



<Lecture 3>FOSTER: Facilitating Open Science Training in European Research

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Facilitating Open Science Training in European Research

Training for Open Science: the FOSTER approach

Eloy Rodrigues



The FOSTER project

Facilitate Open Science Training for European Research

- Facilitate Open Science Training for European Research
- Two-year EU-funded FP7 project (Feb 2014 - Jan 2016 - Now extended until July 2016)
- 13 consortium partners (Project lead University Minho)
- Collaboration and support by 27 other organizations (Institutions, Graduate Schools, Associations from students and young researchers, etc.) from 13 countries

“Spread the seeds of Open Access and Open Science”



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 612425

Overview

1. The FOSTER project
2. The FOSTER Approach
 - Identifying and Organising Training Resources
 - Releasing the FOSTER Portal
 - Conducting/Supporting FOSTER Training
 - Face2Face training
 - Elearning courses
3. Concluding Remarks



FOSTER Partners

- Universidade do Minho - *Portugal (coordinador)*
- Georg August Universitaet Goettingen Stiftung Oeffentlichen Rechts - *Germany*
- Danmarks Tekniske Universitet - *Denmark*
- Stichting eIFL.net - *Netherlands*
- SPARC-Europe - *UK*
- Stichting LIBER - *Netherlands*
- University of Glasgow - DCC - *UK*
- Technische Universiteit Delft - *Netherlands*
- The Open University - *UK*
- ICM - Uniwersytet Warszawski - *Poland*
- Consortium Universitaire de Publications Numériques Couperin - *France*
- Consejo Superior de Investigaciones Científicas - *Spain*
- University of Edinburgh - DCC - *UK*



The FOSTER project

Facilitate Open Science Training for European Research

OBJECTIVES

- To support different stakeholders, especially younger researchers, in adopting open access in the context of the European Research Area (ERA) and in complying with the open access policies and rules of participation set out for Horizon 2020
- To integrate open access principles and practice in the current research workflow by targeting the young researcher training environment
- To strengthen institutional training capacity to foster compliance with the open access policies of the ERA and Horizon 2020 (beyond the FOSTER project)
- To facilitate the adoption, reinforcement and implementation of open access policies from other European funders, in line with the EC's recommendation, in partnership with PASTEUR4OA project



Why does it matter?

- Openness will increasingly become a defining and inherent characteristic of all scientific research.
- Training is needed to foster new and developing skills (professional, organisational, managerial, intellectual...) in response to new practices, policies, and technologies.
- Training materials have been produced independently across the ERA, in a range of disciplinary contexts.
- There is a need for these dispersed materials to be evaluated, consolidated, and organised.



The FOSTER approach

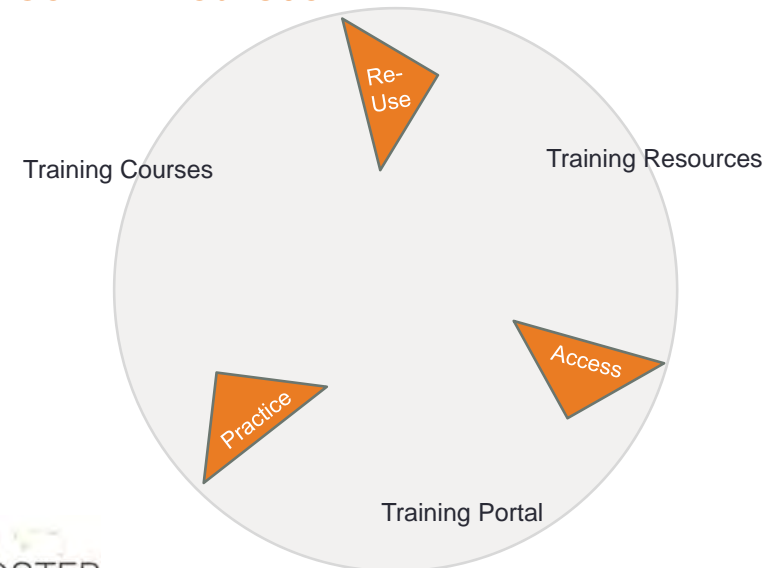
Facilitate Open Science Training for European Research

METHODS

- Identifying already existing content that can be reused in the context of the training activities and repackaging, reformatting them to be used within FOSTER, and developing/creating/enhancing contents as required
- Developing the FOSTER Portal to support e-learning, blended learning, self-learning, dissemination of training materials/contents and a Helpdesk
- Delivery of face-to-face training, especially training trainers/multipliers who can deliver further training and dissemination activities, within institutions, nations or disciplinary communities



FOSTER Methods



Training Resources

Content for Open Science – Open the shell and show your pearls!

