation.

The evaluation methods (see 4) will clearly indicate whether benchmark dates have been met and whether cognitive improvements have occurred. Attitudinal surveys will determine whether students "feel" more informed, more motivated, and more appreciative of FT-IR sampling accessory training experiences that reinforce the subject matter. As improved recruitment of quality students is an aspect of the proposal, numbers of incoming students, as well as their GPAs and ACT scores, will demonstrate whether this has been achieved. Finally, numbers of students enrolling in our entire lab based pre-professional programs, numbers that subsequently applied to the programs, and percent success rates will provide a complete picture of the project’s impact on our curriculum.

10. Estimate the expected life of hardware and software. Explain any anticipated equipment/software upgrades during the next five years.

The sampling accessory for the FT-IR comes with a one year warranty, to cover non-consumable parts and labor to correct defects in workmanship and/or materials when defects have not been caused by misuse or abuse. It is built-to-last and the diamond ATR has been chosen for its "student-proof" ruggedness and with excellent care it should perform for many years.

11. Explain in detail a plan and policy that will be in place to ensure property security/controls for any equipment received through a Student Technology Fee.

If you are requesting equipment that will be either/or checkout to students or moved within the department, you must provide a checkout/loan policy.

(i) Property security
All materials obtained through this project will be protected under the Department of Chemistry & Physics removable property guidelines (and tagged with the NSU bar code).

(ii) Cost Effectiveness?
It is estimated approx. well over x1000 students per year requiring our labs (excluding any physics students) and with a budget of $5650 we consider $5.65 per student to be very cost effective.
12. Detailed budget include all specs, pricing and vendors. Any incomplete proposal will be returned.

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<tr>
<td>Smart iTR with diamond plate for iS10: includes single reflection diamond with ZnSe lens, a high pressure tower and it's for iS10, iZ10 and x700.</td>
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Attach two (2) letters of support for the project from the following individuals: the requesting department's Dean, the appropriate Vice President (for non-academic units), or the SGA President from the requesting campus (for student requests).

Student Technology Fee Grant Proposal Checklist:

- ✔ Is all information requested provided (items 1-11)?
- ✔ Is a detailed budget attached?
- ✔ Is all specifications, description, model number, quotation, cost, state contract number, and vendor provided for each item?
- ✔ Are your two (2) letters of support attached?
- ✔ If equipment is to be checked out/loaned, is your policy attached?
Gillian Rudd

From: Simonis, Jeffrey J. [jeffrey.simonis@thermofisher.com]
Sent: Wednesday, October 21, 2009 10:54 AM
To: Gillian Rudd
Cc: Gearhart, Jeff
Subject: Smart iTR Quotation
Attachments: 20095788 - NORTHWESTERN STATE UNIV.pdf

Hello Gillian,

I received your voicemail.

Here is the updated quotation you requested I send to you regarding the Smart iTR accessory. Please let me know if I can be of further assistance.

To expedite your order, please reference this quotation number on your purchase order. To pay by credit card, please call 1-800-532-4752, Option 2.

Thank you for doing business with Thermo Fisher Scientific.

Have a great day!

Jeffrey Simonis
Aftermarket Sales
Thermo Scientific
Thermo Fisher Scientific
5225 Verona Road
Madison, WI 53711
608-276-6191 (Office)
608-273-5045 (Fax)
Email: jeffrey.simonis@thermofisher.com

Follow LIFECYCLE Enterprise Solutions on:
Facebook  Twitter
**Sales Quotation**

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Smart ITR with Diamond Plate for iS10
~ Includes Single Reflection Diamond with ZnSe lens
~ Includes a high pressure tower
~ For iS10, iZ10 and x700

**Note:**

All purchase orders must reference the following information:

**Thermo Electron North America LLC**

1400 Northpoint Pkwy Ste 50, West Palm Beach, FL 33407-1976

Submitted To: 0001034931

GILLIAN RUDD
NORTHWESTERN STATE UNIVERSITY
CENTRAL RECEIVING
998 SOUTH JEFFERSON
NATCHITOCHES LA 71497

Tel: 318-357-5232

To place an order:

Call: 800-532-4752
Fax: 608-273-5045
Email: Jeff.Gearhart@Thermofisher.com

This order is subject to instructions and Thermo Fisher's terms & conditions on the last page.

