

LEKKAS, E., LOZIOS, S., FOUNTOULIS, I., KRANIS Ch., ADAMOPOULOU E. (1996). – Urban planning –seismic risk reduction at Grevena – Kozani. *Applied Geoscience Conference of the Geol. Soc. London Abstract*, p. 8, Warwick, Birmingham.

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High Magnitude Events:  
Landslides, Floods and Earthquakes

15/APR/1996

**Urban Planning - Seismic Risk Reduction at  
Greveva - Kozani (Northern Greece)**

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A destructive earthquake (M=6.6 R) hit the region around Greveva and Kozani on May 13, 1995. Mainly small rural communities were stricken, in some of which the damage was total. That is, in 3 villages more than 70% of the buildings collapsed, in 5 villages the collapsed constructions accounted for more than 50% and in 8 villages for more than 30%. In addition, there was considerable damage to 20 more villages. The geologic and geotechnical survey carried out soon after the earthquake showed that the principal causes of the destruction were (i) the occurrence of a NE-SW trending seismic fault zone, (ii) the occurrence of surficial geologic formations with low values of geotechnical properties and (iii) the instability of formations at areas of high topographic gradient and the occurrence of landslides. The combination of all the above led to a characteristic distribution of the damage, both in the pleistoseismal area in general and inside the villages themselves. For the immediate reconstruction of the area, the following proposals were made: (a) relocation of 8 villages to safer location, or incorporation with others and (b) the development of construction only at the secure parts of the villages or at the flanks of them. These interventions aim at the long-term reduction of the seismic risk in the area.

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15th February 1996

Dr. E. Lekkas  
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Dear Dr Lekkas

**Re: Applied Geosciences Conference, Warwick 1996**

Your two abstracts have been accepted for posters for the Symposium on High Magnitude Events at the Geological Society Conference at Warwick on Applied Geosciences. The symposium runs from 9.00 am on the 15th to 5.50 pm on the 16th April.

The size of the poster boards will be 136 cm wide and 238 cm high. If you require more than one poster board for each of your posters, please let me know and I can allocate you more poster space.

If you have any questions regarding this symposium please do not hesitate to contact either myself or Dr. Jan Alexander. We look forward to meeting you in April.

Yours sincerely



Dr. Kevin G. Taylor

Monday 15th April 1996

**High Magnitude Events: Landslides, Floods and Earthquakes  
British Sedimentological Research Group joint with Engineering Group**

**ARTS CENTRE THEATRE (ACT)**

- 09.00 **KEYNOTE** Fractal Geometry of Catastrophies - Professor K J Hsu, Berlin  
Institute of Advanced Studies
- 10.00 **Invited Talk** Landslides, debris flows and turbidites on the Flanks of the  
Canary Islands - D G Masson, P P E Weaver, Southampton  
Oceanography Centre
- 10.45 **COFFEE** - The Arts Centre Foyer
- 11.15 **Reconfiguration of the Cumbre Vieja Volcano, La Palma. Advance Warning  
of a Giant Landslide?** - S J Day, Cheltenham & Gloucester College of HE  
J-C Carracedo, Estacion Volcanologica de Canarias, H Guillou, Centrales  
Faibles Radioactivities
- 11.45 **Tsunami Signature of Large Submarine Slope Failures** - A G Dawson,  
D E Smith, R Hindson, S Dawson, Coventry University, T W Anderson,  
Geological Survey Canada, D Long, British Geological Survey  
A Ruffman, Geomarine Assoc Ltd; J Svendsen, S Bondevik, University  
of Bergen, S Shaozhong, Inverness College
- 12.15 **Landslides in Hong Kong** - R A Forth, University of Newcastle upon Tyne
- 12.45 **LUNCH**

**14.00 OPENING CEREMONY** - will take place in the Arts Centre  
Lecture Theatre. The Conference and Exhibition will be  
officially opened by Professor Sir Robert May, Chief Scientific  
Adviser for the Office of Science and Technology.



- 14.45 **KEYNOTE** Storms, Floods and Wildfires: Taking Bearings in the  
Greenhouse - Dr J Leggett, Greenpeace
- 15.30 **POSTER PRESENTATIONS**
- 15.45 **TEA** - Butterworth Hall
- 16.15 **Magnitude-Frequency Characteristics of Landslides in Tectonically-Active  
Mountain Belts and Rates of Sediment Efflux** - N Hovius, P A Allen  
C Stark, University of Oxford
- 16.45 **Some Typical Debris Flows of Sri Lanka** - N M S I Arambepola, RAP de  
A M Karunaratne, National Building Research Organisation
- 17.00 **END**

**Posters**

Hyogoken-Nambu Earthquake (Japan, 17 January 1995)/ Away Island - Damage and  
Neotectonics - Geotechnical Conditions - E Lekkas and H Kranis

Urban Planning - Seismic Risk Reduction at Greveva - Kozani/Northern Greece -  
E Lekkas, S Lozios, J Fountoulis, H Kranis and E Adamopoulos

Slope Failure along the Karakoram Highway, Northern Parkistan - 1995 -  
L A Owen and M Fort

**SPEAKERS AND CONVENORS INFORMATION**

In a multitesion scientific conference it is most important that the time-table is adhered to. Convenors are asked to ensure that speakers finish strictly to time. In the event of a cancellation/no-show the gap should be filled with a discussion or a recess should be taken.

**Traffic Light System for Speakers**

The University provides this timing system to indicate that speakers are nearing the end of their presentation time.

When the white light flashes the speaker has ten minutes left to speak, the green light 5 minutes and the red light 1 minute. If the red light flashes again the speaker must stop.

**Preparation of Slide Presentations**

There will be a technician in each lecture theatre who will co-ordinate all oral presentations. The Band Room (next to the Press Office) has been set aside for speakers to preview their slide presentations. There are only four monitors available and therefore speakers are asked to preview their slides during the break time before the beginning of their particular session.

**POSTER PRESENTER'S INFORMATION**

Session Convenors will oversee the set up of their relevant poster presentations in the Butterworth Hall, Trade Exhibition area. The Conference Office contact for poster boards is Aznive Simon. Posters will be displayed for the full day and should be removed by 18.30 hrs at the latest. If posters are not removed by the presenter they will be held in the Conference Organisers Office behind the reception area in the Rootes Social Building. Please note that if this is the case no responsibility will be taken for any damage of loss of poster boards.

The best three posters from each day will be chosen by the Session Convenors and Chairmen during afternoon tea breaks each day. These posters will then be displayed in the Exhibition Area for the duration of the Conference. The overall winning poster, which will be chosen by Professor Steve Sparks, Professor Richard Howarth and Dr Bill French, will receive a Geological Society special publication voucher to the value of £35.00 at the members rate. This selection will take place on Thursday 18th April during the afternoon tea break.

**PROGRAMME DETAILS**

Programme details for each day will be displayed by the Registration Desk in the Rootes Social Building and will show any alterations.