Parent Category: News | Published: Thursday, 10 April 2014 | Written by Astrid Orth

Have you, or your organization, created or repackaged/reused quality content (from briefing papers, to presentations, videos, etc) on open access, open data and open science in any language, which can be useful and used on the FOSTER training context? We are now calling for the community contribution on the identification and mapping of relevant content which can be used for FOSTER training, to train researchers, project managers, administrators and future trainers in the benefits of Open Science and compliance with Horizon 2020 Mandate (Article 29.2 of the model Grant Agreement).

We are looking for a wide variety of content both thematically (from general open access advocacy, to discipline specific promotion/training for open science) and regarding formats (from individual texts, slides or videos to full packaged training objects or courses). With your help, we want to showcase engaging and instructive training materials and reach out to diverse disciplinary communities and countries in the European Research Area.



So if you have produced, used, or are simply aware of, quality content on open access, open data an open science, and want to give that content a wider audience and use in collaboration with the FOSTER training programme, please describe it using the form available at: <http://goo.gl/meV0EK>

This call for content will remain open during the project lifetime, but we are aiming to have an initial relevant sample of content by early May, so we would be very grateful if you submit your content until April 30th



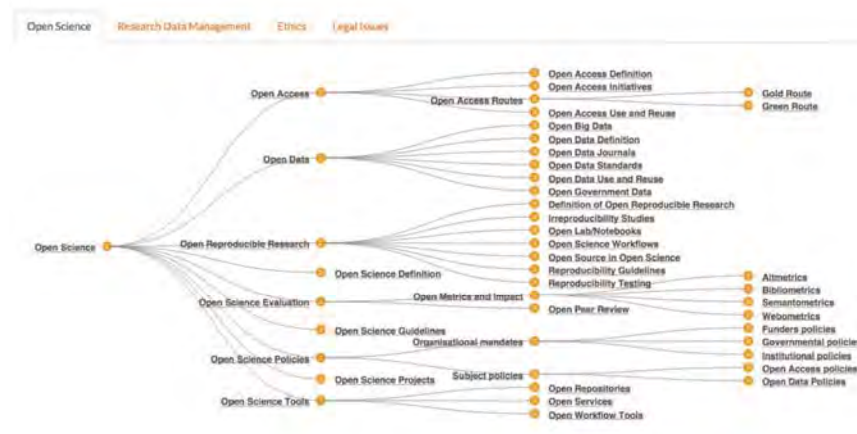
Training Resources

- Suggested by project consortium and community (ongoing) & created by Training events
- Identify, classify and prioritise content by target group, subject focus and level of expertise
- Minimum metadata for storage¹: Title, General description of the resource, Author/Creator, Date, URL, Language, Target audience, Scientific discipline, Level of Knowledge, Main topic, Secondary topic, Resource licence, Media type, File type, Size
- Categorisation: 9 areas, 4 levels deep

¹ Based on DaMSSI-ABC-Classification Data Management Skills Support Initiative - Assessment, Benchmarking, Classification <http://www.dcc.ac.uk/training/damssi-abc>



Content Map/Open Science Taxonomy



FOSTER Training Content

- Presentations
- Guides
- Publications
- Videos
-

The screenshot shows a FOSTER website page for a video titled "Open for all – the benefits of open data in a digital age". The page includes:

- Title:** Open for all – the benefits of open data in a digital age
- Author:** Mark Thorley, NERC, CODATA. "Open Research Data: Implications for Science and Society", Warsaw, Poland, May 28-29, 2015, conference organized by the Open Science Platform – an initiative of the Interdisciplinary Centre for Mathematical and Computational Modelling at the University of Warsaw. pon.edu.pl@OpenSciPlatform #ORD2015
- Level of Knowledge:** Intermediate skills
- Language:** English (EN)
- License:** CC BY
- Video:** A thumbnail image of a presentation slide.
- Topics:** A list of related topics with small icons.
- Audience:** A list of target groups: PhD Students, Project Managers, Researchers and Students.



