


# OPEN EDUCATIONAL E-ENVIRONMENT OF MODERN UNIVERSITY

Collected Scientific Works

Within the framework  
of the international project IRNET



## ВІДКРИТЕ ОСВІТНЄ Е-СЕРЕДОВИЩЕ СУЧАСНОГО УНІВЕРСИТЕТУ

Збірник наукових праць

У рамках міжнародного проекту IRNet

Kyiv – 2015

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УДК 004.416

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PECULIARITIES OF USING OPEN  
CONFERENCE SYSTEMS PLATFORM  
FOR SITE OPENEDU.KUBG.EDU.UA DEVELOPMENT

*Scientific conferences management systems simplify and make more effective functioning of organizing committees, however, they are not widespread in Ukraine yet. The reasons for this are the lack of awareness of the organizers of conferences according to the following systems without understanding the feasibility of their use, lack of Ukrainian localizations of such systems. It is the reason of research problem — study of peculiarities of the use of these systems for maximum automation and the effective use of resources in the process of scientific conference management.*

**Keywords:** *scientific conferences, scientific e-magazines, open systems, software, Open Conference Systems.*

The relevance of this work is that the organization of conferences is a complex and time consuming process, and all more common specialized information systems are able to optimize it. The term “e-science” (e-Science), which provides scientific expertise in the formation of scientific communication and cooperation, which includes the ability to work and use open system.

The aim of the research is to introduce modern electronic open systems of scientific conferences management in electronic educational and scientific environment of the university and development of the site of scientific conference “Open Educational E-Environment of the Modern University” on the basis of Open Conference Systems.

The subject of the research is to study the sources and existing experience on the topic of work, to examine the essence of electronic systems of scientific conferences management, to present peculiarities of development of the site of scientific conference on the basis of Open Conference Systems.

Analysis of the works by A. V. Vasylykov, A. Ye. Huskov [3], O. P. Tsurin, [6]. T. O. Yaroshenko [7], M. Carl Drott [8] shows that the main object of human activities in the information society is the exchange of information. The free circulation of information in society can be an important factor in economic, national and personal development. The peculiarity of contemporary socio-cultural situation is an increasing role of information, which results from the interaction of two processes: continuous increase of information and improving its technology accumulation and distribution.

It is observed a logical tendency to spread public resources, including education [1]. Public resources are defined as materials available on the Internet (without access control), published simultaneously with the right to further use.

Open educational resources can be in the form of books, online courses, tests, multimedia, software and other tools that can be used in teaching and learning. It may be didactic materials developed for the needs of training, or any other resource that can be used in the learning process. Open publishing model provides efficient and widespread knowledge, opening it for reuse, updating and adapting to the needs of its users.

The development of open educational resources and their use brings positive trends in higher education [4]:

1. enable universal and free access to high quality content;
2. reducing the high cost of education;
3. significant reduction of time on developing educational programs and providing the renovation of existing ones;
4. encouraging communication between teachers and authors or co-operation between consumers and authors;
5. providing a tool for people who learn throughout the life.

Openness of education requires the use of new technologies in the educational process, what caused the emergence of the term “e-science” that characterizes modern approach to science, which includes support for distributed global collaboration of scientists using the Internet and virtualization huge repositories of data and computer resources

scientific equipment. At the heart of the concept of e-science there is the complete orientation on the use of computing and communication tools, and technologies [5].

Conference assistance online and creating archives of electronic publications are becoming quite common, because it improves the quality and promotion of conference materials. The use of assistance tools in holding conference allows to put a lot of routine work into automation functions (communication and getting works from authors, work review, assistance for conferences schedule, etc.), permanent access to information and communication with authors, reviewers, work with readers.

*Open Conference Systems* (OCS) is a powerful and flexible management and publishing system for organizing scientific conferences online. From the technical point of view it is a web platform with open-source code, based on the programming language PHP.

The system is downloaded for free and installed on a local Web server. OCS meets the standards of open access policies and provides high-quality indexing of metadata of published materials.

The main advantage of Open Conference Systems is that it covers all the stages of online conference assistance — from the setting up website for the event to the publishing conference reports. OCS also helps manage the work of the organizing committee, trace statistics of applications, inform readers and participants of the conference etc.

The Open Conference Systems allow to:

- create a conference website;
- send out invitations to participants;
- register participants;
- organize online discussions;
- accept online payment.

One platform is able to support the work of several conferences. All conferences have unique URL, and own design. The system user setting (*Figure 1*) allows to appoint a single manager for the conference as well as the team of people with different responsibilities for various aspects of the conference.

*The authors* have the opportunity to to acquaint themselves with the conference, register as the authors; participate in the review and editing process.

*Reviewers* can agree to review, receive text reports for review; contact with authors and acquaint them with a review, provide the review for the leader.

