



9th International Conference on Nuclear Microprobe Technology and Applications September 13-17 2004, Cavtat, Dubrovnik, Croatia

Second Announcement and Call for Papers



WELCOME

to the 9th ICNMTA, to be held in Cavtat near Dubrovnik - the pearl of Adriatic Sea



Important dates:

- 15th April - Abstract deadline
- 1st June - Notification of acceptance, early registration
- 1st August - End of the reduced registration fee
- 13th September - Submission of papers

Organized by: Ruđer Bošković Institute,
Zagreb, Croatia

in co-operation with IAEA

Contact:

ICNMTA Secretariat
Ruđer Bošković Institute
P.O.Box 180,
10002 Zagreb
Croatia

Email: icnmta@irb.hr , <http://icnmta.irb.hr>

SCIENTIFIC PROGRAMME

Foreword:

Continuity of changes may be probably the best description for scientific programmes of all former ICNMTA meetings. From the early presentations of analytical and imaging applications of nuclear microprobes, each of the following ICNMTA gatherings presented another series of novel developments and many new and unique microbeam techniques and applications. Novelty and uniqueness will therefore continue to be a main guideline for participants presenting their original scientific achievements at the 9th ICNMTA as well.

The ICNMTA 2004 will comprise of invited and contributed talks, short oral presentations and poster sessions. Invited speakers will give plenary lectures of the most exciting achievements using state of the art nuclear microprobe systems. In order to attract more younger scientists, afternoon sessions with a number of shorter oral presentations (10 minutes) and increased efficiency of poster sessions, will supplement morning sessions with invited and contributed talks, leaving some time for a short beach - break as well. Tuesday evening will be reserved for traditional workshop discussions on the controversial issues of common concern.

Main conference topics:

1 Facilities and irradiation techniques: new principles, new facilities, beam optics, combination with other systems, beam positioning, hit verification, etc.

2 Analytical and imaging techniques: new techniques and upgrades, sample treatments and handling, data acquisition and processing, quantification, etc.

3 Applications of microbeam irradiation: irradiation effects, micromachining, ion implantation, other irradiation applications in material science, single cell irradiation, other biomedical applications of irradiation, etc.

4 Analytical applications: biology and medicine, environment, materials and electronics, art and archaeology, geology, etc.

It is the aim of organizers to accept presentations by specialists of the other competitive and complementary techniques to the nuclear microprobes, especially in using low energy focused ion beam (FIB) and focused x-ray beams.

Preliminary list of invited speakers:

D.N. Jamieson (University of Melbourne, Australia), Quantum computing

I. Rangelow (University of Kassel, Germany)
Concept of an ion implantation stage with atomic resolution

V. Biryukov (Institute for High Energy Physics, Russia), Channeling technique to make nanoscale ion beams

D. Spemann (University of Leipzig, Germany)
Magnetic carbon: A new application for ion microbeams

M. Takai (Osaka University, Japan)
Nanometar range applications of medium energy microprobes

M. Breese (National University of Singapore, Singapore), Creating 3D structures in silicon

A. Bettiol (National University of Singapore, Singapore), Proton beam writing applications in microphotonics

J. Salomon (C2RMF, Paris, France), Nuclear microprobe and cultural heritage: benefits of external beams

R. Ortega (CNRS, Gradignan, France),
Chemical element distribution in cells

M. Folkard (Grey Cancer Institute, UK)
New insights into the cellular response to radiation using microbeams

G. Vizkelethy (Sandia National Laboratories, Albuquerque, USA), Review of IBIC technique

E. Vittone (University of Torino, Italy), Study of damage induced by protons in 4H-SiC Schottky diodes

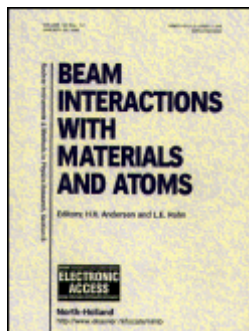


CALL FOR PAPERS

The scientific programme of ICNMTA 2004 will consist of invited oral presentations, oral contributions selected in response to the call for papers, and poster presentations.

The preliminary programme of invited presentations has been selected by the organizers on the basis of input from the International committee. The full programme of invited papers and speakers will be available on the ICNMTA web site by the summer.

