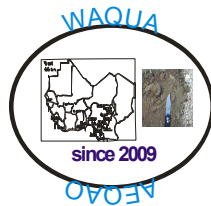


**WAQUA (West African Quaternary Research Association)**



WEST AFRICAN QUATERNARY RESEARCH  
ASSOCIATION (WAQUA)  
L ASSOCIATION DES ETUDES QUATERNAIRES DE  
L AFRIQUE DE L OUEST (AEQAO)



**Université  
des SSG  
Bamako**

**PAGES**  
PAST GLOBAL CHANGES

**F.H.G**  
F.H.G

## **Training workshop**

**Topic: Methods and techniques for  
quaternary paleoenvironmental  
reconstruction**

**26-30 September 2016**

**CRES BAMAKO**

**Presentation of the training workshop and call for  
participation**

## **Introduction**

The West African Quaternary Research Association (WAQUA) is organizing under the leadership of the Université des Sciences Sociales et de Gestion de Bamako (USSGB), and with the financial support of PAGES (Past Global Changes) a training workshop in Bamako from 26 to 30 September 2016 on the topic: " Methods and techniques of reconstruction of quaternary environments." This training workshop will gather 30 young researchers from West Africa: masters students, doctoral student, and early-career researchers.

### **1. Background and justification**

The understanding of paleoenvironmental conditions of the past 2.6 million years of the natural history of the earth is the key to understanding the current changes in the natural systems. Current climatic, ecological and hydrological conditions carry in them evidences of past changes that, when understood, can help apprehend the history and impact of functional changes. Questions about climate change; human settlements and the environmental impacts of human actions cannot be fully understood, only in the context of its relationship with the previous environmental conditions. The current natural environment is a legacy of conditions that existed and which can help build a global overview of the human living environment.

West Africa paleoenvironments are not well studied and its environmental dynamics are not well understood, while the evidence of past environmental conditions are numerous. One of the main reasons explaining that, is the lack of Quaternary scientists and also the lack of training in research methodologies in reconstructing Quaternary environments: Quaternary sedimentological techniques, dendrochronology, pollen and phytoliths analysis. The consequence is that the contributions of West Africans researchers to paleoenvironmental scientific literature are very limited. The few papers available on the region are published by foreign researchers mainly Europeans.

### **2. Objectives of the training workshop**

The objective of the workshop is to train university professors and researchers from West Africa, specialized in the fields of biology , physical geography, ecology , geology and archaeology, in techniques that can be used to reconstruct the quaternary paleoenvironmental conditions.

This workshop will allow young scholars and researchers from this region to acquire skills enabling them to analyse the paleoclimate variability and its effects on the environment from fluvial and lacustrine records (sediments, soils). That will be a considerable help to the understanding of natural and anthropogenic impacts of climate change. These environmental reconstructions can be made at the sub regional level and could be very useful to modellers of future climate trends.

### **3. The skills to be developed during the training session**

At the end of the training session, participants will be able to:

- Put natural and human events in a defined quaternary stratigraphic framework.
- Collect samples of soil or sediment for analysis to obtain the necessary paleoenvironmental information.
- Conduct a sedimentological analysis of the different types of Quaternary sediments and determine the environments of deposits.
- Reconstruct past climate variations based on sedimentological succession or fossils: flora and fauna.
- Conduct an analysis of samples of pollen and phytoliths.
- Apply dendrological methods to the reconstruction of past environments.

### **4. Methodology**

The training session will be organized in presentations, debates, round tables and practical work. Seniors in the above mentioned areas would make a presentation on the themes identified in the program, followed by sessions of questions and discussions. The seniors will make available to the participants the necessary teaching materials. The practical work will be done according to need at the Faculty of History and Geography, or on site at CRES.

### **5. Profile of participants**

The workshop is designed for young researchers and scholars, University level teachers, graduates and postgraduates in the fields of archaeology, prehistory, history, physical geography, environmental science, geology, biology, ecology, chemistry wishing to acquire methods of analysis of past quaternary environments. The techniques concern methods to reconstruct past climates, past vegetation, past

wildlife, to identify species that have disappeared and those that have emerged, and to understand the role of prehistoric populations in shaping environments, etc.

## **6. Outcomes**

In the short term, the training session will allow the formation of a working group on the reconstruction of Quaternary paleoenvironment in West Africa. A working group that will be dynamic and be able to make high-level publications on the quaternary of West Africa and in the long term it will enable us to build up a scholarship in quaternary science in the region.

## **7. Practical and Financial conditions**

### **7.1 Timetable**

The workshop will begin on Monday, September 26th, 2016 at 8:00 am and will end Friday, September 30th at 17:00 hours. Participants are invited to the conference site on the evening of Sunday, September 25.

### **7.2 Venue and accommodation**

The training workshop will be held under the leadership of the Faculty of History and Geography of USSGB at CRES. CRES in Bamako is a university centre with a dormitory and conference room and a renowned restaurant.

### **7.3 Participation fees**

Participants can be supported and self-supported.

With the support of our funding partner PAGES; we will be able to provide food and accommodation to 30 participants. To be supported the participants need to be:

- **A young doctor whose thesis was defended in less than 5 years.**
- **A graduate or postgraduate student from a university in West Africa.**

Bus tickets will be reimbursed on presentation of the ticket. Air tickets are not supported.

Each participant must pay the participation fees distributed as follows:

- **Master and doctoral students: 15,000 FCFA**
- **Researchers and university teachers: 30,000 FCFA**

To be supported participation requests must be completed and sent to:

- [ndjjac@gmail.com](mailto:ndjjac@gmail.com)
- [keitadaou@gmail.com](mailto:keitadaou@gmail.com)

Those who want to participate as self-supported can also fill the form and send it to emails mentioned above.

#### **7.4 Working languages**

The languages used during training are French and English with simultaneous translation.

For more information please visit:

<http://pastglobalchanges.org/calendar/upcoming/127-pages/1621-5th-waqua-wshop>

The president of WAQUA  
N'dji dit Jacques DEMBELE