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**To expedite your order, please include the quotation number on your purchase order.**

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**ThermoFisher SCIENTIFIC**
## Sales Quotation

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</tr>
<tr>
<td>Phone No.</td>
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### To place an order

- Call: 800-532-4752
- Fax: 608-273-5045
- eMail: Jeff.Gearhart@Thermofisher.com

### Item Table

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Quote does not include taxes or shipping charges.

Any questions on quote, please contact
Jeff Gearhart
Phone - (608)276-6161
Fax - (608)273-5029
Email Jeff.Gearhart@Thermofisher.com

All purchase orders must have a copy of the quotation attached or the quotation number must be listed on the purchase order.
1. GENERAL. THERMO ELECTRON NORTH AMERICA LLC ("Seller") hereby offers for sale to the buyer named on the face hereof ("Buyer") the products listed on the face hereof (the "Products") on the express condition that Buyer agrees to accept and be bound by the terms and conditions set forth herein. Any provisions contained in any document issued by Buyer are expressly rejected and if the terms and conditions in this Agreement differ from the terms of Buyer's offer, this document shall be construed as a counter offer and shall not be effective as an acceptance of Buyer's offer. Buyer's receipt of Products or Seller's commencement of the services provided hereunder will constitute Buyer's acceptance of this Agreement. This is the complete and exclusive statement of the contract between Seller and Buyer with respect to Buyer's purchase of the Products. No waiver, consent, modification, amendment or change of the terms contained herein shall be binding unless in writing and signed by Seller and Buyer. Seller's failure to object to terms contained in any subsequent communication from Buyer will not be a waiver or modification of the terms set forth herein. All orders are subject to acceptance in writing by an authorized representative of Seller.

2. PRICE. All prices published by Seller or quoted by Seller's representatives may be changed at any time without notice. All prices quoted by Seller or Seller's representatives are valid for thirty (30) days, unless otherwise stated in writing. All prices for the Products will be as specified by Seller or if no price has been specified or quoted, will be Seller's price in effect at the time of shipment. All taxes are subject to adjustment on account of specifications, quantities, raw materials, cost of production, shipment arrangements or other terms or conditions which are not part of Seller's original price quotation.

3. TAXES AND OTHER CHARGES. Prices for the Products exclude all sales, value added and other taxes and duties imposed with respect to the sale, delivery, or use of any Products covered hereby, all of which taxes and duties must be paid by Buyer. If Buyer claims any exemption, Buyer must provide a valid, signed certificate or letter of exemption for each respective jurisdiction.

4. TERMS OF PAYMENT. Seller will invoice Buyer upon shipment for the price and all other charges payable by Buyer in accordance with the terms on the face hereof. If no payment terms are stated on the face hereof, payment shall be due thirty (30) days from the date of invoice. If Buyer fails to pay any amounts when due, Buyer shall pay Seller interest thereon at a periodic rate of one and one-half percent (1.5%) per month (or, if lower, the highest rate permitted by law), together with all costs and expenses (including without limitation reasonable attorneys' fees and disbursements and court costs) incurred by Seller in collecting such overdue amounts or otherwise enforcing Seller's rights hereunder. Seller reserves the right to require from Buyer full or partial payment in advance, or other security that is satisfactory to Seller, at any time that Seller believes in good faith that Buyer's financial condition does not justify the terms of payment specified. All payments must be made to Seller in United States currency. All orders are subject to acceptance in writing by an authorized representative of Seller.

5. DELIVERY; CANCELLATION OR CHANGES BY BUYER. The Products will be shipped to the destination specified by Buyer, F.O.B. Seller's shipping point. Seller will have the right, at its election, to make partial shipments of the Products to and to invoice each shipment separately. Seller reserves the right to stop delivery of Products in transit and to withhold shipments in whole or in part if Buyer fails to make any payment when due or if Buyer makes any breach of any term of this Agreement that is material in nature. All shipping dates are approximate only, and Seller shall not be liable for any loss or damage resulting from any delay in delivery or failure to deliver which is due to any cause beyond Seller's reasonable control. The right to terminate the order or to reschedule the shipment within a reasonable period of time, and Buyer will not be entitled to refuse delivery or otherwise be relieved of any obligations as the result of such delay. Products as to which delivery is delayed due to any cause within Buyer's control may be placed in storage by Seller at Buyer's risk and expense and for Buyer's account. Orders in process may be canceled only with Seller's written consent and upon payment of Seller's cancellation charges. Orders in process may not be changed except with Seller's written consent and upon agreement by the parties as to an appropriate adjustment in the purchase price therefor. Credit will not be allowed for Products returned without the prior written consent of Seller.