In order to maintain the high standard of ICNMTA proceedings and to keep them to a reasonable size, potential authors are reminded that only novel, original work should be submitted. The conference Proceedings will be published as previously by Elsevier as a special volume of Nuclear Instruments and Methods, section B. Detailed instructions for manuscript preparation will be provided at this site after abstract submission deadline.



Abstract submission:

The deadline for the receipt of abstracts is 15th April 2004. They must be prepared according to instructions given below and submitted electronically to the conference e-mail icnmta@irb.hr as attached file. The preferred length of abstract is 200 words (maximum 300), in English.

As a guideline, you may organize your abstract to describe WHAT kind of research you have done, WHY you have done that work, HOW you have done it and WHAT results have been achieved.

Authors of papers submitted for presentation at the conference will be informed of their acceptance before the 1st of June.

All submitted abstracts will be available at the ICNMTA web site before the conference and will be available in the form of the usual book of Abstracts upon registration at the conference. Queries concerning the submission of abstracts should be directed to the organizers by e-mail.

International committee:

David Jamieson, Australia
Milko Jakšić, Croatia
Philippe Moretto, France
Jan Meijer, Germany
Mikio Takai, Japan
Teresa Pinheiro, Portugal
Frank Watt, Singapore
Klas Malmquist, Sweden
Geoff Grime, UK
Barney Doyle, USA

Program committee:

In addition to the members of International committee, Program committee includes:

Zvonko Medunić, Croatia
Iva Bogdanović Radović, Croatia
Ulf Rosengard, IAEA
Guy Demortier, EPS

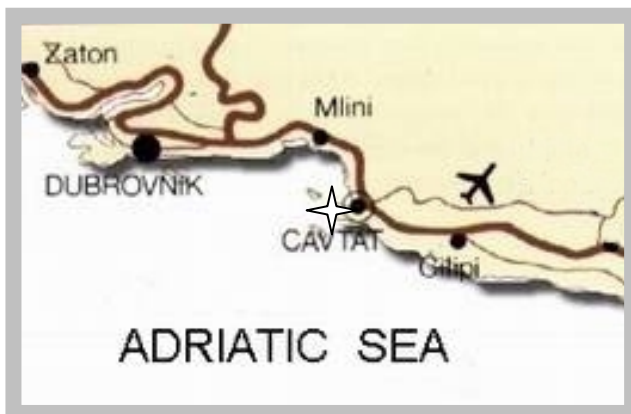
Local organizing committee:

Milko Jakšić, Chairman
Mirna Benat, Secretary
Zvonko Medunić
Iva Bogdanović Radović
Tonči Tadić
Stjepko Fazinić
Ivo Orlić
Željko Pastuović
Natko Skukan
Luka Mandić
Zdravko Siketić

VENUE

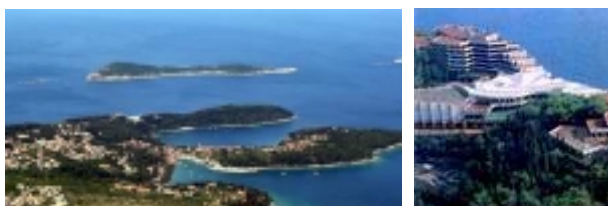
Location

Dubrovnik is located in the southern most part of the Croatian Adriatic sea coast.



HOTEL CROATIA

The 9th ICNMTA will be held in Hotel Croatia, which is a five star hotel that lies on a peninsula overlooking the Adriatic on one side and the picturesque bay and the old town of Cavtat on the other. The hotel offers a large meeting hall (Ragusa) and a number of smaller meeting rooms of various sizes, offices and exhibition space.



