

Next generation Institutional Repositories

The case of the CUT Institutional Repository KTISIS

Alexia Kounoudes, Marios Zervas, Petros Artemi,
Stamatios Giannoulakis

Outline

- Ktisis history
- Aim of the project
- Implementation
- New functionalities
- Next Generation Repositories

Ktisis history

- Institutional repositories were originally developed to provide dissemination of the research output created at universities and research institutions
- Open source software gave the ability to developers to build custom features
- In 2009 Ktisis was developed by the Library and Information Services of the Cyprus University of Technology
- Ktisis was developed using the open source software DSpace

Ktisis history

- Ktisis initial goals
 - Locate and archive cultural heritage items
 - Long-term preservation and access to the data
 - Promote interest and involvement in the digitization process cultural heritage
 - Promote open access
- In the following years it was decided that Ktisis should only store research activities of the university
- In early 2015 it was decided that the Cyprus University of Technology must become a member of ORCID
- At the same time the Library decided to move to DSpace-CRIS
- There are 2 funds to promote open access (Private company, University fund)

Aim of the project

- To integrate the use of ORCiD in Ktisis
- Identifying researchers and linking them to their research work is difficult and challenging
- Researchers use different variations of their name
- CRIS systems come as a solution for collecting, managing, preserving, analyzing and showcasing the research output of institutions, providing the use of persistent identifiers such as ORCiDs

CRIS System

- Publication → Activity → Paper → Impact
- Funding → Publications
- Project → Funding_a thru Funding_n with associated outcomes
- Equipment → Research Data → Publication
- Explore co-author networks



Ktisis at Cyprus University of Technology

Welcome to Ktisis

Ktisis is an open access institutional repository gathering any digital material relating to the various activities of the Cyprus University of Technology, especially original research material produced by the members of the University. Defined in this framework, Ktisis demonstrates the intellectual life and the research activities of the University, preserving, spreading and promoting the scientific research to the local and international community. Ktisis was named after the symbol of the Cyprus University of Technology depicting Ktisis, the spirit of creation.



