



Miss Judith Ray

is now back from her year long secondment at POLYINTELL, France. This work experience in industry allowed her to improve her laboratory and scientific skills as she was trained to use innovative MIP technology and materials. She also became fluent in French. Judith is now back at Queen Mary, University of London to resume her PhD under the supervision of Dr

Resmini at the School of Biological and Chemical Sciences. On her return Judith worked hard on her poster presentation entitled “Synthesis and Characterisation of Polymeric Nanoparticles for Drug Delivery” for the School 2nd Year Postgraduate Symposium 2012 and her work was awarded as she won the best poster prize! The symposium was held at the stunning Victorian Octagon venue at QMUL on Monday 20th February 2012.





I started my PhD in September 2011 at Queen Mary, University of London in the School of Biological and Chemical Sciences under the supervision of Dr. Marina Resmini. The aim of my project is to develop new thermoresponsive nanogels as delivery vehicles for skin disease treatments.

In December 2011 I went to visit Saint Paul's Way Trust School in London to give a presentation about my research. The talk was entitled "Drug delivery systems for Skin Disease". As the audience was around 12-14 years old I had to ensure that I targeted my presentation to this age group using lots of illustrations to make sure they could understand. In particular, illustrations were used to explain about nanotechnology so they could comprehend the small scale at which we work. I talked about medicines, both how they are formulated and also the importance of the drug carrier to achieve therapeutic effect.

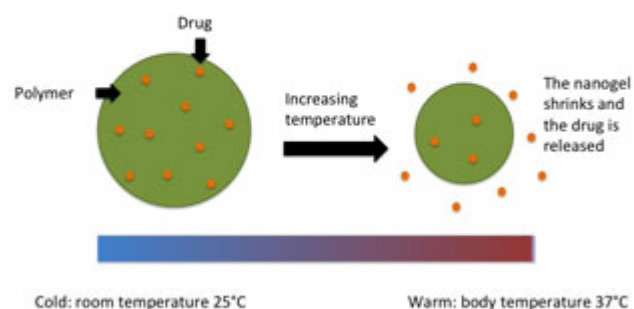
To explain the effect of a change in temperature on my nanogels I used an analogy: a sponge! If it is full of water and you squeeze it, the water is released. Our nanogels, once loaded with drugs, will be able to work in the same way and as my nanogels are thermoresponsive they shrink and release the drug on a change in temperature.

One of the most important reasons of going to the senior school was to motivate students to choose a career in

science. The science teacher in the school told me that due to the influence of current TV shows, adolescents today predominantly want to be football players or singers! Taking this into account I explained to them about University, the importance of getting a good degree and how, for me, this opened the door to doing a PhD. I also explained to them the gratification of contributing to developing ways of treating people, that one day might be used as a cure.

Dolça

How does a thermo-responsive nanogel work?



Recruitment & Secondment



Nataliya Marchyk

ESR - CNRS

From 1st December 2011, Nataliya started her six-month secondment at POLYINTELL. Below is her biography.

I was born in Minsk in 1984. Minsk is the capital of small but very beautiful landlocked country Belarus, bordered with Poland in the west, Russia in the northeast, the Ukraine in the south and Lithuania and Latvia in the northwest. Here I finished my high school and graduated from the Belarusian State University which is considered the best country's university in fundamental sciences where I obtained the specialization in Chemistry, scientific and production activity.

During my master studies I was interested in the formation of nanostructured thin-layer composites on the basis of Langmuir-Blodgett technique which I carried out in the laboratory of chemistry of surfaces of thin films in the Institute of chemistry of new materials of the National Academy of Sciences of Belarus. I obtained my master diploma in June 2008.

In January 2009, I started my PhD studies at the Université de Technologie de Compiègne, France. The aim of my work is to prepare molecularly imprinted polymers for the optical detection of glycoconjugates.

Dr Olivier Lepine

from POLYINTELL has started his 3 months secondment at CNRS in March 2012.



Dr. Serena Ambrosini

ER-CNRS

Serena was born in 1983 in Novara (NO), a small town closed to the enchanting Lago Maggiore, northern Italy.

She graduated in Pharmaceutical Chemistry and Technologies (CTF) in 2007 at the University of Pavia (Italy). She carried out her master's degree thesis in a laboratory of analytical pharmaceutical chemistry under the supervision of Prof. E. De Lorenzi. The thesis project involved the use of analytical techniques to study amyloidogenic proteins, in particular the use of capillary electrophoresis to follow their aggregation processes. Serena kept on working with Prof. E. De Lorenzi and in November 2007 she started her PhD. The PhD project was carried out in close collaboration with the research group of Dr. B. Sellergren (Technical University of Dortmund, Germany), where Serena spent part of her doctoral studies. The PhD project was focused on the synthesis, characterization and application of molecularly imprinted polymers against glucuronated metabolites. Therefore, she had the opportunity to gain expertise with organic and polymeric synthesis, liquid chromatography and solid phase extraction.

In 2012 she won a one-year postdoc fellowship in the research group of Prof. G. Massolini (University of Pavia). During that year, she was involved in the development of biocatalytic processes (e.g. enzymatic hydrolysis) to enrich vegetable oils in essential fatty acids.

In February 2012, Serena joined Prof. K Haupt's Lab at the Université de Technologie de Compiègne (France) as Experienced Researcher to work on the IRMED project.



Port~~h~~coming

Events

Network Events

23 apr **12** **IRMED Mid-Term Review Meeting**
and 2nd International Meeting
Paris, France

25-27 jun **12** **2nd IRMED Summer Training School**
Queen Mary, University of London



other forthcoming conferences

19-20 apr **12** **Nanomedicine: Visions, Risks, Potential**
Berlin, Germany
<http://www.ea-aw.org/>

14-18 mai **12** European Materials Research Society
E-MRS 2012 SPRING MEETING
Congress Center - Strasbourg, France
<http://www.emrs-strasbourg.com/index.php>

10-11 jul **12** **Marie Curie Conference ESOF 2012**
The Convention Centre Dublin, Ireland
<http://esof2012.org/about/marie-curie-actions-conference-2012/>

15-17 jul **12** **Colloids and Nanomedicine 2012**
Amsterdam, The Netherlands
<http://www.colloidsandnanomedicine.com/index.html>

27-30 aug **12** **Molecularly Imprinted Polymers -
Science and Technology
MIP 2012**
Paris, France
<http://www.mip2012.com/>



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