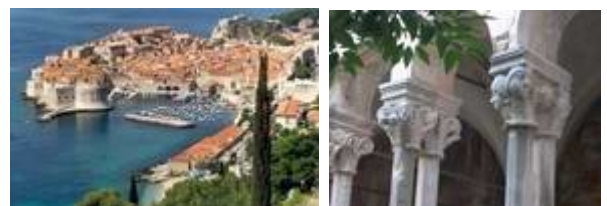
CAVTAT

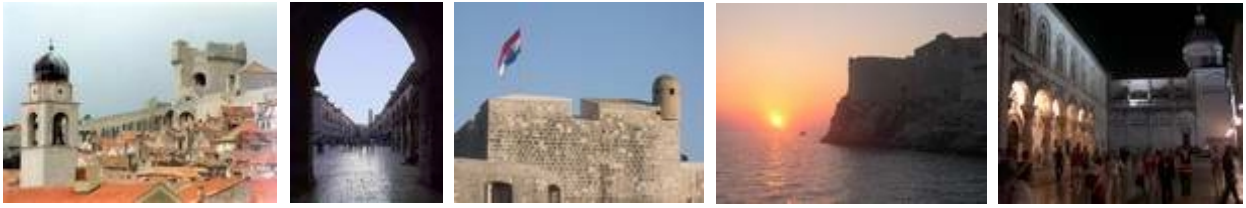
The medieval town of Cavtat, the southeast pearl on the Dubrovnik Riviera has a population of some 1,500 inhabitants. In ancient times it was a Greek settlement known as Epidaurum. In the vicinity of Dubrovnik, Cavtat has grown to be a cultural and tourist centre of Konavle, the southernmost region of Croatia. The area is most attractive due to the Mediterranean vegetation, clear sea and a mixture of old and new architecture.



DUBROVNIK

Dubrovnik is work of human inspiration. Dubrovnik is light, white walls, chiming bells and sea gulls that slowly flap their wings. It is a city that fills the heart. For centuries now it has explored freedom with verses sung to liberty, the greatest of all treasures cherished by the human heart. Centuries of insight and accord, a simple, charming urban entity, whose integral spirit and concordance are worthy of our deepest admiration. The city at the foot of hill Srdj is a highlight of the Adriatic and the whole Croatia.





Dubrovnik is an absorbing city of constant activities and visits to make. Things to see include the city walls, built between the 8th and 16th centuries, a Franciscan monastery with Europe's oldest pharmacy (still working), a 12th-century cathedral; an arsenal built in the 13th century, and a corn depot house (looking like a fortress) that dates back to the 16th century. But the greatest fascination of the town simply lies in its street life and street appearance, its medieval character, all combined with the rich and colorful vegetation of the Mediterranean region. Here, history, culture, and nature all melt into one harmonic unity. Apart from its historic atmosphere, Dubrovnik offers a remarkable number of cultural and entertainment programs, sea sports, sightseeing and excursion possibilities, specific Mediterranean cuisine and excellent Dalmatian wines.



ACCOMODATION

Sufficient number of rooms at the Hotel Croatia (conference hotel) and a limited number of rooms in Hotel Supetar and private rooms in Cavtat has already been booked for the participants and guests of ICNMTA. As September is still high tourist season, it is highly recommended to reserve the accommodation as early as possible. Participants are kindly requested to fill in the Registration and accommodation form that will be soon available for download from the ICNMTA web page.

Hotel CROATIA (5***)**

Bed & breakfast in single room (sea view)
EUR 135,00 per person
Bed & breakfast in single room (park view)
EUR 110,00 per person
Bed & breakfast in double room (sea view)
EUR 72,00 per person
Bed & breakfast in double room (park view)
EUR 59,00 per person

Hotel SUPETAR (2)**

Bed & breakfast in single room
EUR 51,00 per person
Bed & breakfast in double room
EUR 30,00 per person

Private Houses

Bed in single room
EUR 47,00 per person
Bed in double room
EUR 32,00 per person
(breakfast in Hotel Croatia included in price)

The Travel Agency ATLAS has been appointed as the official agency of the ICNMTA 2004 to handle accommodation and registration of participants.

SOCIAL EVENTS

Sunday evening - Welcome reception (Hotel Croatia)



Our first gathering will take place at the wonderful terraces of Hotel Croatia. Sunset view of the Cavtat bay, tasting Dalmatian wines, meeting friends, may be continued with an evening walk along the streets of Cavtat, where many will be attracted to sit in one of the number of cafés and restaurants by the sea.

Monday evening - Reception at Rectors palace (Dubrovnik)



Departure by bus from the Hotel Croatia in Cavtat. Arrival in Dubrovnik with short walk to the Rectors Palace. Introductory speech about the history of Dubrovnik Republic will be followed by welcome address of the City Major and cocktail party. In the Atrium of the Rectors Palace music trio will entertain participants with medieval music.