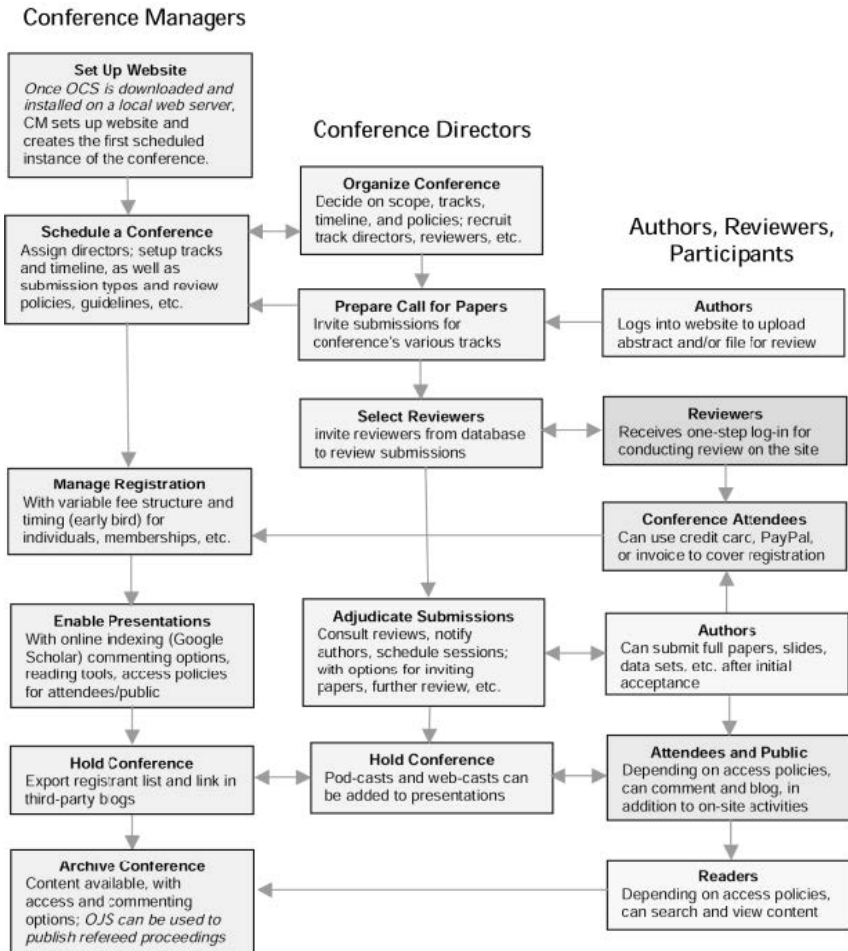


Fig. 1. Management of OCS users

*Conference Manager* provides website creation, interact with reviewers and keep their reviews, develops conference program and holds a conference;

*Visitors* are able to make a payment, log in and see the conference program, view and obtain the necessary information from the archive and contact the authors of publications.



**Course and study.** The study was conducted at the Research Laboratory of informatization of education Borys Grinchenko Kyiv University within the framework of the international scientific conference “Open Educational E-Environment of the Modern University”.

Open Conference Systems 2.3.6.0 is installed on a web server that meets the technical parameters of registered developers OCS requirements, such as:

- OS platform: Linux;
- PHP version: 5.4.36-0 + deb7u3;
- Apache version: Apache / 2.2.22 (Debian);
- Database driver: mysql;
- Database server version: 5.5.41-0 + wheezy1.

Website Design Conference (Figure. 2) is developed according to recommendations [2] on the use of corporate identity Borys Grinchenko Kyiv University.

Pages of the site have the following structure:

1. University’s logo;

The screenshot shows the website interface with the following numbered callouts:

- 1: University logo
- 2: QR code
- 3: User login form (Username, Password, Remember me, Log In)
- 4: Language dropdown menu
- 5: Information links (For Readers, For Authors)
- 6: Navigation menu (HOME, ABOUT, LOG IN, ACCOUNT, SEARCH, CURRENT, CONFERENCES)
- 7: Breadcrumbs (Home > Open educational e-environment of modern University > 2015 > Conference Timeline and Information)
- 8: Main title of the current page (Conference Timeline and Information)
- 9: Footer area
- 10: Social media share buttons (SHARE, FB, TW, VK)
- 11: Visitors counter (UA 16, 118, FLAG counter)
- 12: OPEN CONFERENCE SYSTEMS logo

The main content area displays the following information:

### Conference

First day of conference	August 20, 2015
Last day of conference	August 21, 2015

### Website

Go Live (as a Current Conference)	January 1, 2014
Move to Conference Archive	August 22, 2015

### Submissions

Author registration opened	May 10, 2015
Author registration closed	July 10, 2015
Call for Papers posted	May 10, 2015
Submissions accepted	May 10, 2015
Submissions closed	July 10, 2015

