

Colloquium on New Materials – Spring 2009 – Essay topics

Select one of the topics below and write a 5-7 page essay or short research report (5 pages without pictures, ~7 pages with pictures). As the topics are rather broad, the essay should contain a short introduction to the topic and then a more detailed discussion through example(s).

Note that some of the topics are quite closely related to the talks given in the seminar. If you select one of those topics, try to write your essay to cover mostly the things that were not presented in the lecture. I.e. use the lecture slides only as a way to find additional materials.

Return your essay by latest 31.5.2009 by one of the following methods:

1. Email: eeva.rautama@tkk.fi
2. Internal mail: Eeva Rautama, PL 6100
3. Conventional mail: Eeva Rautama, PL 3500, 02015 TKK

- 1) **Bioactive materials**
- 2) **Composite Materials**
- 3) **Advanced electrode materials in supercapacitors**
- 4) **(New) low-friction materials for high-temperature applications**
- 5) **Inorganic and organic light-emitting diodes**
- 6) **Commercial applications of nanotubes**
- 7) **Graphene –future prospects**
- 8) **Biomedical applications**
- 9) **Own topic.** This should be related to modern material science or technology and should NOT be the topic of the research you are or have been doing (The intention of the course is to learn new). Before writing on this, contact Eeva Rautama and explain the topic and give approximate contents of the essay.