

## **Domna Constantinou**

PhD student

University of Thessaloniki

### **Personal Profile**

Domna wanted to study chemical engineering since at school having always liked chemistry and maths and physics...

She wanted to work with technologies that had to do with products we use in every-day life, like medicines, plastics, petrol, drinks and foodstuff.

On finishing her degree in Thessaloniki she decided to move on to do a PhD, either in Thessaloniki or at the University of Cyprus. Finding some interesting proposals at the UATH Chemistry Department she put in her applications, was accepted and started her PhD in January 2006.

### **Research Profile**

"The aim of my research is to produce hydrogen from biomass and is done in collaboration with other European universities as well as industries.

Hydrogen is a very important energy carrier.

The main aspect of biomass we target is wood.

Wood is combusted through a chemical process and the gas product is collected.

Part of this gas product is hydrogen and carbon dioxide. The solid product, ash is collected and used as a fertilizer. The liquid product is what we are concerned with. We collect a compound called phenol. Phenol is reacted with water vapour and a catalyst to produce hydrogen. This here is a catalyst which contains calcium oxide and magnesium oxide. It can be found in nature as a bed-rock which makes the cost of this process very low".

### **Other interests**

In the middle of high levels studies, it is important to relax and Domna likes going shopping with her friends, for a drink or to the cinema...

### **Relevant Links or info**

For further information about chemical Engineering at the University of Thessaloniki please view [http://www.cheng.auth.gr/cheng\\_uk/index.html](http://www.cheng.auth.gr/cheng_uk/index.html)