6. TITLE AND RISK OF LOSS. Notwithstanding the trade terms indicated above and subject to Seller's right to stop delivery of Products in transit, title to and risk of loss of the Products will pass to Buyer upon delivery of possession of the Products to the carrier; provided, however, that title to any software incorporated within or forming a part of the Products shall at all times remain with Seller, or the licensor(s) thereof, as the case may be.

7. WARRANTY. Seller warrants that the Products will operate or perform substantially in conformance with Seller's published specifications and be free from defects in material and workmanship, when subjected to normal, proper and intended usage by properly trained personnel, for the period of time set forth in the product documentation, published specifications or package inserts. If a period of time is not specified in Seller's product documentation, published specifications or package inserts, the warranty period shall be one (1) year from the date of shipment to Buyer for equipment and ninety (90) days for all other products (the "Warranty Period"). Seller agrees during the Warranty Period, to repair or replace, at Seller's option, defective Products so as to cause the same to operate in substantial conformance with said published specifications; provided that Buyer shall (a) promptly notify Seller in writing upon the discovery of any defect, which notice shall include the product model and serial number (if applicable) and details of the warranty claim; and (b) after Seller's review, Seller will provide Buyer with service data and/or a Return Material Authorization ("RMA"), which may include biodegradable decontamination procedures and other product-specific handling instructions, then, if applicable, Buyer may return the defective Products to Seller with all costs prepaid by Buyer. Replacement parts may be new or refurbished, at the election of Seller. All replaced parts shall become the property of Seller. Shipment to Buyer of repaired or replaced Products shall be made in accordance with the Delivery provisions of the Seller's Terms and Conditions of Sale. Consumables are expressly excluded from this warranty.

Notwithstanding the foregoing, Products supplied by Seller that are obtained by Seller from an original manufacturer or third party supplier are not warranted by Seller, but Seller agrees to assign to Buyer any warranty rights in such Product that Seller may have from the original manufacturer or third party supplier, to the extent such assignment is allowed by such original manufacturer or third party supplier.

In no event shall Seller have any obligation to make repairs, replacements or corrections required, in whole or in part, as the result of (i) normal wear and tear, (ii) accident, disaster or event of force majeure, (iii) misuse, fault or negligence of or by Buyer, (iv) use of the Products in a manner in which for which they were not designed, (v) causes external to the Products such as, but not limited to, power failure, fire, flood, earthquake, civil commotion, riot, act of war or terrorism, (vi) improper storage and handling of the Products or (vii) use of the Products in combination with equipment or software not supplied by Seller. If Seller determines that Products for which Buyer has requested warranty services are not covered by the warranty hereunder, Buyer shall pay or reimburse Seller for all costs of investigating and responding to such request at Seller's then prevailing time and materials rates. ANY INSTALLATION, MAINTENANCE, REPAIR, SERVICE, RELOCATION OR ALTERATION TO OR OF, OR OTHER TAMPERING WITH, THE PRODUCTS PERFORMED BY ANY PERSON OR ENTITY OTHER THAN SELLER WITHOUT SELLER'S PRIOR WRITTEN APPROVAL, OR ANY USE OF REPLACEMENT PARTS NOT SUPPLIED BY SELLER, SHALL IMMEDIATELY VOID AND CANCEL ALL WARRANTIES WITH RESPECT TO THE AFFECTED PRODUCTS.