Wednesday afternoon - Excursion to Dubrovnik by boat



Oldtimer sailboat takes the group from Cavtat to Dubrovnik. The scenic journey along the Riviera and around island Lokrum takes about 45 minutes. Upon disembarkation in old Dubrovnik port, small groups would have

guided walking tour of the old walled city of Dubrovnik, which is a pedestrian-only zone. You will walk along famous street Stradun, visit the Rector's Palace, the Franciscan Monastery, and a 14th century Pharmacy which is still in operation. Free time to explore the city and the city walls on your own before returning to the hotel by coaches.



Thursday evening - Conference banquet (Konavoski dvori)



Konavoski Dvori Country Club is a unique restaurant, located at the foot of the mountain in the old watermill, half an hour drive from the Croatia Hotel. Waitresses dressed in national costumes serve local homemade specialties! During dinner, we will be entertained by a Dalmatian klapa (traditional vocal ensemble).

TRAVEL

Arrival by air:

Traveling by plane is a convenient and comfortable way to visit Dubrovnik. Many European companies have direct flights to Dubrovnik or to Zagreb from where the Croatian national carrier, Croatian Airlines, provides regular flights to Dubrovnik. During summer season there are numerous charter flights operating from many European cities. The airport is called Čilipi airport and it is located about 18 km from the Dubrovnik city center and only 6 km from Cavtat and Hotel Croatia.

Transportation to Cavtat will be organized for conference participants on Sunday the 12th. Otherwise a taxi should be used. Price for the taxi from the airport to Hotel Croatia is approximately 50 kn (7 Eu).

Arrival by car:

Traveling by car is a great way to visit Dubrovnik, because it gives you the freedom to explore Croatian Adriatic Coast on the way to Dubrovnik and Dubrovnik Region as well. There are numerous places and towns to be seen and a variety of things to be done.

For travel from northwest (Slovenia, Austria, and Hungary) the fastest way is to take a highway from Zagreb to Split (370 km) and from Split to Dubrovnik (210 km) by Adriatic coast road. By the September 2004, about 70% of Zagreb-Split direction will be a modern highway. On your way you may stop to visit Plitvice lakes national park, waterfalls at Skradin near Šibenik, or visit Split, the largest town at Croatian coast with Roman city walls and many more.

From west (Slovenia and Italy) you can travel to Dubrovnik by the spectacular but rather long road along the coastline (Rijeka to Dubrovnik is 600 km).

Arrival by sea:

Another pleasant way of traveling to Dubrovnik is by sea. There are international and coastal ferry lines with arrivals and departures in Dubrovnik.

Jadrolinija is the main Croatian ferry company, with the highest number of regular international and domestic lines. Other agencies operate along the Croatian coast during summer. From Italian Adriatic coast there are regular ferry lines between Ancona and Zadar or Split and from Bari to Dubrovnik.

Arrival by coach:

Coaches are often used by Croatian citizens. There are a large number of regular lines between main Croatian cities. For example, there are 5 coach connections a day between Zagreb and Dubrovnik. Travel time is about 10 hours and the price is aprox. 170 kn (23 Eu).

Arrival by train:

The closest railway station to Dubrovnik is in Split. A train arrives to the Split railway station which is located in the harbor and close to the coach station where you can take a coach to Dubrovnik which is 200 km away.

VISA REGULATION

As Croatia is one of the main European tourist destinations, entry visas are not required for the most of European countries. Entry visa is not required for citizens of EU countries, USA, Canada, Japan, Australia, Singapore, etc. For further information see <http://www.mvp.hr>

All citizens of the countries for which entry visas are requested according to Visa Regulations of the Republic of Croatia must, as a rule, obtain the visas abroad prior to the entry into the Republic of Croatia by applying to the related Embassy or Consular Office of the Republic of Croatia. The Conference Organizers will provide invitation Letter to facilitate Visa issuing.

ACCOMPANYING PERSONS PROGRAMME

Accompanying persons may be attracted by numerous possibilities for free time that can be offered at Dubrovnik Riviera. In addition to Welcome reception at Sunday evening, Major reception at Monday evening, and Conference excursion at Wednesday, that are all included in the fee, we are planning to organize two additional excursions, with still enough time left for swimming or just relaxing at the beach.