All



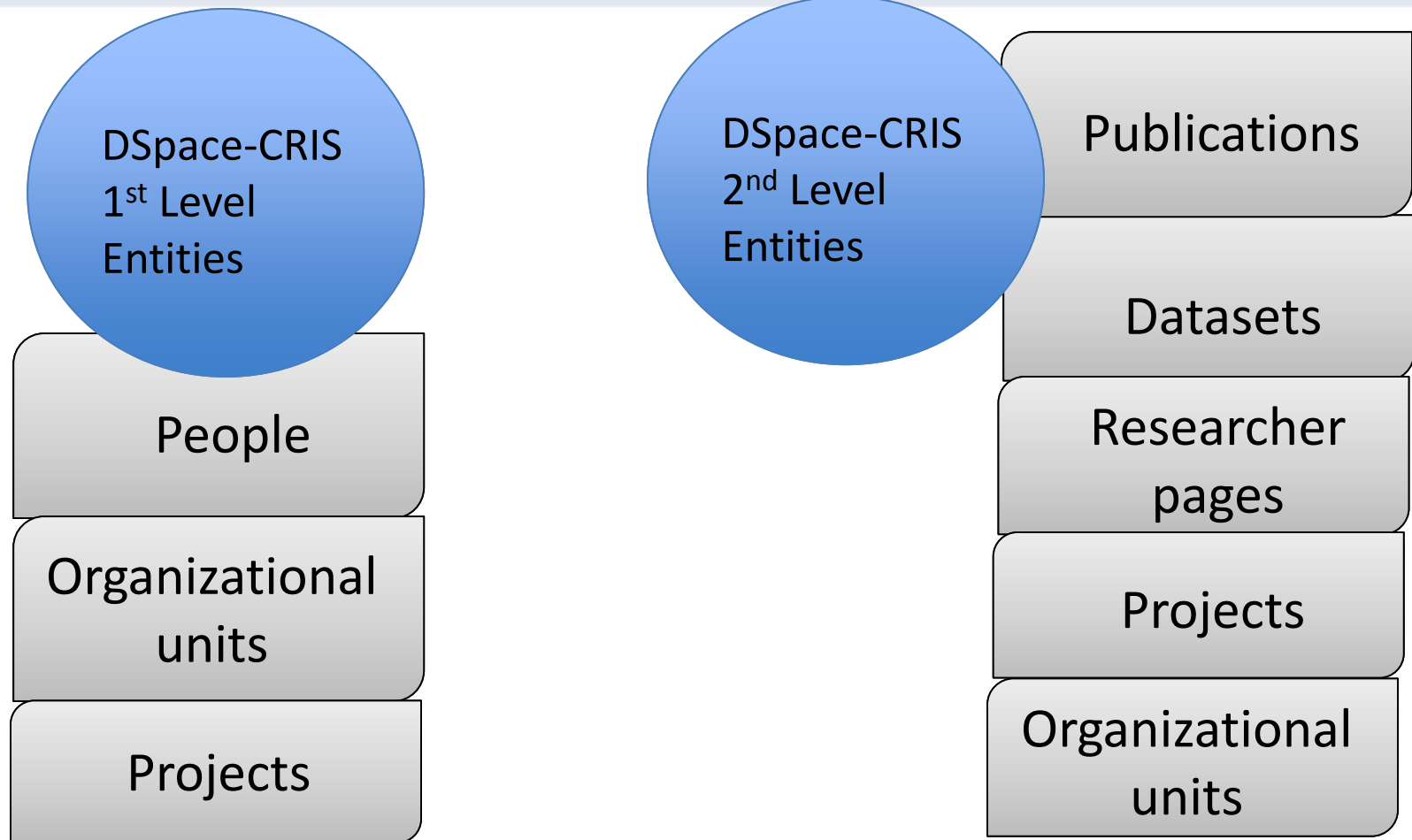
Aim of the project

- To extend the scope of Ktisis, by adding value to the system and its content.
- DSpace-CRIS is free, open source and compliant with open standards
- DSpace-CRIS can collect and manage research information such as researchers' profiles, department pages, project grants, research outputs, metrics, reports and statistics.
- To provide a framework to the researchers to submit information about their research activities such as Participation in Editorial Boards

Implementation

- Collaboration with the company 4Science
- DSpace-CRIS is centered on researchers, so we had to change the hierarchy structure to be based around organizational units which are then connected to the researchers

Implementation



Implementation

- We created a new organizational unit which represents the University entity as a whole
- Organizational units were created to represent each faculty and department
- New organizational units to represent all the external affiliations. These values were normalized before they were imported in the new system.
- We created a list with the names, the department, faculty and ORCiD of all the University researchers, which was imported into the system

New functionalities

Researcher Profile Enhancement

Ktisis at Cyprus University of Technology

Tsapatsoulis, Nicolas (rp00028)

Source ID: none

Created: at 6:21:38 PM EET on Thursday,
November 24, 2016

Source Reference none

Updated: at 1:30:10 PM EET on Tuesday,
December 6, 2016

 Network Lab

 View Statistics

 Email Alert

 RSS Feed

 Edit Researcher Page



Profile

 [Contact information](#)

[Biography](#)

Bibliometrics

Publications

University responsibilities

[Teaching list](#)

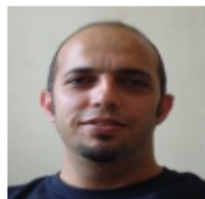
[Supervision of undergraduate
projects](#)

[Supervision of Phd/Msc projects](#)

Research activities

[Research projects](#)

