

3-rd International Summer School

Contribution of Chemistry and Material Engineering to Environmental Issues

28th July – 10th August 2008



DAAD

Deutscher Akademischer Austausch Dienst
German Academic Exchange Service

This is the third summer school offered through co-operation of the **DAAD, Warsaw University of Technology** and **Koszalin University of Technology**. The aim of the event is to provide high quality of education in a chosen theme. This occurs through interaction with outstanding researchers in their appropriate fields, in an informal classroom setting as well as through joint student exercises and hands-on experiments. The goal is not only to acquire scientific knowledge but also to interact closely with prominent instructors, and to meet leading researchers in the field. Environmental issues are highly multidisciplinary field, covering disciplines in chemistry and material engineering. Much speculation exists over what new science and technology might result from these lines of research.

The theme for this year's summer school is "**Contribution of Chemistry and Material Engineering to Environmental Issues**" and will be held in Warsaw and Koszalin, Poland, between July 28th – August 10th 2008.

Summer School provides students with the opportunity to accelerate their program, and complete ahead of time, get a head start to their degree, take a unit that does not fit into their timetable or is outside their normal program and combine a holiday in Poland with study.

PARTNERS

Warsaw University of Technology is a research-intense, doctoral-level academic institution focused on undergraduate and graduate programmes almost exclusively in engineering and applied sciences. With over thirty thousand students served by over two thousand professors and instructors, Warsaw University of Technology is the largest and the highest ranking engineering university in Poland.

Koszalin University of Technology is the only technical university in the region of Central Pomerania in Poland. It is located in a city of over 100.000 inhabitants in an area of beautiful landscapes near the Baltic Sea, about 12 kilometre from the coast with its clean sandy beaches. This region is part of “the green lungs” of Poland. The University provides academic and technical education and is a leader in research in the disciplines generally connected with the region’s areas of development.

PARTICIPANTS

Summer School 2008 is aimed at students of technical universities from Poland and Germany. It’s an introduction to Chemistry and Material Engineering to Environmental Issues – there are no minimum requirements regarding the academic year of study or course. It’s only your involvement and passion that is demanded. Summer School is reserved for 10 participants from Poland and 10 from Germany.

DATES

Polish–German Summer School 2008 will be held between **July 28th and August 10th 2008**.

The first week (July 28th – August 2nd) will take place in Warsaw, the second week (August 3rd – 10th) – in Koszalin.

HOW TO APPLY

Very soon, there will be an application form on the web page of Centre for International Cooperation (www.cwm.pw.edu.pl).

The filled form should be sent to:

<p>CENTRE FOR INTERNATIONAL COOPERATION WARSAW UNIVERSITY OF TECHNOLOGY 00-661 WARSAW, PLAC POLITECHNIKI 1</p>

Each candidate will have to attach the opinion of his Study Group tutor!

ENGAGEMENTS

Tutorials – courses and workshops – will be provided by professors from Warsaw University of Technology (WUT) and Koszalin University of Technology (KUT). All lecturers are from the following faculties: Faculty of Materials Science and Engineering, Faculty of Chemistry, Faculty of Chemical and Process Engineering WUT; Institute of Mechatronics, Nanotechnology and Vacuum Techniques KUT.

We plan 5 hours of sciences engagements per day – from Monday to Friday. The full program of 3rd Polish–German Summer School - with classes and entertainment particulars - will be posted on our website very soon. Upon completion, the students will receive certificates.

In order to receive detailed information, please contact WUT International Students Office: e-mail k.masluszczak@cwm.pw.edu.pl

EXPENSES

The courses are fully free!

The participants have to pay only for:

- Housing costs:
~ 20 EUR / night
- Food costs:
~ 12 EUR / day
- Excursions and visits to places of interest:
~ 55 EUR



Warsaw University of Technology

Centre for International Cooperation

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3-rd International Summer School
Contribution of Chemistry and Material Engineering to Environmental Issues
PROGRAM OF ACTIVITIES

WARSAW UNIVERSITY OF TECHNOLOGY

First week
(28th July – 2th August 2008)

27.07.2008 (Sunday)

8.15 - 11.00	arrival of the participants
10.00 - 11.30	accommodation at the Student's Hostel
12.00 - 13.00	lunch
13.00 - 18.00	activities organized by Students Union
19.00 -	dinner and welcome party

28.07.2008 (Monday)

8.00 - 9.00	breakfast
9.30 - 10.00	welcome by the Vice-Rector of Warsaw University of Technology
10.30 - 12.30	lecture " <i>Transition metals containing molecular devices – synthesis and characterization</i> " – dr B. Korybut-Daszkiewicz / <i>The Polish Academy of Sciences /Faculty of Chemistry and Chemical Show</i>
13.00 - 14.00	lunch
14.30 - 16.30	<i>visit to the "FLOGISTON" – Chemical Study Group</i>
18.00 - 19.00	dinner
20.00 -	activities organized by Students Union

29.07.2008 (Tuesday)