National Park - Island of Mljet



The island of Mljet is one of the loveliest and most densely wooded islands in the Adriatic. A part of the island has been declared a national park, whose main attractions are two salt-water lakes. Join a boat trip to the islet in the Great Lake for a visit to the 12th century Benedictine Monastery. Enjoy a stroll around the islet or swim in the lovely saltwater lake. Transfer, guide, and entrance fees to the National Park and boat trip included.

A tale of silk



The silk is one of the oldest textile fibers known to the man. During the Roman Empire, it was sold for its weight in gold. Here in Konavle Valley, near Dubrovnik, women keep tradition of small, non-profitable ancient handcraft of silk production. Silk thread mostly used for embroidery of beautiful national costumes of Konavle Region. Take an opportunity to share an experience of producing silk thread in most traditional manner. You will take part in whole process: cocoon boiling, thread reeling, dyeing, plying, reeling, weaving, and embroidering. Enjoy hospitality of the village family and rediscover some of the lost values.

In addition to these two excursions, and main conference outing on Wednesday, we will organize transfers to Dubrovnik, where accompanying persons will have a chance to have a walk around City walls (it takes about two hours), visit Dubrovnik Galleries, or just to have a coffee at Stradun – the famous main street of Dubrovnik.

POSTCONFERENCE EXCURSIONS

For those of participants and accompanying persons that can spare one day for additional excursion, we can suggest you some. These are on the first place: Neretva river delta - combination of history and natural beauty, Mostar - unique mixture of Orient and west (in Bosnia and Herzegovina), or through historical places of Kotor`s bay (in Montenegro). Furthermore, national parks Kornati and Plitvice lakes deserve particular attention, however these will require more than one day and may be combined with your travel to/from Dubrovnik.



IAEA assistance

On the basis of sponsorship agreement with International Atomic Energy Agency, the ICNMTA organizers will support participation of limited number of scientists from the countries eligible to receive assistance under the IAEA Technical Co-operation programme. Applications should be sent by email together with abstract submission.

Industrial exhibition

ICNMTA conferences traditionally includes industrial exhibition, featuring companies producing accelerators, focusing systems, vacuum equipment, detectors and electronics, related instruments and consumables.

Exhibition will be organized in the lobby area by the entrance to the main conference hall in hotel Croatia. Please contact organizers for further information.

Post-conference technical visit

A visit to the Ruđer Bošković Institute in Croatian capital Zagreb will be organized on Saturday 18th September for those that can make such travel arrangements. Facilities at the Laboratory for ion beam interactions include two accelerators (6 MV EN Tandem and 1 MV Tandetron which will be installed in spring 2004) and 7 beam lines most of which are used for ion beam analysis techniques.

REGISTRATION

Registration fees:

	Before 1st August	After 1st August
Regular participant	420 Eu	450 Eu
Student	220 Eu	250 Eu
Accompanying person	220 Eu	250 Eu

Full conference fee includes:

Attendance on all conference sessions
Conference bag, contents and abstract book
Conference Proceedings in NIMB
Welcome reception
Reception at Rectors Palace in Dubrovnik
Conference excursion
Lunches in Hotel Croatia from Monday to Thursday

Student conference fee includes:

Attendance on all conference sessions
Conference bag, contents and abstract book
Welcome reception
Reception at Rectors Palace in Dubrovnik
Conference excursion
Lunches in Hotel Croatia from Monday to Thursday

Accompanying person's fee includes:

Conference bag and contents
Welcome reception
Reception at Rectors Palace in Dubrovnik
Conference excursion
Two additional excursions
Additional lunch in Hotel Croatia

Travel Agency ATLAS has been appointed as the official agency of the ICNMTA 2004 to handle participant accommodation and registration. The Registration and accommodation forms will be available soon at the conference web site for the on-line registration. Payment will be possible by bank transfer, credit card, or cash at the conference registration desk.

For those that prefer earlier registration, registration and accommodation form (download will be soon available for download from the web site) can be send by fax to:

ATLAS Travel Agency, Meetings & Events
Department

Fax: 00385-1-4698-052;

E-mail: ranko.filipovic@atlas.hr