Contact Information



Tsapatsoulis, Nicolas

Τσαπατσούλης, Νικόλας

Department

Department of Communication and Internet Studies

Faculty

Faculty of Communication and Media Studies

Email

nicolas.tsapatsoulis@cut.ac.cy

ORCID

[0000-0002-6739-8602](#)

Scopus Author ID

[6603932656](#)

Researcher ID

[E-4146-2016](#) 

Status

Current Staff

New functionalities

Researcher Profile Enhancement

Kalogirou, Soteris A. (rp00110)

Source ID: none

Created: at 8:21:48 PM EET on Thursday,
November 24, 2016

Source Reference none

Updated: at 9:45:48 AM EET on
Wednesday, March 14, 2018

 Network Lab

 View Statistics

 Email Alert

 RSS Feed

 Edit Researcher Page



Profile

[Contact information](#)

[Biography](#)

Bibliometrics

Publications

University responsibilities

[Teaching list](#)

[Supervision of Phd/Msc projects](#)

Research activities

[Research projects](#)

Service to the community/university

 [Committee memberships -
external organizations](#)

Service to the professional/self- development

[Participation in editorial boards](#)

Name Card



Kalogirou, Soteris A.

Καλογήρου, Σωτήρης

Department

Department of Mechanical Engineering and Materials Science and Engineering

Faculty

Faculty of Engineering and Technology

Committee Membership – External Organizations

Results 1-1 of 1 (Search time: 0.014 seconds).

Committee name	Work accomplished	Start date	End date
Technical Chamber of Engineers, Cyprus	Member of the Energy Committee.	02-05-2000	

New functionalities

Researcher Profile Enhancement

Kalogirou, Soteris A. (rp00110)

Source ID: none

Created: at 6:21:48 PM EET on Thursday,
November 24, 2016

Source Reference none

Updated: at 9:45:48 AM EET on
Wednesday, March 14, 2018

[Network Lab](#)

[View Statistics](#)

[Email Alert](#)

[RSS Feed](#)

[Edit Researcher Page](#)



Profile

[Contact information](#)

[Biography](#)

Bibliometrics

Publications

University responsibilities

[Teaching list](#)

[Supervision of Phd/Msc projects](#)

Research activities

[Research projects](#)

Service to the community/university

[Committee memberships - external organizations](#)

Service to the professional/self-development

[Participation in editorial boards](#)

Name Card



Kalogirou, Soteris A.

Καλογήρου, Σωτήρης

Department

Department of Mechanical Engineering and Materials Science and Engineering

Faculty

Faculty of Engineering and Technology

Editorial Boards (All)

Results 1-2 of 2 (Search time: 0.088 seconds).

Name of editorial board

Academic year

Renewable Energy Journal

2014-2015

Energy - The International Journal

2011-2012

New functionalities

Researcher Profile Enhancement

- Users can update their Researcher Profile status to make it either visible or hidden
- Users can update their picture, their personal information such as name, title, department, personal site, qualifications, etc.
- When publications are already in the system, the researchers can "claim" a publication (or "disclaim" it) and automatically add it to their profile

New functionalities Projects

Primary Data



Project title

Coordinating and integrating state-of-the-art Earth Observation Activities in the regions of North Africa, Middle East, and Balkans and Developing Links with GEO related initiatives towards GEOSS

