

**UNIVERSITY COUNCIL MEETING**  
**November 4, 2013**  
**3:00 p.m.**  
**1045 Pamplin Hall**  
**AGENDA**

1. Adoption of Agenda Dr. Charles Steger
  
2. Announcement of approval and posting of minutes of October 21, 2013 Dr. Charles Steger  

These minutes have been voted on electronically and will be posted on the University web.
  
3. New Business Dr. Charles Steger  

Commission on Undergraduate Studies and Policies Dr. Audrey Zink-Sharp  
Resolution 2013-14B  
Resolution to Approve the Bachelor of Science Degree in Nanoscience
  
4. Announcement of acceptance and posting of Commission Minutes Dr. Charles Steger  

These minutes have been accepted for filing by electronic vote and will be posted on the University web. Note that the purpose of voting on Commission minutes is to accept them for filing. University Council By-laws require that policy items be brought forward in resolution form for University Council action.

Commission on Equal Opportunity and Diversity  
April 22, 2013

Commission on Graduate Studies and Policies  
October 2, 2013

Commission on Research  
September 11, 2013

Commission on Undergraduate Studies and Policies  
October 21, 2013
  
5. Adjournment Dr. Charles Steger

**University Council Minutes**  
**November 4, 2013**  
**3:00 PM**  
**1045 Pamplin Hall**

**Present:** Charles Steger (presiding), Erik Westman for Richard Benson, Lay Nam Chang, Jack Davis, Karen DePauw, Elizabeth Flanagan, Guru Ghosh, Edwin Jones for Alan Grant, Mark McNamee, Jeb Stewart for Scott Midkiff, Kim O'Rourke, Sue Ott Rowlands, Patricia Perillo, Laura Rugless, Dwight Shelton, Robert Sumichrast, Tom Tillar, Martin Daniel for Robert Walters, Tyler Walters, Kayla Smith for Sherwood Wilson, Paul Winistorfer, Carlyle Brewster, Jesus de la Garza, Jennifer Hundley, Maxine Lyons, Lesley Moyo, Mayuresh Patil, Audrey Zink-Sharp, Susan Anderson, Charlene Eska, Cherlin Charles for Scott Nelson, Bruce Pencek, Eugene Brown, Paul Herr, William Huckle, Carola Haas for Tom Fox, Sam Riley, Ana Agud, Judy Alford, Darla Chudzik, Cyndy Graham, Stacey Poertner, Marwa Abdel Latif, Brett Besag, Robin Lawson, Michael Martin, Samantha Erwin, Brent Ashley, Johnson Bray, Jordan Disney, Elizabeth Lazor, Bryan Mitchell, Daniel Pierce-Parra, Joe Merola, Sue Teel,

**Absent:** Cyril Clarke, William Lewis (with notice), Dan Cook (with notice), Joseph Eifert, Kylie Gilbert, Susanna Rinehart (with notice), Mike Denbow, Dave Dugas, Leanna House, Melissa Means (with notice), Jen Mirabella (with notice), Morgan Esters, Kyrille Goldbeck DeBose, Karisa Moore, Shaimaa Abdallah, Mordecai Harvey, Nick Warrington, Erica Wood

**Guests:** Jack Finney, Natalie Hart, James Heflin, Michael Hochella, Rachel Holloway, Edward Lener, J.P. Morgan, April Myers

Dr. Steger called the meeting to order at 3:00 p.m. A quorum was present.

**1. Adoption of Agenda**

A motion was made and seconded to adopt the agenda. The motion carried.

**2. Announcement of approval and posting of minutes of October 21, 2013**

Dr. Steger noted that these minutes have been voted on electronically and can be publicly accessed on the Governance Information System on the Web (<http://www.governance.vt.edu>).

**3. New Business**

**Commission on Undergraduate Studies and Policies**

Resolution 2013-14B

Resolution to Approve the Bachelor of Science Degree in Nanoscience

Ms. Kim O'Rourke informed the Council members that the background information was not posted with the resolution. The options are to wait until the next meeting to have the first reading or let it come to first reading at this meeting, and if members are not comfortable voting at the next meeting, the resolution can be deferred to the December 2, 2013, meeting. The general consensus was made to have the first reading today, and the background materials will be distributed immediately after the meeting.

Dr. Aubrey Zink-Sharp presented the resolution for first reading and directed questions to Gary Long and Dr. James Heflin. Dr. Long indicated that this degree is a cross departmental action in an emerging field. Dr. Long asked Dr. Heflin to give background on the degree proposal. Dr. Heflin indicated that this program deals

with the science side of nanoscience, which is before things develop into technology. Students will be able to develop a firm foundation of nanoscience including understanding, characterizing, designing, and manipulating nanostructures at complex levels. This program comes out of the departments of Biological Sciences, Chemistry, Physics, and Geological Sciences. The program is a new initiative that will have a very strong hands-on component with several lab courses. Virginia Tech is fortunate enough to have established faculty in nanoscience which will enable Virginia Tech to become a leader in this field. Ours would be the first nanoscience major in the country.

Dean Chang informed the Council members that Virginia Tech has been able to accumulate quite a few topnotch faculty members in the field of nanoscience since the late 1990s. The university has also been a great help in acquiring equipment needed for this program. In the past, students were not able to take nanoscience courses until their senior year.

Dr. Chang informed the Council that Dr. Michael Hochella's current project caught the attention of the National Science Foundation (NSF). Dr. Hochella stated that nanoscience is now a multi-trillion-dollar research industry and is a revolution that is just as important as the information technology and biomedical revolutions. Many think it is the next industrial age. Virginia Tech needs to join Cornell, Harvard, MIT, Berkeley, and Stanford in order to become a leader in the field. The National Nanotechnology Infrastructure Network (NNIN) is funded by the NSF for a twenty-year period for a sum of \$320 million. Currently this is at the ten-year mark, and up to this point, Virginia Tech has not been a part of that. Virginia Tech has been asked by the schools named above to join them because of Virginia Tech's forefront position in research and teaching. The proposal is before the NSF right now, awaiting a final decision for the next ten years for the entire group of eighteen universities. The NNIN wants Virginia Tech to be a partner because of the R1 research status in nanosciences and for Virginia Tech's educational commitment. Virginia Tech is unique in the educational arena. The number of students in this program has grown over the past three years. The first year there were eight majors, the second year there were twelve majors, and the third year there were thirty majors.

#### **4. Announcement of Approval and Posting of Commission Minutes**

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#### **5. Adjournment**

There being no further business, a motion was made to adjourn the meeting at 3:23 p.m.