IM2655 Introduction to Nanomaterials and Nanotechnology

PROJECT WORK

Assoc. Prof. Muhammet Toprak
toprak@kth.se

Functional Materials Division, ICT School
Royal Institute of Technology (KTH)

Outline - Report

- Title
- Aim of the report - Objectives
- Background
- Methodologies – (Theory) – Examples
  - » Including relevant figures
- Future of the technology
- References
  - » Proper referencing style
  - » Journal articles, books, web-resources, etc.

Requirements

- Length
  - 6-8 A4 pages (excluding figures)
  - 1.5 line spacing
- Font:
  - Times New Roman, 12 pts
  - All margins 2.5 cm (including header and footer) except the right margin should be 1.5 cm wide
- References
  - Proper citations given (given.[1], or given.[1])
  - Minimum 10 journal articles referred
    - (pdf files of the Ref. will be handed over along with your reports)
    - Web-based references will not count in this 10

Reports due …

Reports have to be handed over by

Oct, 2014

Do not forget the cover page with all group members' names

1. **Use KTH BOX to upload and share the folder**
2. **Bring all files (i.e. Main Report** and **references on memory sticks to copy to TOPRAK's computer)**

GOOD LUCK! ☺

Evaluation

- A presentation for
  - 20 min + 3-5 min Q&A and discussions → group of 2 students
  - 25 min + 3-5 min Q&A and discussions → group of 3 students
  - Submit the followings ELECTRONICALLY:
  - Project Report
  - pdf file for the references used in the Report
  - Project Presentation (ppt preferred)
- Date to be decided together **(According to the Schedule)**

Important Points to Consider

- The focus of the projects should be on the IMPACT of NANOTECH in the RESPECTIVE FIELDS.
- A comparison of the state-of-the art before and after the introduction of NANOTECH/NANOMATERIALS should be made
- **Keep away from PLAGIARISM**

Nanomaterials and Nanotechnology for/in …

	Topics	Students
1	Energy storage– Batteries (Li ion)	
2	Energy applications – Solar cells (3rd generation)	
3	Energy applications – Hydrogen storage	
4	Biomedical Applications – Drug delivery	
5	Biomedical Applications – Imaging	
6	Environmental Remediation (water/soil/air clean-up)	
7	Energy Harvesting – Phase Change Materials	
8.	Energy Harvesting – Thermoelectric Materials	
9	Building/Structural Materials	
10	Coating (anticorrosion, lubricative, etc.)	
11	Textile industry	
12	Characterization tools	
13	Electronics (portable)	
14.	Splitting of water	