The FOSTER Portal



The FOSTER Portal

- Organized according with the Open Science Taxonomy
- For each Topic the Portal presents the associated:
 - Resources
 - Events
 - Courses



The FOSTER Portal - Content/Resources

Open Data



Open Data are online, free of cost, accessible data that can be used, reused and distributed provided that the data source is attributed and shared alike.

Please [sign in](#) to subscribe to this topic.

Navigation

- Parent Topic
- Open Science
- Sub Topics
- Open Big Data
 - Open Data Definition
 - Open Data Journals
 - Open Data Standards
 - Open Data Use and Reuse
 - Open Government Data

Resource



COCOS - building a large scale cosmological simulation database
By Aleksander Nowinski
Publication year: 2015

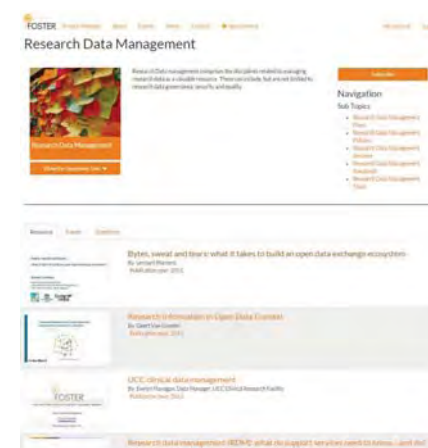


RepODD - a new Repository for Open Data in the scientific landscape of Poland
By Marta Hoffman-Sommer
Publication year: 2015



A Novel Publication Pipeline for Life Science Data based on openBIS and CKAN
By Henry Lütcke
Publication year: 2015

FOSTER Portal



- All materials are free to use, and can be edited, repurposed, recombined to suit your own training needs.
- Many of these materials are being compiled into courses. [Work in progress.]



The FOSTER Portal - Events

Events

Map Europe

Upcoming Past

FOSTER-CESSDA training 01 Mar 2015 to 30 Nov 2015

Promoting Open Science among Young Researchers: Challenges and Opportunities (4 workshops) 19 Mar 2015 to 19 Oct 2015

Software Writing Skills for Your Research 23-25 September 2015

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The FOSTER Portal - Courses (Work in Progress)

FOSTER Project Website About Events Courses News Contact

Open Science / Open Data

Open Data

Open Data are online, free of cost, accessible data that can be used, reused and distributed provided that the data source is attributed and shared alike.

Please sign in to subscribe to this topic

Navigation

Parent Topic

- Open Science

Sub Topics

- Open Big Data
- Open Data Definition
- Open Data Journals
- Open Data Standards
- Open Data Use and Reuse
- Open Government Data

Resource Events Questions **Courses**

COURSE: Open Science to Scientific Research

Intended audience: Researchers, funders, research administrators, librarians Level: introductory - no previous knowledge is required

The following course is a general introduction to the various components and philosophies of Open Science, that can directly enrich each step of the scholarly lifecycle (Open Notebook Science, OpenData, Open Research Software, Open Access). The overall objective of the course is to provide an introduction to why Open Science is essential to rigorous, reproducible and transparent research, as well as to future

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FOSTER Training

FOSTER Project Website About Events Courses News Contact

Sign in Register

CESSDA Research Data Management for Open Data doctoral training series: RESEARCH DATA MANAGEMENT AND OPEN DATA

23-25 Jul '15

The main goal is to promote open data in the research community and raise awareness about sharing research data and using existing research data. The course is designed for doctoral students from the field of social sciences and humanities.

Training consists of lectures and hands-on sessions focused on good Research Data Management practices and issues related to data sharing within the current EU frameworks, which foster open science.