THE OBLIGATIONS CREATED BY THIS WARRANTY STATEMENT TO REPAIR OR REPLACE A DEFECTIVE PRODUCT SHALL BE THE SOLE REMEDY OF BUYER IN THE EVENT OF A DEFECTIVE PRODUCT. EXCEPT AS EXPRESSLY PROVIDED IN THIS WARRANTY STATEMENT, SELLER DISCLAIMS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, ORAL OR WRITTEN, WITH RESPECT TO THE PRODUCTS, INCLUDING WITHOUT LIMITATION ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. SELLER DOES NOT WARRANT THAT THE PRODUCTS ARE ERROR-FREE OR WILL ACCOMPLISH ANY PARTICULAR RESULT.

8. INDEMNIFICATION.

8.1 By Seller. Seller agrees to indemnify, defend and save Buyer, its officer, directors, and employees from and against any and all damages, liabilities, actions, causes of action, suits, claims, demands, losses, costs and expenses (including without limitation reasonable attorney's fees) ("Indemnified Items") for (i) injury to or death of persons or damage to property to the extent caused by the negligence or willful misconduct of Seller, its employees, agents or representatives or contractors in connection with the performance of services at Buyer's premises under this Agreement and (ii) claims that a Product Infringes any valid United States patent, copyright or trade secret; provided, however, Seller shall have no liability under this Section to the extent any such indemnified items are caused by either (i) the negligence or willful misconduct of Buyer, its employees, agents or representatives or contractors, (ii) by any third party, (iii) use of a Product in combination with equipment or software not supplied by Seller where the Product would not itself be infringing, (iv) compliance with Buyer's designs, specifications or instructions, or (v) the use of Product in an application or environment for which it was not designed or (vi) modifications of the Product by anyone other than Seller without Seller's prior written approval. Buyer shall provide Seller prompt written notice of any third party claim covered by Seller's indemnification obligations hereunder. Seller shall have the right to assume exclusive control of the defense of such claim or, at the option of the Seller, to settle the same. Buyer agrees to cooperate reasonably with Seller in connection with the performance by Seller of its obligations in this Section.

Notwithstanding the above, Seller's indemnification related indemnification obligations shall be extinguished and released if Seller, at its discretion and at its own expense (a) procures for Buyer the right, at no additional expense to Buyer, to continue using the Product; (b) replaces or modifies the Product so that it becomes non-infringing, provided the modification or replacement does not adversely affect the specifications of the Product; or (c) in the event (a) and (b) are not possible, refund to Buyer the amortized amounts paid by Buyer with respect thereto, based on a five (5) year amortization schedule. THE FOREGOING INDEMNIFICATION PROVISION STATES SELLER'S ENTIRE LIABILITY TO BUYER FOR THE CLAIMS DESCRIBED HEREIN.
8.2 By Buyer. Buyer shall indemnify, defend with competent and experienced counsel and hold harmless Seller, its parent, subsidiaries, affiliates and divisions, and their respective officers, directors, shareholders and employees, from and against any and all damages, liabilities, actions, causes of action, suits, claims, demands, losses, costs and expenses (including without limitation reasonable attorneys' fees and disbursements and court costs) to the extent arising from or in connection with (i) the negligence or willful misconduct of Buyer, its agents, employees, representatives or contractors; (ii) use of a Product in combination with equipment or software not supplied by Seller where the Product itself would not be infringing; (iii) Seller's compliance with designs, specifications or instructions supplied to Seller by Buyer; (iv) use of a Product in an application or environment for which it was not designed; or (v) modifications of a Product by anyone other than Seller without Seller's prior written approval.

9. SOFTWARE. With respect to any software products incorporated in or forming a part of the Products hereunder, Seller and Buyer intend and agree that such software products are being licensed and not sold, and that the words "purchase," "sell" or similar or derivative words are understood and agreed to mean "license", and that the word "Buyer" or similar or derivative words are understood and agreed to mean "licensee". Notwithstanding anything to the contrary contained herein, Seller or its licensor, as the case may be, retains all rights and interest in software products provided hereunder.