Code

GEO-CRADLE

Project Coordinator [Hadjimitsis, Diofantos G.](#) Start date 01-02-2016

Expected Completion 31-07-2018

Description

Abstract

GEO-CRADLE brings together key players representing the whole (Balkans, N. Africa and M. East) region and the complete EO value chain with the overarching objective of establishing a multi-regional coordination network that will (i) support the effective integration of existing EO capacities (space/air-borne/in-situ monitoring networks, modelling and data exploitation skills, and past project experience), (ii) provide the interface for the engagement of the complete ecosystem of EO stakeholders (scientists, service/data providers, end-users, governmental orgs, and decision makers), (iii) promote the concrete uptake of EO services and data in response to regional needs, relevant to the thematic priorities of the Call (adaptation to climate change, improved food security, access to raw materials and energy), and (iv) contribute to the improved implementation of and participation in GEO, GEOSS, and Copernicus in the region. In this context, GEO-CRADLE lays out an action plan that starts by inventorying the regional EO capacities and user needs, which in turn leads to a gap analysis, the definition of region specific (G)EO Maturity Indicators and common priority needs. Through showcasing pilots, it demonstrates how the priorities can be tackled by the GEO-CRADLE Network, and provides the roadmap for the future implementation of GEOSS and Copernicus in the region, building on the GEO-CRADLE Regional Data Hub, which abides by the GEOSS Data Sharing Principles. To maximise the impact of GEO-CRADLE activities, well-defined Communication, Dissemination and Stakeholder Engagement strategies are proposed. Key Performance Indicators (KPIs) will be used for the quantified assessment of the impact, identifying potential enabling or constraining factors, while pursuing realistic but also ambitious exploitation scenarios. For efficient project coordination, the project management is assisted by a regional coordination structure, and active liaison with EC, GEO and UN initiatives.

New functionalities

Projects

Primary Data



Project title

Transforming Intangible Folkloric Performing Arts into Tangible Choreographic Digital Objects

Code

Terpsichore

Project Coordinator

Tsapatsoulis, Nicolas

Start date

01-04-2016

Expected Completion

31-03-2020

Description

Abstract

Intangible Cultural Heritage (ICH) content means "the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith". Although, ICH content, especially traditional folklore performing arts, is commonly deemed worthy of preservation by UNESCO (Convention for the Safeguarding of ICH) and the EU Treaty, most of the current research efforts are on the focus is on tangible cultural assets, while the ICH content has been overlooked. The primary difficulty stems by the complex structure of ICH, its dynamic nature, the interaction among the objects and the environment, as well as emotional elements (e.g., the way of expression and dancers' style). TERPSICHORE aims to study, analyse, design, research, train, implement and validate an innovative framework for affordable digitization, modelling, archiving, e-preservation and presentation of ICH content related to folk dances, in a wide range of users (dance professionals, dance teachers, creative industries and general public) . The project targets at integrating the latest innovative results of photogrammetry, computer vision, semantic technologies, time evolved modeling, combined with the story telling and folklore choreography. An important output of the project will be a Web based cultural server/viewer with the purpose to allow user's interaction, visualization, interface with existing cultural libraries (EUROPEANA) and enrichment functionalities to result in virtual surrogates and media application scenarios that release the potential economic impact of the ICH. The final product will support a set of services such as virtual/augmented reality, social media, interactive maps, presentation and learning of European Folk dances with tremendous impact on the European society, culture and tourism.

Publications (All)

Show/Hide filters ▾

Results 1-1 of 1 (Search time: 0.013 seconds).

☐ Refman ☐ EndNote ☒ Bibtex ☐ RefWorks ☐ Send via email

☐	Issue Date	Title	Author(s)
☐	1 Jan-2018	Metadata for intangible cultural heritage: the case of folk dances	Giannoulakis, Stamatios ; Tsapatsoulis, Nicolas ; Grammalidis, Nikos

New functionalities

Metrics

Title:	A strong regioregularity effect in self-organizing conjugated polymer films and high-efficiency polythiophene: fullerene solar cells
Authors:	Choulis, Stelios A.  Kim, Youngkyoo  Cook, Steffan 
Keywords:	Polymers;Fullerenes;Nanostructured materials;Plastic films;Solar cells
Issue Date:	2006
Publisher:	Nature
Source:	Nature materials, 2006, Volume 5, Issue 3, Pages 197-203
Abstract:	The influence of polymer regioregularity (RR) on the molecular nanostructure, and on the resulting material properties and device performance was analyzed. Annealed blend films show increased α regardless of RR, that indicates improved charge-carrier diffusion. It was found that the highest device efficiencies will be achieved with the highest RR P3HT. It was also found that the dark-current density of as-fabricated devices made with pristine P3HT increases with the RR of P3HT in the higher voltage regime
URI:	http://ktisis.cut.ac.cy/handle/10488/7613
ISSN:	1476-1122 (print) 1476-4660 (online)
DOI:	10.1038/nmat1574
Rights:	© Nature Publishing Group
Type:	Article
Appears in Collections:	Αρθρα/Articles

