



Polish French German geosciences meeting

Prof. Pierre Antoine

Centre National de la Recherche Scientifique, France



The Pleistocene fluvial records (terraces) from the Somme River and other main rivers from N France

14 May 2012, 16:00

Room 242

Prof. Ludwig Zöller

University of Bayreuth, Germany



Bridge between geoecology & geosciences

15 May 2012, 14:00

Krygowski's hall



Dnia 14 maja 2012 o godzinie 16:00 w Instytucie Geoekologii i Geoinformacji WNGiG w sali nr 242 odbędzie się wykład [Profesora Pierre'a Antoine](#) z Francuskiej Akademii Nauk (CNRS)

w Paryżu w ramach cyklu wykładów otwartych pod auspicjami:

SAS <http://geoinfo.amu.edu.pl/sas/>

LGP <http://www.lgp.cnrs-bellevue.fr/>

AFEQ <http://www.afeq.cnrs-bellevue.fr/>

PAGES <http://www.pages-igbp.org/>

Temat wykładu:

**ZMIANY PALEOHYDROLOGICZNE RZEK PÓŁNOCNEJ FRANCJI W ŚWIETLE
NAJNOWSZYCH BADAŃ I ROLA TYCH BADAŃ W REKONSTRUKCJI OD KULTUR
ASZELSKICH DO KULTUR MŁODSZEGO ŚRODOWEGO PALEOLITU.**

Wykład odbędzie się w języku angielskim.

ABSTRAKT

Title: *The Pleistocene fluvial records (terraces) from the Somme River and other main Rivers from N France including dating and palaeoenvironmental reconstructions of palaeolithic sites from the oldest acheulean (550 ka) to Younger Middle Palaeolithic*

Place room 242 IGiG AMU Poznań

Time: 16:00-17:00 **duration** 45 minutes *lecture +15 minutes discussion*



W imieniu organizatorów serdecznie zapraszamy społeczność akademicką

Z poważaniem

Profesor Leszek Kasprzak

Dyrekcja IGiG

ABSTRACT

The aim of my presentation is to give an overview of the results of the multidisciplinary researches undertaken for more than 15 years on fluvial deposits, loess sequences and Palaeolithic sites from the main river valleys flowing from Northern France into the channel area (Somme, Seine and Yonne). These works are based on an interdisciplinary approach combining stratigraphy, sedimentology, bioclimatic studies and geochronology using the following methods: U-series, ESR, OSL, ESR/U-series. They lead to the characterisation of well-developed stepped terrace systems showing up to 10 incision steps and alluvial formations for the last 1 Ma. It has been shown that these terrace systems have recorded the response of the fluvial environments to climatic cyclicity, superimposed on a background of slow tectonic uplift since about ~1 Ma (about 55-65m). Within this system, full interglacial conditions have been demonstrated in calcareous tufa sequences, especially for MIS 11 and 5e, and the major incision phases leading to terrace formation are dated at the transition between interglacial and glacial (early-glacial phases).

Finally, the whole data set indicates that human occupation of this area has been likely discontinuous and highly influenced by climatic and environmental factors. In the Somme basin, the oldest *in-situ* human occupations (handaxes) are dated at a 450-500 ka maximum (Early MIS 12), but more recent works lead us to think that Acheulean industries may occur earlier from 550 to 600 ka.

Some references:

- ANTOINE, P., AUGUSTE, P., BAHAIN, CHAUSSE, C., FALGUERES, C., GHALEB, B, LIMONDIN-LOZOUET, N., LOCHT, J.L. VOINCHET, P. (2010) - Chronostratigraphy and palaeoenvironment of Acheulean occupations in Northern France (Somme, Seine and Yonne River valleys). *Quaternary International* 223-224, 456-461.
- BAHAIN, J.J., FALGUÈRES, C., DOLO, J.M., ANTOINE, P., AUGUSTE, P., LIMONDIN-LOZOUET, N., LOCHT, J.L., TUFFREAU, A. (2010) - ESR/U-series dating of teeth recovered from well-stratigraphically age-controlled sequences from Northern France. *Quaternary Geochronology* 5, Special Issue LED-2008, 371-375.
- LOCHT, J.L., GOVAL, E. & ANTOINE, P. (2010) - Reconstructing Middle Palaeolithic hominids behaviour during OIS 5 in Northern France. In: Conard, N.J. & Delagnes A. ed., *Settlements dynamics of the Middle Palaeolithic and Middle Stone Age*, volume 3, Kerns Verlag ed., Tubingen. 329-355.
- CLIQUET D., LAUTRIDOU, J.-P, ANTOINE, P., LAMOTHE, M., LEROYER, M., LIMONDIN-LOZOUET, N., MERCIER, N., (2009) - La sequence loessique de Saint-Pierre-lès-Elbeuf (Normandie, France): nouvelles données archéologiques, géochronologiques et paléontologiques. *Quaternaire* 20 (3), 321-343.
- ANTOINE, P., LIMONDIN-LOZOUET, N., CHAUSSÉ, C., LAUTRIDOU, J.P., PASTRE, J.F., AUGUSTE, P., BAHAIN, J.J., FALGUÈRES, C. & GALEHB B. (2007) - Pleistocene fluvial terraces from northern France (Seine, Yonne, Somme) : synthesis and new results. *Quaternary Science Reviews* 26, 2701-2723.
- ANTOINE, P., LIMONDIN-LOZOUET, N., P. AUGUSTE, P., LOCHT, J.L., GHALEB, B., REYSS, J.L., ESCUDÉ, E., CARBONEL, P., MERCIER, N., BAHAIN, J.J., FALGUERES, C. & VOINCHET P. (2006) - Le tuf de Caours (Somme, Nord de la France) : mise en évidence d'une séquence de tufs calcaires eemiens et d'un site paléolithique associé. *Quaternaire* 17 (4), 281-320.
- ANTOINE, P., MUNAUT, A.V., LIMONDIN-LOZOUET, N., PONEL, P. & DUPÉRON, J. & M. (2003) - Response of the Selle River to climatic modifications during the Lateglacial and Early Holocene (Somme Basin-Northern France). *Quaternary Science Reviews*. 22, 2061-2076.
- ANTOINE, P., COUTARD, J.P., GIBBARD, P., HALLEGOUET, B., LAUTRIDOU, J.P. & OZOUF, J.C. (2003) - The Pleistocene rivers of the Channel Region. *Journal of Quaternary Sciences*. 18, 227-243.
- ANTOINE, P., LAUTRIDOU, J.P. & LAURENT M. (2000) - Long-Term Fluvial archives in NW France : Response of the Seine and Somme Rivers to Tectonic movements, Climatic variations and Sea level changes, *Geomorphology*, 33, 183-207.



Dnia 15 maja 2012 o godzinie 14:00 na Wydziale Nauk Geograficznych i Geologicznych UAM w auli B. Krygowskiego odbędzie się wykład [Profesora Ludwiga Zöllera](#) z Uniwersytetu Bayreuth (Niemcy) w ramach cyklu wykładów otwartych na Wydziale Nauk Geograficznych i Geologicznych.

Temat wykładu:

MOST POMIĘDZY GEOEKOLOGIĄ A NAUKAMI O ZIEMI

Wykład odbędzie się w języku angielskim.

[ABSTRAKT](#)

Title: *BRIDGE BETWEEN GEOECOLOGY & GEOSCIENCES*

BRÜCKE ZWISCHEN GEOÖKOLOGIE UND ERDKUNDE

Place *Krygowski's hall WNGiG AMU Poznań*

Time: *14:00-15:00 duration 45 minutes lecture +15 minutes discussion*



W imieniu organizatorów serdecznie zapraszamy społeczność akademicką

Z poważaniem

Profesor Marek Marciniak

Dziekan WNGiG

Abstract:

Geomorphology is a most important branch of geoecology because geomorphology deals with the "relief spere". Apart from geomorphometric results such as slope, curvatures, aspect, and besides actual geomorphic processes and mass transport etc., geomorphology investigates the near-surface underground and its genesis. Present and past processes have generated the landforms. On the other hand, substrates and landforms witness past to present environmental conditions and perform the key to decipher the development of the relief under changing environmental and climatic conditions. Human impact on the landscape since the Neolithic has also been recorded in the relief and the near-surface substrates. The modern paradigm of geography makes it the discipline to unravel man-environment interaction. Geomorphology as a sub-discipline of geography is, thus, the bridge between geography and geoecology.