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11. EXPORT RESTRICTIONS. Buyer acknowledges that each Product and any related software and technology, including technical information supplied by Seller or contained in documents (collectively "Items"), is subject to export controls of the U.S. government. The export controls may include, but are not limited to, those of the Export Administration Regulations of the U.S. Department of Commerce (the "EAR"), which may restrict or require licenses for the export of Items from the United States and their re-export from other countries. Buyer shall comply with the EAR and all other applicable laws, regulations, laws, treaties, and agreements relating to the export, re-export, and import of any Item. Buyer shall, without first obtaining the required license to do so from the appropriate U.S. government agency, (i) export or re-export any Item, or (ii) export, re-export, distribute or supply any Item to any restricted or embargoed country or to a person or entity whose privilege to participate in exports has been denied or restricted by the U.S. government. Buyer shall, if requested by Seller, provide information on the end user and end use of any item exported or to be exported by Buyer. Buyer shall cooperate fully with Seller in any official or unofficial audit or inspection related to applicable export or import control laws or regulations, and shall indemnify and hold Seller harmless from, or in connection with, any violation of this Section by Buyer or its employees, consultants, or agents.

12. MISCELLANEOUS. (a) Buyer may not delegate any duties nor assign any rights or claims hereunder without Seller's prior written consent, and any such attempted delegation or assignment shall be void. (b) The rights and obligations of the parties hereunder shall be governed by and construed in accordance with the laws of the State of Seller's manufacturing location, without reference to its choice of law provisions. Each party hereby irrevocably consents to the exclusive jurisdiction of the state and federal courts located in the county and state of Seller's manufacturing location, in any action arising out of or relating to this Agreement and waives any other venue to which it may be entitled by domicile or otherwise. (c) In the event of any legal proceeding between the Seller and Buyer relating to this Agreement, neither party may claim the right to a trial by jury, and both parties waive any right they may have under applicable law or otherwise to a right to a trial by jury. Any action arising under this Agreement must be brought within one (1) year from the date that the cause of action arose. (d) The application to this Agreement of the U.N. Convention on Contracts for the International Sale of Goods is hereby expressly excluded. (e) In the event that any one or more provisions contained herein shall be held by a court of competent jurisdiction to be invalid, illegal or unenforceable in any respect, the invalidity, illegality and unenforceability of the remaining provisions contained herein shall remain in full force and effect, unless the revision materially changes the bargain. (f) Seller's failure to enforce, or Seller's waiver of a breach of, any provision contained herein shall not constitute a waiver of any other breach or of such provision. (g) Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not used to be for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to humans or animals. (h) Buyer agrees that all pricing, discounts and technical information that Seller provides to Buyer is proprietary and confidential information of Seller. Buyer agrees to (1) keep such information confidential and not disclose such information to any third party, and (2) use such information solely for Buyer's internal purposes and in connection with the Products supplied hereunder. Nothing herein shall restrict the use of information available to the general public. (i) Any notice or communication required or permitted hereunder shall be in writing and shall be deemed received when personally delivered or within three (3) business days after being sent by certified mail, postage prepaid, to a party at the address specified herein or at such other address as either party may from time to time designate to the other.
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______________________________  ____________________
Signature                        Date
October 22, 2009

To Members of the Student Technology Selection Committee:

Please accept this letter of support on behalf of Dr. Gillian Rudd of the Department of Chemistry and Physics for purchase of a smart iTR accessory. This technology will considerably improve the flow of laboratory students who require the use of the Fourier Transform IR (FTIR) during “rush hour” when analysis of samples is required. What’s more, this will also increase one hundred fold, the type of samples that can be analyzed e.g. toxic liquids, paint chips etc.

Thank you for your consideration of this proposal.

Sincerely,

Austin L. Temple, Jr., Ph.D.
Dean, College of Science and Technology
Dear Committee Members:

I am pleased to write this letter of support in behalf of a grant proposal written by Dr. Gillian Rudd. Dr. Rudd is proposing to upgrade the chemistry and physics laboratories in the Department of Chemistry and Physics. Funds from this grant will be used to purchase an ultra-high performance, versatile Attenuated Total Reflectance (ATR) sampling accessory for our FT-IR. With the new technology, waiting time for the instrument will decrease, and this should increase student awareness of sampling techniques. The upgrade will affect all students who are taking chemistry or physics laboratory based courses.

Thank you for serving on this very important committee and for your consideration of this proposal.

Very truly yours,

[Signature]

Dr. April N. French
Assistant Professor of Chemistry
Department of Chemistry & Physics