Topics to be covered:

- Research Data Management
- Legal and Ethical Issues
- Depositing and Using Data

Teaching is delivered through a combination of presentations, exercises

Where

Faculty of Social Sciences, Kardeljeva ploščadica 2, 1000 Ljubljana, Slovenia

Full

Orga

Scien

Lang

FOSTER

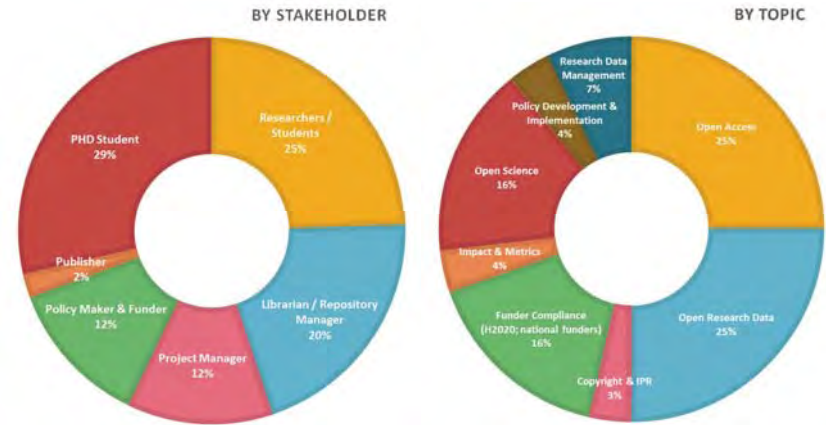
- Call 1 (March 2014 - for events in 2014)
- 17 training programmes (over 70 events) in 13 countries (Belgium, Bulgaria, Croatia, Denmark, France, Germany, Greece, the Netherlands, Poland, Portugal, Slovenia, Spain and the UK)

- Call 2 (November 2014 - for events in 2015)
- 24 training programmes from 18 countries (Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Spain and United Kingdom)

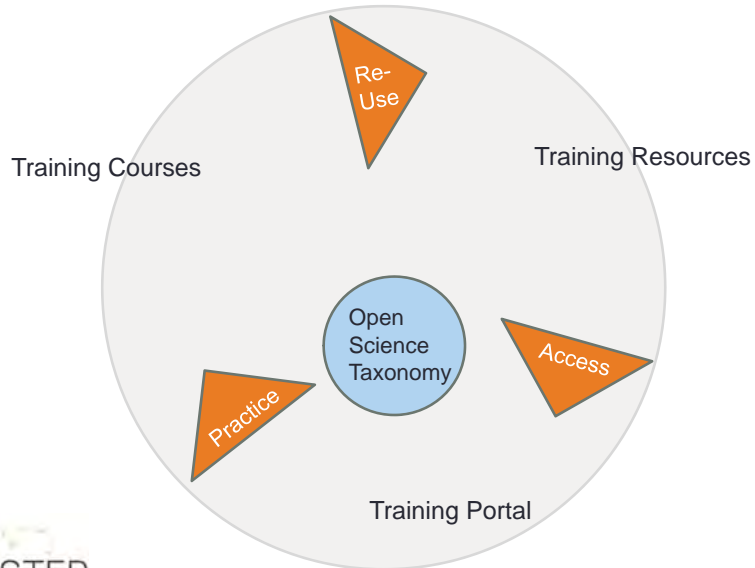
FOSTER Training Programme 2014-2015



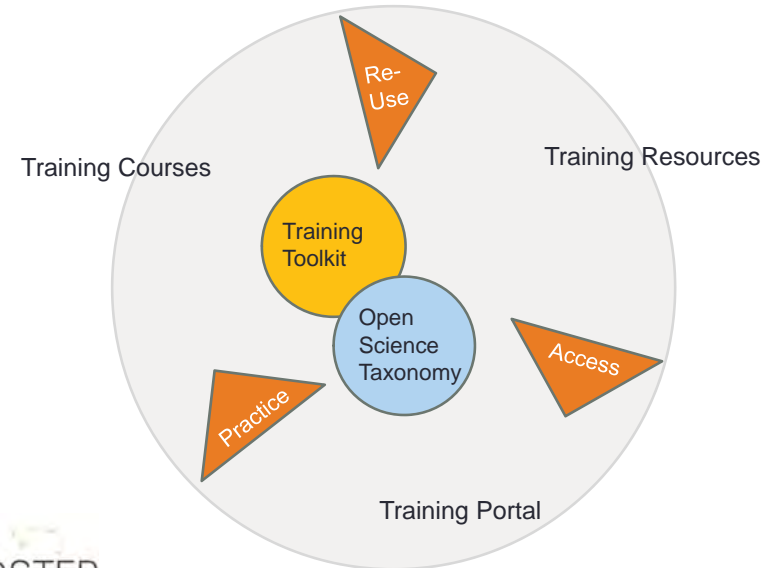
Training Courses 2014



FOSTER Methods & Tools



FOSTER Methods & Tools



Training Toolkit

- Helping to create Training Events

- Suggestion: 6 TYPES OF TRAINING SESSIONS

Audience	Expert talk	Talk by peers	Panel session	Workshop	Group work/Break-out sessions	E-learning
Students & Academic Staff	X	X	X	X	X	X
Administrators & Librarians	X	X	X	X	X	X
Research Project Managers	X	X	X		X	X
Policy makers & Funders	X	X	X			X



