

## Colloquium on New Materials – Spring 2008 – 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 31.5.2008 by one of the following methods:

1. Email: [mika.koskenvuori@tkk.fi](mailto:mika.koskenvuori@tkk.fi)
2. Internal mail: Mika Koskenvuori, PL 3500
3. Conventional mail: Mika Koskenvuori, PL 3500, 02015 TKK
4. To room 4123 in Micronova

- 1) **Synthesis of nanoparticles**
- 2) **Nanotechnology in energy storage**
- 3) **Bioadaptive materials**
- 4) **(New) materials for fuel cells**
- 5) **New materials for (nano-)optics**
- 6) **Synthesis of materials for medical (=therapeutic) use**
- 7) **Successfully commercialized examples of nanotechnology**
- 8) **Plasmonics**
- 9) **Composite materials**
- 10) **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 Mika Koskenvuori and explain the topic and give approximate contents of the essay.