8.00 - 8.30	breakfast
9.00 - 10.30	lecture " <i>Reliable supply with water for consumption</i> " - prof. M. Kwietniewski / <i>Faculty of Environmental Eng.</i>
11.00 - 12.30	lecture " <i>Microbial contamination of drinking-water distribution systems: problems and solutions</i> " - prof. A. Grabińska-Łoniewska / <i>Faculty of Environmental Eng.</i>
13.00 - 14.00	lunch
14.30 - 17.00	laboratory " <i>Removal of humic substances by chemical oxidation (potassium permanganate or ozone) during drinking water treatment</i> " - dr M. Perchuc / <i>Faculty of Environmental Eng.</i>
18.00 - 19.00	dinner
20.00 -	activities organized by Students Union

30.07.2008 (Wednesday)

8.00 - 9.00	breakfast
10.00 - 12.00	lecture “ <i>Membrane technology and applications (medicine, waste treatment and others)</i> ” – dr W. Piątkiewicz / <i>Faculty of Chemical and Process Eng.</i>
12.30 - 13.30	lunch
14.00 - 18.30	visit to Lindley’ Water Filters “ <i>How do the water treatment plant work</i> ”
19.00 - 20.00	supper
20.00 -	activities organized by Students Union

31.07.2008 (Thursday)

8.00 - 9.00	breakfast
10.00 - 11.00	lecture “ <i>Bulk-nanometals</i> ”- prof. K. J. Kurzydłowski / <i>Faculty of Materials Science and Eng.</i>
11.30 -12.30	lecture “ <i>Nano in Nature</i> ” - dr K. Konopka / <i>Faculty of Materials Science and Eng.</i>
13.00 - 14.00	lunch
15.00 - 17.00	laboratory course (<i>scanning electron microscopy, transmission electron microscopy</i>)”/Faculty of Materials Science and Eng.
18.00 - 19.00	supper
19.30 -	activities organized by Students Union

1.08.2008 (Friday)

8.00 - 9.00	breakfast
10.00 - 11.00	lecture “ <i>Amorphous and nanocrystalline alloys for efficiency enhancement in power sector</i> ” – dr J. Ferenc / <i>Faculty of Materials Science and Eng.</i>
11.30 - 12.30	lecture “ <i>Nanomechanical and nanotribological studies of materials</i> ”- prof. Z. Rymuza / <i>Faculty of Mechatronics</i>
13.00 - 14.00	lunch
15.00 - 17.00	laboratory course (<i>laboratory of Division of Constructional and Functional materials</i>) / <i>Faculty of Materials Science and Eng.</i>
18.00 - 19.00	supper
19.30 -	activities organized by Students Union

2.08.2008 (Saturday)

9.00 - 10.00	breakfast
10.00 - 12.00	activities organized by Students Union
13.00 - 14.00	lunch
15.00 - 18.00	free time
18.00 - 19.00	supper
21.45 -	departure from Warsaw

Contact: **Karol Maśluszczak**, International Students Office (PW), (0-22) 234-50-91;
k.masluszczak@cwm.edu.pl

Przemysław Kornatowski, Przewodniczący Rady Kół Naukowych-Delegat do Komisji Zagranicznej; mobile: 609 504 460 ; pkornatowski@samarzad.pw.edu.pl

KOSZALIN UNIVERSITY OF TECHNOLOGY
Institute of Mechatronics, Nanotechnology and Vacuum Technique

Second week
(03th – 10th August 2008)

03.08.2008 (Sunday)

6.50 arrival of the participants from Warsaw (by train)
8.00 accommodation at the students' dormitory
9.00 - 10.00 breakfast
13.00 - 14.00 lunch
14.00 - free time

04.08.2008 (Monday)

9.00 - 10.00 breakfast
10.30 - 11.30 kick-off meeting, Institute of Mechatronics, Nanotechnology
and Vacuum Technique (IMNVT),
13.00 - 14.00 lunch
14.00 - free time

05.08.2008 (Tuesday)

9.00 - 10.00 breakfast
10.15 - 13.00 lecture „*Introduction to nanocomposite thin film coatings for tribological
applications – growth, structure and properties*” - dr W. Gulbiński (IMNVT)
13.30 - 14.00 lunch
16.00 - 22.00 excursion to Kołobrzeg

06.08.2008 (Wednesday)

9.00 - 10.00 breakfast
10.15 - 13.00 lecture „*Fundamentals of vacuum plasma technology for thin films deposition*”
- dr J. Staśkiewicz (IMNVT)
13.30 - 14.00 lunch
16.00 - 18.00 visit to BROK Brewery in Koszalin

07.08.2008 (Thursday)

9.00 - 10.00 breakfast
10.15 - 13.00 lecture “*Wear resistant and low friction nanocomposite coatings*” - dr T.
Suszko (IMNVT)
13.30 - 14.00 lunch
14.30 - free time

08.08.2008 (Friday)

9.00 - 10.00 breakfast
10.15 - 13.00 workshop and laboratory course „*Vacuum arc deposition of industrial coatings
– an industrial case*” - dr J. Staśkiewicz (IMNVT)
13.30 - 14.00 lunch
14.30 - 20.00 free time
20.00 - disco in student's club “Kreślarnia”

09.08.2008 (Saturday)

- 9.00 - 10.00 breakfast
10.15 - 13.00 workshop and laboratory course „*Reactive magnetron sputtering of nanocomposite films*” - dr T. Suszko (IMNVT)
13.30 - 14.00 lunch
18.00 - Campfire – marina of Yacht Club of KUT, Mielno

10.08.2007 (Sunday)

- 9.00 - 10.00 breakfast
10.15 - departure of participants

Contact:

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