### Reviews

Reviewer registration opened	June 10, 2015
Reviewer registration closed	July 20, 2015

Fig. 2. Structure of the conference site

Міжнародна конференція  
Відкрите освітнє е-середовище сучасного університету

ДОМАШНЯ СТОРІНКА ПРО НАС ТЕКА КОРИСТУВАЧА ПОШУК  
ПОТОЧНІ КОНФЕРЕНЦІЇ

Донавіня сторінка > 2015 > Тека користувача

Тека користувача

» Адміністратор сайту

Відкрите освітнє е-середовище сучасного університету

» Менеджер конференції

2015

» Керівник 0 Неопрацьовані 0 Рецензуються [Сповістити користувачів]

» Автор 0 Активні [Нова подання]

Мій обліковий запис

» Редагувати мій профіль

» Змінити мій пароль

» Вийти

КОРИСТУВАЧ  
Ви увійшли як...  
admin

- Мій профіль
- Вийти

МОВА  
Українська

ІНФОРМАЦІЯ

- Для читачів
- Для авторів

SHARE

Visitors  
UA 16  
163  
FLAG COUNTER

OPEN CONFERENCE SYSTEMS

Fig. 3. Virtual office with the Ukrainian user interface

2. Name and QR-code of the conference;
3. Authorization form;
4. Block language selection;
5. Block background information;
6. Main menu of the site;
7. Current location on the site;
8. Title page;
9. The content of the page;
10. Button dissemination of information to social networks;
11. Counter visitors;
12. Block information about the developer.

The interface (Figure 3) and website content available in two languages of the conference (English and Ukrainian), which is realized by connecting a special plugin.

In order to improve the indexing of the conference, the site included in the database of sources which support protocol metadata Open Archives Initiative (<http://www.openarchives.org/Register/BrowseSites>).

For authorization on the site can it can be used a local profile as well as data account for access to other resources of the e-environment of the university. Such an opportunity is provided by OCS integration with the university database LDAP, the protocol that uses TCP / IP and allows to bet on different resources on one account.

After setting the platform, the system is brought information about the conference. The page structure “About the Conference” has the following view:

- Organising Committee
  - Contact Information
  - Organizing Committee
- Politics
  - Policy on access to archives
- Submission
  - Submit reports
  - Regulations on Copyright
  - Privacy
- Others
  - Map of the site

Important dates of the conference, which are filled in the standard form are also set up (*Figure 4*).

The screenshot shows the 'Conference Timeline and Information' page. The header includes the university logo, the text 'International conference' and 'Open educational e-environment of modern University', and a QR code. The navigation menu contains 'HOME', 'ABOUT', 'USER HOME', 'SEARCH', and 'CURRENT CONFERENCES'. The main content area is titled 'Conference Timeline and Information' and includes a breadcrumb trail: 'Home > 2015 > User > Conference Site Management > Conference Timeline and Information'. A note states: 'The dates recorded here will be utilized for this scheduled conference, and can be posted on the website by checking "Conference timeline" at the bottom of the page.' The 'Events Schedule' section is divided into four categories: 'Conference', 'Website', and 'Submissions', each with a 'Post Date' field. The 'Conference' section has two date fields: 'First day of conference' (August 20, 2015) and 'Last day of conference' (August 21, 2015). The 'Website' section has two date fields: 'Go Live (as a Current Conference)' (January 01, 2014) and 'Move to Conference Archive' (August 22, 2015). The 'Submissions' section has four date fields: 'Author registration opened' (May 10, 2015), 'Author registration closed' (July 10, 2015), 'Call for Papers posted' (May 10, 2015), and 'Submissions accepted' (May 10, 2015). The 'Submissions closed' field is set to July 10, 2015. On the right side, there is a 'Visitors' counter showing 178 visitors and a 'FLAG counter'.

Fig. 4. Setting important dates of the conference

According to the given dates given the following system automatically opens and stops receiving the reports, sends alerts, publishes information on the site etc.

### Conclusions

Scientific conference “Open Educational E-Environment of the Modern University” was held on 20–21 August, 2015. OCS system has been correctly installed on the web server and operates without errors. The site of the conference was actively used at all stages of organizing the conference — from registration of participants to the publication of a collection of materials.

The use of application of OCS in reality, particularly on the basis of Research Laboratory at Borys Grinchenko Kyiv University shows that the system is fully functional, and its use for these purposes is justified.

Site structure is clear to users, so no need for any additional instructions. Also, any difficulties have arisen with the administrative interface OCS, indicating that the logic of building systems and the possibility of its use by the staff without special training. Thus, the research confirms the feasibility and demonstrates one of the ways of using open conferences management system of e-conferences OCS.

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