Michael Coplan, Associate Director of The Institute of Physical Science and Technology (IPST), and Director of the Chemical Physics Graduate Program, and Charles Clark of the National Institute of Standards and Technology (NIST), and Adjunct Professor of the Chemical Physics Graduate Program, have been selected for the 2008 R&D 100 Award. They received this award for their Lyman Alpha Neutron Detector (LAND).

Jan Sengers has been chosen as the 2008 recipient of the Distinguished International Service Award by the Office of International Programs. The award was presented by President Mote on November 5, 2008.

Effective June 1, 2008, each University of Maryland College Park graduate assistant, graduate fellowship recipient and postdoctoral fellow may designate one qualified person in addition to himself or herself who shall be eligible for Campus-based privileges in accordance with certain rules. More information on the policy can be found at:


The supervision of the Ph.D. research of Chemical Physics (CHPH) students by both on-campus and off-campus advisors is the most important element of the students' training. While it is assumed that the students have acquired the necessary core knowledge during their first two years of course work, the application of this knowledge and the acquiring of the new knowledge necessary to solve significant scientific problems and become an independent researcher requires mentoring skill and close attention to detail and schedule.

The members of the CHPH Program all have extensive experience in research, and understand the nature of Ph.D. education. On the other hand, each program has its own requirements, benchmarks, schedules and familiarity with one does not necessarily apply to others. For this reason, it is essential that all advisors of CHPH students know the requirements and the expectations.

It is expected that students will graduate with their Ph.D. degrees five years after being admitted into the program. Some entering students with M.S. degrees will take less time, others will take more. The uncertainty of research does not allow for precise time lines to
be established. Nevertheless, there are expectations that form the basis of approximate schedules. The following schedule assumes graduation in five years:

<table>
<thead>
<tr>
<th>Event</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete core course work</td>
<td>1 to 2 years</td>
</tr>
<tr>
<td>Pass Qualifying Examination</td>
<td>1 to 2 years</td>
</tr>
<tr>
<td>Choose research group and advisor</td>
<td>no later than the end of year 2</td>
</tr>
</tbody>
</table>

**Ph.D Candidacy Requirements**

- Advanced laboratory: Year 2
- Advanced course: Year 2
- Two semesters of seminar: Year 2
- Research presentation: Years 2 or 3
- Scholarly paper: Years 2 or 3, after a thesis topic has been assigned

**Nominate Thesis Examining Committee**

Years 2 or 3, after a thesis topic has been assigned

**Research Credit (CHPH 899)**

12 credits needed for graduation

**Note:** 24 class credits required

Students with off-campus advisors are required to have an on-campus advisor. The student and the both advisors must meet at least once a year, and preferably once a semester to review student progress. A brief written report by the student should be part of the meeting. Copies of the reports are to be sent to the CPHH office to be filed with the student’s record. The student should meet with the Thesis Examining Committee once a year to review progress.

There is an annual meeting, usually in the spring, of all Ph.D. student advisors where the progress of the students is discussed. Attendance is essential for effective supervision.

**Online Resources**

**Graduate School:**

www.gradschool.umd.edu

- General Graduate Student Forms
- Graduation Deadline dates
- Rules and Regulations

**Testudo:**

www.testudo.umd.edu

- Schedule of Classes
- Registration
- Add/Drop

**International Education Services:**

http://www.international.umd.edu/ies/3970

- FI, J1 Student Information
- Resource Guide

**Registrar Office:**

http://www.reg.umd.edu/

- Academic Calendar
- Transcript Center

**Office of the Bursar:**

http://www.umd.edu/bursar/

- Tuition and Fees
- Bill Due Dates
- Billing Schedules

**Maryland English Institute (MEI):**

http://www.international.umd.edu/mei/

- Programs & Courses
- English Language Tests
Spring 2009 - Important Graduate School Deadlines

FEBRUARY 6, 2009
All Graduate Degree Candidates: Last day to electronically submit Application for Graduation to the Registrar's Office for graduation that semester.

FEBRUARY 13, 2009
Doctoral Students: Last day to submit Nomination of Dissertation Committee Form to the Registrar's Office, 1113 Mitchell (Committee form must be submitted at least six weeks before the scheduled defense.)

MARCH 6, 2009
Master's Thesis Students: Last day to submit Approved Program Form and Nomination of Thesis Committee Form to the Office of the Registrar, 1113 Mitchell Bldg. Committee form must be submitted at least six weeks before the scheduled defense.
Non-Thesis Master's Students:
Last day to submit the Approved Program Form to the Office of the Registrar, 1113 Mitchell.

APRIL 27, 2009
Doctoral Students: Final date to submit electronically Dissertation to the Registrar.
Final day to submit Electronic Thesis and Dissertation Publication Form to the Registrar. Final day for Dissertation Directors to send Report of Examining Committee Form to the Registrar, 1113 Mitchell.

MAY 4, 2009
Master's Thesis Students: Final date to submit electronically Thesis.
Final day for Thesis Directors to send Report of Examining Committee Form to the Registrar, 1113 Mitchell.
Non-Thesis Master's Students:
Final date to submit Certification of Master's Degree Without Thesis Form to the Registrar, 1113 Mitchell Bldg.

Students who do not register, will be dismissed from the Graduate School at the end of the semester for failure to comply with the continuous registration requirement.
Students dismissed for non-registration may appeal dismissal during a 30-day period following the end of the semester of non-registration. Students who do not appeal, or if the appeal is denied, must apply to the Graduate School for readmission. In this case, readmission does not alter the initial requirements for time to degree or advancement to candidacy.