SCOPUS[™]
Citations

1,938 

checked on Apr 29, 2018

1

WEB OF SCIENCE[™]
Citations

1,804 

Last Week
5

Last month

checked on Sep 17, 2017

1



Page view(s)

972 

Last Week
18

Last month
95

checked on Jun 6, 2018

1



Google Scholar[™]

Check



Altmetric

Next Generation Repositories

- The vision of COAR for Next Generation Repositories is to position repositories as the foundation for a distributed, globally networked infrastructure for scholarly communication
- The objectives of Next Generation Repositories are:
 - Cross-repository interoperability by exposing uniform behaviors across repositories
 - Value added services to support discovery, access, annotation, real-time curation
 - To help transform the scholarly communication system by emphasizing the benefits of collective, open and distributed management

Next Generation Repositories

- According to COAR Working Group on behaviors and standards for the next generation of repositories Ktisis managed to achieve:
 - Exposing Identifiers: The use of ORCID identifiers for individual researchers which relate to their publications
 - Declaring Licenses at a Resource Level: In Ktisis we use Creative Commons Copyright Licenses
 - Discovery through Navigation: Link to the landing page of a publication
 - Batch Discovery: Ktisis is compatible with aggregators such as OpenAIRE
 - Exposing Standardized Usage Metrics: In Ktisis we have implemented metrics and statistics
 - Preserving Resources: Ktisis ensures that the scholarly output and all resources will be available in the long term by preservation and keeping copies of the system daily

Next Generation Repositories

- Future goals:
 - Interacting with Resources (Annotation, Commentary and Review): Ktisis will support commentary, annotation and peer review activities.
 - Resource Transfer: Ktisis will provide references to the repositories where the resources are distributed
 - Collecting and Exposing Activities: Ktisis will notify authors about changes, additions, comments, annotations, peer-reviews, access, downloads, etc.
 - Identification of Users: For the functions such as annotation, commentary, peer review users will have the possibility to identify themselves

Benefits

- DSpace-CRIS provides a flexible data model to describe all the entities that populate the research environment and their meaningful links
- DSpace-CRIS is open-source and it provides a technology that allows us to maintain independence from vendors
- Our publications are safely and easily managed as before, but now we have the advantage to link them to relevant data such as authors, projects, metrics, networks, statistics, etc.

Benefits

- DSpace-CRIS provides persistent identifiers
- Provides the ability to import records from external databases such as Web of Science, Scopus, etc. This interoperability saves a lot of time for the population of the system.

Challenges

- One of the main goal of Ktisis is to gather the publications of the academic community
 - The University asked to all members of the academic community and the PhD students to create an ORCID account
 - The Library attempt with the support of 4Science to automate the procedure of importing the publications for Scopus and Web Of Science
- The researcher profile reflects the Research and Academic Portfolio academics have to fill every year for their evaluation.
 - The University Senate decided that is their obligation to update the data in Ktisis researcher profile.
 - The Library employs Students for the updating of the researcher profile
 - Try to simplify and automate the procedure (for example the Studies and Student Affairs provide with the course title)

Conclusions

- The transformation of Ktisis into a CRIS system has provided the academic community of our university a lot of benefits and functionalities
- The researchers are now able to keep track of their work
- Ktisis now enables them to build a full academic profile which will assist them in their assessment process

Thank you very much for your
attention

Stamatios Giannoulakis

s.giannoulakis@cut.ac.cy