Training Toolkit

Attribution (BY)
Others can copy, distribute, display, perform or otherwise use your work if they credit your name as requested.

No Derivative Works (ND)
Others can only copy, distribute, display or perform verbatim copies of your work.

Share Alike (SA)
Others can distribute your work only under a license identical to the one you have chosen for your work.

Non-Commercial (NC)
Others can copy, distribute, display, perform or otherwise use your work but for non-commercial purposes only.

- Do not sit too close to the background (wall), allow light to wrap around you.
- Avoid mixed light, daylight and artificial light. Try to sit opposite to the light but not in front of a window.
- If possible use a three way lighting, one main light (key light), one light from the back to set you free from your background and one light from the back to set you free from your background. Lights should be as high as possible on tripods and make sure the picture is sharp.

LOCATION:

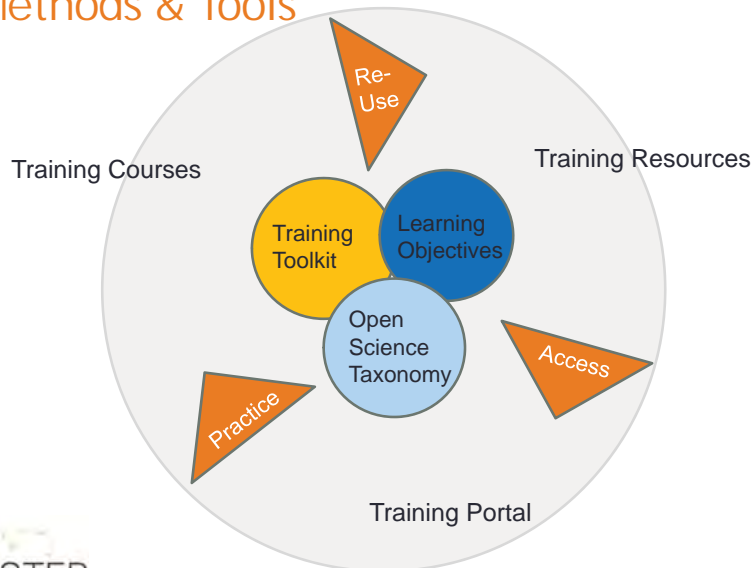
- Studio – eligible for introduction video's
- Lecture hall – eligible for live colleges
- Lab – eligible for demo clips for interpretation of tests
- Outdoors – eligible for showing cases or examples

VIDEO FORMATS:

- Mp4, mpeg format, H264 HD 1080P, YouTube HD, Vimeo HD



Methods & Tools



Learning Objectives

TOPICS (following the Research Lifecycle)	CORE LEARNING ELEMENTS	LEARNING OBJECTIVES (as basis for a LEARNING PLAN)	STAKEHOLDER				
			Doctoral Students	Researchers	Research Project Managers	Knowledge Managers & Librarians	Funding Agencies
Open Science Definition	Define the concept of Open Science	Define relevance of OS tools to Reproducibility/Integrity of Research	0	0	0	0	0
		Identify OS tools for each step of the Research Lifecycle	0	0	0	0	
		Apply OS concepts to your daily research processes	0	0			
Open Reproducible Research	Define relevance to Reproducibility	Discuss OS & Reproducibility role in Innovation & Economic Growth		0	0	0	0
		Identify OS tools for each step of the Research Lifecycle	0	0	0	0	
		Apply OS concepts to your daily research processes	0	0			
Open Big Data	Justify Openness as a Reproducibility Tool	Define relevance of OS tools to Reproducibility/Integrity of Research	0	0	0	0	0
		Apply OS concepts to your daily research processes	0	0			
		Discuss OS & Reproducibility role in Innovation & Economic Growth	0	0	0	0	
Open Data Definition	Open Big Data	Define Open Big Data concept			0	0	0
		Identify services based on Open Big Data			0	0	0
		Define Open Data	0	0	0	0	0
Open Data Definition	Open Data Definition	Demonstrate the advantages of Open Data	0	0	0	0	0
		Identify existing Open Data Journals	0	0			0



<https://goo.gl/IFGuhR>

Elearning courses

Courses

Are you interested in proposing new courses? Get in touch with us at elearning@fosteropenscience.eu and take a look at our course on "how to create a course".



