Utilizing NACK Class Notes/Lab Resources for the Teaching of the Introductory Course Set (1) Materials, Safety, and Equipment Overview for Nanotechnology and (2) Basic Nanotechnology Processes

**Workshop Focus**
This five-day workshop is intended for faculty and administrators at post-secondary institutions which are offering, or which intend to offer, nanotechnology courses. This specific workshop covers the NACK hands-on teaching approach to the introductory subject set (1) Materials, Safety, and Equipment Overview and (2) Basic Nanotechnology Processes. The NACK experience is that teaching this introductory overview of materials and safety/equipment issues together with an introduction path for students into the world of nanotechnology. This workshop will cover teaching these two subjects, using the NACK class notes, and provide the required background, for each of the two courses. The workshop will also cover the strategies for the conducting of the NACK-provided labs for each of the two courses. We will also discuss the equipment needs for the labs, equipment costs, and sustaining costs. The various modes in which institutions may choose to present these courses and their labs will be examined varying from complete in-house offerings to web-augmented joint offerings with NACK.

Additional workshops are available focusing on utilizing NACK Notes/Lab Resources for Course Set II covering (3) Materials in Nanotechnology and (4) Patterning for Nanotechnology as well as focusing on utilizing NACK Notes/Lab Resources for Course Set III covering (5) Materials Modification in Nanotechnology and (6) Characterization, Testing of Nanotechnology Structures and Materials.

**Workshop dates and Venue**
This workshop will be held from Monday April 6th – Friday April 10th, at The Penn Stater Conference Center Hotel in State College, Pennsylvania.

The Penn Stater Conference Center Hotel
215 Innovation Boulevard
State College, PA 16803
(800) 233-7505

**Travel Reimbursement**
Expenses for lodging and travel will be reimbursed for all participants. In addition, there will be a $500.00 stipend for participants. There will be breaks throughout the workshop where snacks will be served and lunch will be part of the workshop. Dinner will not be provided so that you may spend your evening break how you wish before we reconvene for evening sessions.

**Registration**
There is a form at the end of this document. You can fax the completed form to (814)-865-9400 or email the completed form to ldaub@engr.psu.edu. Please contact Ms. Daub if you have any questions regarding the registration process.
**Agenda**

**Sunday April 5**

Check-in at the hotel

**Monday April 6**

8:00-8:30 am Registration/Welcome/Continental Breakfast  
*Steve Fonash*

8:30-10:00 am Background and modes of using NACK courses and labs  
*Steve Fonash*

10:00-10:15 am Break

10:15-11:45 am Lecture “Using the class notes for Materials, Safety, and Equipment Overview” course  
*Steve Fonash/Travis Benanti/Terry Kuzma*

12:00-1:00 pm Lunch

1:00-2:00 pm Lecture “Using the class notes for Materials, Safety, and Equipment Overview” course  
*Steve Fonash/Travis Benanti/Terry Kuzma*

2:00-2:30 pm Break

2:30-4:30 pm Lecture “Using the class notes for Materials, Safety, and Equipment Overview” course  
*Steve Fonash/Travis Benanti/Terry Kuzma*

4:30-7:00 pm Break for Dinner

7:00-9:00 pm Lecture “Using the class notes for Materials, Safety, and Equipment Overview” course  
*Steve Fonash/Travis Benanti/Terry Kuzma*

**Tuesday April 7**

8:00-8:30 am Continental Breakfast

8:30-9:00 am Welcome and Background  
*Steve Fonash*

9:00-10:00 am Lecture “Using the class notes for Materials, Safety, and Equipment Overview” course  
*Steve Fonash/Travis Benanti/Terry Kuzma*

10:00-10:15 am Break
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<tr>
<th>Time</th>
<th>Activity</th>
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<tr>
<td>10:15-11:45 pm</td>
<td>Lecture “Using the class notes for Basic Nanotechnology Processes” course</td>
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**Wednesday April 8th**

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<tr>
<td>8:00-8:30 am</td>
<td>Welcome/Continental Breakfast</td>
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<td>(Steve Fonash)</td>
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<td>10:00-10:15 am</td>
<td>Break</td>
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<tr>
<td>10:20-11:45 am</td>
<td>Equipment needs, equipment costs, and sustaining costs for these two courses</td>
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<td>(Steve Fonash/Terry Kuzma)</td>
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<tr>
<td>12:00-1:00 pm</td>
<td>Lunch</td>
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<td>1:00-4:00 pm</td>
<td>Conducting the NACK-provided labs for the course” Materials, Safety, and Equipment Overview”</td>
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<td>(Dave Johnson/Amy Brunner/Bill Mahoney)</td>
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<td>4:30-7:00 pm</td>
<td>Break for Dinner</td>
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<tr>
<td>7:00-9:00 pm</td>
<td>Conducting the NACK-provided labs for the course” Materials, Safety, and Equipment Overview”</td>
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Thursday April 9th
8:00-9:00 am  Welcome/Continental Breakfast

9:00-10:00 am  Conducting the NACK-provided labs for the course “Materials, Safety, and Equipment Overview”
(Dave Johnson/Amy Brunner/Bill Mahoney)

10:00-10:15 am  Break

10:15-11:45 am  Conducting the NACK-provided labs for the course “Basic Nanotechnology Processes”
(Dave Johnson/Amy Brunner/Bill Mahoney)

12:00-1:00 pm  Lunch

1:00-4:00 pm  Conducting the NACK-provided labs for the course “Basic Nanotechnology Processes”
(Dave Johnson/Amy Brunner/Bill Mahoney)

4:30-7:00 pm  Break for Dinner

7:00-9:00 pm  Conducting the NACK-provided labs for the course “Basic Nanotechnology Processes”
(Dave Johnson/Amy Brunner/Bill Mahoney)

Friday April 10th
8:00-9:00 am  Welcome/Continental Breakfast

9:00-11:45 am  Conducting the NACK-provided labs for the course “Basic Nanotechnology Processes”
(Dave Johnson/Amy Brunner/Bill Mahoney)

12:00 pm  Wrap up and adjournment
(Steve Fonash)
NACK Train the Trainer Workshop Registration Form

If you are interested in registering for the NACK Train the Trainer Workshop, April 5\textsuperscript{th}-10\textsuperscript{th} 2009, please fill out the following information and fax or email this information to Lisa Daub as soon as possible. \textit{(Use your mouse to go from one field to another. Try not to use the TAB key when filling out the form electronically)}

Full Name: 

Phone Number: 

Email Address: 

Street Address: 

City: 

State: 

Zip: 

Institution’s Name: 

Please provide a brief description regarding your background in nanotechnology education: 

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Please provide any dietary restrictions information:

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