## INTERNATIONAL WORKSHOP ON SEISMIC HAZARD AND SEISMIC RISK REDUCTION IN COUNTRIES INFLUENCED BY VRANCEA EARTHQUAKES

May 20, 2008
Chisinau, Moldova
Organized in the framework of the NATO research project SfP-980468
<a href="http://igg.asm.md/sfp/">http://igg.asm.md/sfp/</a>

#### **Background**

The countries of Central Europe are periodically subjected to the influence of strong earthquakes originating from the place where the Carpathian arc bends, known in seismological literature as the Vrancea zone.

SfP-980468 is the first joint research project on the hazard of Vrancea earthquakes uniting specialists from Romania, the Republic of Moldova, and Bulgaria. The project will result in the design of a joint hazard map in Eurocode 8 format to be used by code writers in the three countries.

## **Workshop Chairs**

Prof. Güney Özcebe Middle East Technical University

Department of Civil Engineering

**Turkey** 

Prof. Ivanka Paskaleva Central Laboratory for Seismic Mechanics and

Earthquake Engineering

Bulgaria

Dr. Iolanda Craifaleanu National Institute for Building Research

**INCERC-Bucharest** 

Romania

Dr. Anton Zaicenco Institute of Geology and Seismology

Academy of Sciences

Moldova

#### **Local Organizing Committee**

Vasile Alkaz, Natalia Rusu, Anton Zaicenco (Academy of Sciences, Moldova).

#### **Program Format**

The technical program consists of 14 oral presentations (20 minutes each) along with poster sessions (scheduled during coffee–breaks).

#### INFORMATION ABOUT THE WORKSHOP

#### Venue

Library of the Academy of Sciences str. Academiei 5a, Chisinau http://www.amlib.asm.md

### **Participant Accommodation**

#### Codru Hotel

str. 31 August 1989, 127 MD-2012, Chisinau http://www.codru.md



Library of the Academy of Sciences

#### **Shuttle Bus**

A shuttle bus will provide transportation between the Codru Hotel and the Academy of Sciences on May 20.

#### **Audiovisual Services**

The meeting room will be equipped with an overhead projector and an LCD projector. A laptop computer will be provided by the workshop.



Codru Hotel

## **Internet Access**

Internet access will be available in the meeting room.

#### **SPECIAL EVENTS**

#### Reception

Monday, May 19 at 20:00 at Symposium restaurant. Str. 31 August (a 5-minute walk from the Codru Hotel, across the street from the History Museum).



Map of downtown Chisinau

#### **Post-Workshop Tour**

Wednesday, May 21. Visit to three seismic stations: (a) City Hall, (b) Academy of Sciences, (c) St. Dmitriy Church. City tour.

# PRELIMINARY TECHNICAL PROGRAM

# Tuesday, May 20

09:00 - 09:30	Official speeches. President of the Academy of Sciences – Acad.Gh.Duca
09:30 – 10:00	Opening remarks Özcebe G., Paskaleva I., Craifaleanu I., Zaicenco A.
10:00 – 10:20	An estimation of maximum interstory drift demands for shear-wall type structures Koleva G., Sandu I., Akkar S
10:20 – 10:40	Assessment of the parameters controlling the seismic input for design and construction purposes: a case study for Sofia City Paskaleva I ., Simeonov Sv., Koleva N., Kouteva M., Hadjiiski K.
10:40 – 11:00	The relevance of H/V spectral ratios technique for Bucharest City Grecu B., Radulian M., Mandrescu N., and Panza G.
11:00 – 11:40	Coffee-break
11:40 – 12:00	Seismic microzonation of Chisinau: a tool for preventing seismic risk Alkaz V., Zaicenco A., Isicko E.
12:00 – 12:20	Hybrid MS-BIEM for seismic site-response phenomena: case study of Sofia Dineva P., Paskaleva I., La Mura C. Panza G.
12:20 – 12:40	Shake maps of strength and displacement demands for Romanian Vrancea earthquakes Lungu D., Craifaleanu I.
12:40 – 13:00	The estimation of an upper limit on prehistoric peak ground acceleration using the parameters of intact speleothems in caves in Balkan and Rodope mountains Gribovszki K., Paskaleva I., Kostov K., Varga P., Nikolov G., Sura'nyi G.
13:00 – 14:30	Lunch

14:30 – 14:50	Ground motion patterns of intermediate depth Vrancea earthquakes: the October 27, 2004 event Bonjer KP., Ionescu C., Sokolov V., Radulian M., Grecu B., Popa M., Popescu E.
14:50 – 15:10	Focal mechanism solutions for the Vrancea seismic area Sandu I., Zaicenco A.
15:10 – 15:30	Data logger for seismic arrays and structural health monitoring Mohniuc R., Kuendig C., Kurmann T., Zaicenco A.
15:30 – 15:50	An estimation of the recurrence and probability of Vrancea intermediate earthquakes Ginsari V.
15:50 – 16:20	Coffee-break
16:20 – 16:40	Comparative analysis for accelerographic records obtained in the Republic of Moldova and Romania during the 1986 and 1990 Vrancea earthquakes Borcia I.S.
16:40 – 17:00	A numerical solution of an elastic wave equation using spectral method Zaicenco A., Alkaz V.
17:00 – 17:20	A contribution to the assessment of the seismic vulnerability of large structures in Sofia City Paskaleva I., Koleva G., Vaccari F., Zuccolo E., Panza G.
17:20 – 17:40	Concluding remarks