COURSE: Making your Repository or Open Access Journal OpenAIRE compatible with OA Horizon 2020 requirements
 Intended audience: Librarians and Repository managers, Policy makers and Funders, Publishers Level: introductory - aware of Course for Repository managers, Data archives managers, Librarians, Journal editors and publishers, Data providers, Research managers and administrators.

Objectives:

1. Understand of the OpenAIRE infrastructure and content harvesting
2. Identify the OpenAIRE guidelines metadata specifications, levels and OAI sets
3. Define the levels of compatibility based on specific needs and technical context
4. Identify and implement system configurations, tools and facilities for repository platforms
5. Use the OpenAIRE validator tool for compatibility tests and registration



COURSE: Open Access to publications in Horizon 2020
 Intended audience: Researchers and Students, Librarians and Repository managers, Project Managers Level: intermediate - able to

The purpose of this course is to inform the researchers on how to comply with the H2020 mandate by depositing their publications in open access. Based on a total of 3 hours, the objectives are:

- Understand the value of the H2020 mandate
- Comply with the H2020 OA Mandate
- Reuse the publications in Horizon2020



COURSE: FOSTER Course on Course Creation
 Intended audience: Librarians, Librarians and Repository managers, PhD Students Level: Introductory - no previous knowledge is required
 The aim of this tutorial is to assist course instructors with creating new courses and editing existing ones in



Open Access to publications in Horizon 2020

The purpose of this course is to inform the researchers on how to comply with the H2020 mandate by depositing their publications in open access. Based on a total of 3 hours, the objectives are:

- Understand the value of the H2020 mandate
- Comply with the H2020 OA Mandate
- Reuse the publications in Horizon2020

You are not logged in, in order to take the course you need to [login](#)

[Go to the Course forum](#)



Course presentation



1 What is the H2020 Open Access Mandate?

An explanation of the objectives of the H2020 Open Access Mandate

- H2020 Open Access Policy Context
- EC position about OA on H2020



2 The requirements of the H2020 Mandate

What, when and where to comply with the H2020 Mandate.

- Open Access Requisites for H2020 Mandate
- 4 essential questions on how to adhere to the EC Horizon 2020

Full details

Level of knowledge: Intermediate, able to

Topics



Audience

- Researcher and Students
- Librarians and Repository managers
- Project Managers

Share



Taking & Designing courses

- Take a course about how to create your own courses out of the FOSTER resources:

<https://www.fosteropenscience.eu/content/foster-course-course-creation>

- Propose courses

After completing the module, the course instructors will be able to:

- propose a course
- upload course material in the portal
- create a course
- add a lesson and lesson material
- create and add a quiz
- publish the course
- communicate with the course participants (use the Forums)

If you would like to propose a course email us elearning@fosteropenscience.eu.

You have already enrolled on the course.

[Go to the Course forum](#)



Course presentation



1 How to create and edit a course or course materials in the FOSTER portal

Show/Hide resources

- Printable guide of Course on Courses
- Propose a course
- Before creating a course
- Add course material
- Video: How to upload the content to the portal
- Create a course
- Add a Lesson
- Add Lesson material
- Course presentation
- Add a Quiz
- Use the Forum
- Edit or publish your course or course material
- Certificate



What you can do!

- Learn more <http://fosteropenscience.eu>
- Locate resources of use to you and your staff
- Notify FOSTER of any additional training materials (web form)
- Register with FOSTER to upload content to the Portal and stay up-to-date with news and further outputs
- Search the events calendar (*right*) for face-to-face trainings, talks or workshops.
- Consult FOSTER speakers list to invite to your own training events
- Give us feedback: quality and effectiveness of the training materials in the portal



Summary



Thank you

- Website:
 - www.fosteropenscience.eu
- Contact details:
 - Eloy Rodrigues
 - eloy@sdum.uminho.pt

