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The total fee is 300 Euro + VAT 20% and includes attendance, proceedings and lunches. Partial support can be granted only to few PhD student who explicitly will make the request, and present a letter of support of their thesis Director. Payment should be made by bank transfer to:

Bank: **Banca delle MARCHE**

Agenzia di Jesi - Corso Matteotti, 8

Account name: Fondazione A.Colocci

Account number: 13832 – CIN N - 6055 ABI - 21205 CAB

International code IBAN:

IT43 N060 5521 2050 0000 0013 832-BIC BAMAIT3A

Please specify for: The International School on Advanced Material Science and Technology.

Registration will be confirmed within 10 days after receiving the application form. Payments should be done immediately after confirmation. Please send by fax a copy of the bank transfer.

Closing date for registration: **15th July, 2006.**

No special application form is required.

Priority will be given to the earlier registrations. The number of participants is restricted to 40. For any other communication, please use e-mail or fax.

Accommodations

The participants have to provide the Hotel's reservation. They have to contact the hotel's staff, before **15th July, 2006.**

Hotels	Single	Double for single use	Double
FEDERICO II **** tel. +39 0731 211079 fax +39 0731 57221	93 €	139 €	139 €
MARIANI *** tel. +39 0731 207286 fax +39 0731 200011	52 €	72 €	72 €
DEI NANI *** tel. +39 0731 4846 fax +39 0731 222533	50 €	65 €	65 €
Villa MALU Agritourist tel/fax +39 0731 5581	30 €	---	50 €
Ostello Villa Borgognoni tel +39 0731 214088 fax +39 0731 223702	Low cost accomodation Contact directly the hostel's staff in Jesi		

Tourist information can be found on the following websites:

www.turismo.marche.it www.conero.it www.frasassi.com

www.comune.jesi.ancona.it

How to reach JESI

By car: motorway A14 exit Ancona Nord (16 km)

By train: Ancona –Roma, railway station Jesi

By plane: airport Falconara -Ancona (17 km)

Low cost flights reach Ancona regularly from Paris, London, Barcelona and Moscow.

Moreover several low cost flights are reaching Rimini (one hour by train), Forli, Pescara (one and half hour by train), Rome (3 hours by train), Milan (4 hours by train) and moreover Florence, Venice, etc. If you have difficulties in finding the proper information please contact:

Miss. **J. Mokrousova** e-mail: isf@alisf1.univpm.it

Foundation “A.Colocci”
Jesi

Foundation Cassa diRisparmio
Jesi

Section of Physical Sciences – Department SASC
Polytechnic University of Marche

International School on Advanced Material Science and Technology “G.Occhialini”

8th Course

INDUSTRIAL APPLICATIONS OF NANOTECHNOLOGIES



Directors of the Course

Prof. Franco Rustichelli
Polytechnic University of Marche
Ancona – Italy

Prof. Spiros Pantelakis
University of Patras
Greece

Site of school:

Fondazione “A.Colocci”
Via Angeloni, 3 – 60035 Jesi (An)
Tel. +39 0731 213234 – Fax +39 0731 56999

5 – 8 September 2006, Jesi - Ancona (Italy)

Purpose of the Course

The nanotechnologies, which concern structures at the scale of the nanometer (i.e. one billionth of a meter) are determining, according to some observers, a revolution at the planetary level, comparable to the one introduced by the birth of electronics. Such a revolution started already some years ago and is expanding in an exponential way. In United States and in Japan the public and private investments devoted to this sector are continuously growing. Also Europe considers with increasing attention this area.

In particular EU spent a sum of roughly 1500 millions of Euro, in the frame of VI Framework in supporting several projects involving Universities, Research Centers and Industries (including the Small Medium-Size Enterprises) also in Networks of Excellence and Integrated Projects.

A basic peculiarity of the nanotechnologies is the interdisciplinarity, involving fundamental sciences like physics, chemistry, biology and the derivative ones like for instance material science and engineering.

The aim of this school is to present the most modern knowledge in the field of nanotechnologies by considering the most interesting applications in production sectors, like the aerospace industry, automotive and mechanical in general (in particular in the field of composite materials reinforced with nanoparticles), in the field of coatings, of microelectronics and of the biomedical industry.

The school is addressed to physicists, chemists, engineers, material scientists, biotechnologists, belonging not only to universities and research centers, but also to the industries. In fact also technicians of Small Medium-Size Enterprises would take advantage from the participation to this school, also if their companies do not intend to be involved immediately in this kind of activities, in order to have the necessary information to exploit the products of the nanotechnologies and to plan the proper eventual involvements in the future.

Possible cooperation within European projects and preparation of future proposals will be considered.

Main foreseen subjects

1. Advantages of nanocrystalline materials as compared to coarse-grained analogs
2. Nanomaterials production scale-up
3. Nanocarbon and nanodiamonds
4. Integration of micro and nanofabrication technologies
5. Photocatalytic coatings on ceramic substrates
6. Applications of nanocomposites and nanocoatings in aeronautical industry
7. Nanotechnologies in automotive industry
8. Applications in microelectronics
9. Nanometric coatings for residential applications: glass/ceramic, stone/concrete, wood/furniture, metal and plastics
10. Nanoclay/butyl thin films with strongly decreased permeability
11. Self-cleaning textiles
12. Applications in the field of chemical sensing and biomedicine (lab-on cell devices)
13. Micro-instrumentation for industrial inspection, and for food and environmental monitoring
14. Micromotors
15. Microbots
16. Microendoscopes and surgical micro-instrumentation
17. Nano-vectors for drug delivery
18. Nanosafety

Endorsement



biomat.net



The following teacher have already accepted to give lectures:

- A. Apicella** - *Alenia Aeronautica, Napoli (Italy)*
G. Bishop - *Net Composites, Chesterfield (U. Kingdom)*
E. Chiellini - *University of Pisa, (Italy)*
S. Coffa - *STMicroelectronics, Catania (Italy)*
P. Dario - *Scuola Superiore di St. Anna, Pisa (Italy)*
C. Heckenberger - *European Aeronautic Defense and Space, Munich (Germany)*
V. Komlev - *Russian Academy of Sciences, Moscow (Russia)*
P. Milani - *University of Milano (Italy)*
A. Moreno Berto - *University of Jaume I, Castellò (Spain)*
S. Pantelakis - *University of Patras (Greece)*
P. Perlo - *Centro Ricerche Fiat, Torino (Italy)*
F. Rosei - *University of Quebec (Canada)*
M. Shaffer - *Imperial College, London (U. Kingdom)*

General Information

The official language of the Course is English. Scientists and Engineers who wish to attend should specify within a maximum of one page:

1. Full name(s), age, sex, citizenship;
2. Postal address, phone, fax, e-mail;
3. Present position and scientific and technological interests;
4. **The correct and complete heading for the invoice regarding the registration fee payment.** Please, indicate also the Italian fiscal code or the VAT number.

These information should be sent by fax or by e-mail to: