

Nadja Zupan Hajna

**INTERNATIONAL CONFERENCE "CLIMATE CHANGE: THE
KARST RECORD", BERGEN**

At the Geology Department, University of Bergen, Norway a conference on climatic changes recorded in karst has taken place between August 1 and 4 coorganized by Karst Waters Institute, West Virginia, USA. The main topic discussed there was the importance of absolute dating of flowstone by ^{234}U isotope and definition of paleoclimatic conditions during the speleothem growth on the base of oxygen and carbon isotopes.

The Conference was attended by 72 karst researchers from all over the world; they presented their work by lectures or posters. There were 48 lectures altogether, 12 on the first day, 19 on the second and 17 on the third and 22 posters. The introductory papers were given by distinguished karst scholars, Prof. D. C. Ford: Dating Cave Deposits and Prof. H.P. Schwarz: Paleoclimate inferences from stable isotopic studies of speleothem, both from McMaster University, Hamilton, Canada and Prof. W. Dreybrodt: Chemical kinetics, speleothem growth and climate from University of Bremen, Germany.

From Slovenia three representatives were present, two of them from the Karst Research Institute ZRC SAZU. Andrej Mihevc gave a lecture entitled Pleistocene to Holocene climatic record in speleothems on the SE edge of the Kras plateau in Slovenia. My first lecture was The valuation of absolute speleothems dating from Slovenia and the second, with co-author Andrej Kranjc Paleogeomorphologically interesting detail from the Ist Island.

The first day the lectures covered stratigraphy and chronology of flowstone from a theoretical point, mostly dealing with U/Th datations by mass spectrometry, luminescence and speleothem growth. The second day morning dealt with stable isotopes and paleoclimatic records during the speleothem growth, stratigraphy of cave sediments and paleomagnetism. The afternoon was dedicated to cave biology and paleontology. The third day the lectures covered regional karst researches and analyses of cave sediments.

From July 30 to 31 an excursion - Geomorphology and Quaternary geology of inner part of Sogne fiord, south Norway was organized. In two days we visited typical landscape consisting of fiords and high plateaus.

The second day of the excursion through the Dumdalen valley, 1080 to 960 m a.s.l., was interesting in particular. In this glacial valley a layer of Cambrian-Ordovician marbles, some metres wide, several times crosses the stream that runs through the valley. At the contact with marbles water sinks, flows underground and reappears at the contact of marbles and shales. In lower part of the valley some shorter active caves developed. The caves have several entrances, they developed in several levels, the main water flow is in flooded passages, the upper levels are dry at low water level and flooded

when the water is very high. The second type of caves developed in the slope of the valley where the marble layer reaches the slope's surface. These caves are mostly phreatic tubes cut by younger vadose chimneys on many places. The caves in the Dummdalen valley are the largest karst caves of the southern Norway.