Waiver of Registration for Doctoral Candidates:
Doctoral candidates are not eligible for waivers of continuous registration. Each doctoral Candidate must maintain continuous registration in 999 (Doctoral Dissertation Research) until the degree is awarded. waivers of registration may be granted only under the University’s policy for leave of absence for graduate students for childbearing, adoption, illness, or dependent care.

Continuous Registration Requirements:
All graduate students must register for courses and pay associated tuition and fees each semester, not including summer and winter sessions, until the degree is awarded.
Students who fail to register and who have not requested and received a waiver of registration of leave of absence for childbearing, adoption, illness or dependent care will be notified by the Graduate School after the first day of classes that they must register for the current semester. The Graduate School will also inform the Graduate Director of the graduate program that the student are in jeopardy of termination.
The Chemical Physics (CHPH) bi-monthly student meetings are held in the IPST building, room 1116, starting at 5:00 P.M. Refreshments will be served.

Fall 2008:

**September 24th:**
Introduction of students and IPST presentation by Joanne Desiato (Graduate Student Ombudsperson).

**October 15th:**
Daniel Rogers, “New Technologies for Broadband Quantum Key Distribution: Sources, Detectors, and Systems” (Charles Clark, NIST, Julius Goldhar, ENGR supervisor).

**October 29th:**
Andrew Ballard, “Efficient Simulation of Complex Systems” (Christopher Jarzynski, CHEM/BIOCHEM and IPST supervisor).

**Brook Hester**, “Optical Trapping Near Resonance” (Kristian Helmerson, NIST, Steven Rolston, PHYS supervisor).

**November 12th:**

**November 25th:**
Yong Sing You, “Designing Matter Wave Interferometry Optical Wave Guide” (Charles Clark, NIST supervisor).

Zhechun Zhang, “Study Proteins Dynamics Using Normal Mode Analysis” (Devarajan Thirumalai, CHEM/BIOCHEM and IPST supervisor).

**December 10th:**
Xiaofei Ma, “Apparent Surface Energy Measurement of Un-supported Zn Nanocrystal” (Michael Zachariah, ENME, CHEM/BIOCHEM and NIST supervisor).

Lin Weng, “DFTB Simulation for Self-assembly of C60 on Pentacene” (Daniel Kosov, CHEM/BIOCHEM supervisor).

The Spring Schedule will be posted on the Chemical Physics website as soon as its available. If you have any ideas or special request please contact the Chemical Physics Graduate Office at dajenkin@umd.edu or 301-405-4780.
Graduate Education in CMPS

There are eight graduate programs based in College of Computer, Mathematical, and Physical Sciences (CMPS), Astronomy, Applied Mathematics and Scientific Computation, Chemical Physics, Biophysics, Physics, Computer Science, Geology and Atmospheric and Oceanic Science. The Graduate Education Working Group (GEWG) is a committee in CMPS made up of the directors of the graduate programs plus two student representatives, each serving a two year term. The objectives of GEWG are:

1. To support the University’s graduate programs and work toward the goals of reduced time to degree and increase PhD completion rates.
2. To improve the graduate experience through assistantships, improved pay packages and benefits.
3. To promote diversity with special attention to admission and enrollment.

I am one representative and it is my responsibility to represent student views. I have discussed and shared my views with the committee members about the size of graduate programs and quality of graduate student placements. I expressed my concerns about downsizing GEWG decided against the downsizing of the graduate programs in CMPS and has taken action to have students complete their studies on time. GEWG distributed among the members the exit interviews of graduating students and decided to use this information to improve the programs. I believe that the exit interviews are especially helpful in assessing the graduate programs performance and understanding of the student expectations.

The committee adopted several benchmarks to evaluate individual program performance. Some are (1) adequate size of the program, (2) quality of the placements, (3) publication rates and (4) financial and infrastructure support of students.

Appropriate benchmarks to gauge student progress is another challenge. (1) passing the qualifying examination, (2) admission to candidacy, (3) success-rate of thesis defense. Implementation of these benchmarks will certainly help the students in assessing their own progress and will motivate them to complete their degree on time.

I believe that increased student involvement will improve the effectiveness of GEWG. Students are well aware of general issues uninformed about everyday details. A better communication channel throughout the student population would be useful. As a first step students should be made aware of GEWG and its mission. After that, the means where by students convey their concerns to their representatives need to be established.

The Chemical Physics program arranges student meetings every semester. I intend to give a talk in this semester about GEWG and its mission. My personal objective is to make the students aware of the GEWG and also to encourage them to communicate their recommendations and suggestions to me. This will help me understand student concerns and effectively represent them to the committee.

GEWG has a well-intended strategy for improving the University’s graduate program. Success of the plan will help UMCP to maintain and improve upon its status. In all of this student participation is important.

Submitted by Debjani Roy,
Chemical Physics Graduate Program.
Chemical Physics & Biophysics

Spring Reception
Friday, April 3, 2009
2:00 - 4:00
CSS Building Room 4301

Join us for lunch!
All Chemical Physics and Biophysics
Students, Faculty and
Government Scientists are welcome.

Please R.S.V.P. by
Wednesday, March 25, 2009

Caricia Fisher, cjfisher@umd.edu

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chemicalphysics.umd.edu