



**Pre-normative REsearch for Safe use of
Liquid Hydrogen (PRESLHY)**
Grant Agreement Number 779613 of the
Fuel Cells and Hydrogen Joint Undertaking (FCH 2 JU)

Project website including internal communication tools

Deliverable Number:	D1.2 (D02)
Author(s):	Thomas Jordan, KIT
Submitted Date:	27 November 2018
Due Date:	31 May 2018
Report Classification:	Public



FUEL CELLS AND HYDROGEN
JOINT UNDERTAKING

(intentionally left blank – for double sided printing)

TABLE OF CONTENTS

1	Introduction.....	5
2	Design	7
2.1	Suffice theme	7
3	Content.....	9
3.1	Main Menu.....	9
3.2	Internal Website	10
4	Functionality	11
4.1	User Administration.....	12
4.2	Newsletter	15
4.3	Emailing.....	15
4.4	Events.....	16
4.5	Adding and Modifying Content	18
4.5.1	Media	18
4.5.2	Pages	19
4.5.3	Tables.....	21
4.6	Data Protection.....	23
5	Maintenance	25
6	Appendix – PRESLHY Privacy Policy.....	27

1 Introduction

The PRESLHY website has been built using a WordPress (Version 4.9.8) (<https://wordpress.org/>, <https://en.wikipedia.org/wiki/WordPress.com>) multi-site installation, provided on a virtual server. The server is operated by the German internet service provider ISP 1&1.

WordPress has developed from a blogging software solution into the world leading Content Management System CMS with more than 30% of all websites worldwide being implemented with WordPress. It provides a consistent split of content and view, which goes well beyond the classical tools like Cascading Style Sheets. For the actual blogging WordPress offers „posts“, providing a flexible, dynamic and highly interactive scheme, and for the more static content, WordPress offers the „pages“ construct. All content, including posts, pages or other content like events, newsletters, tables etc. are stored in a central database.

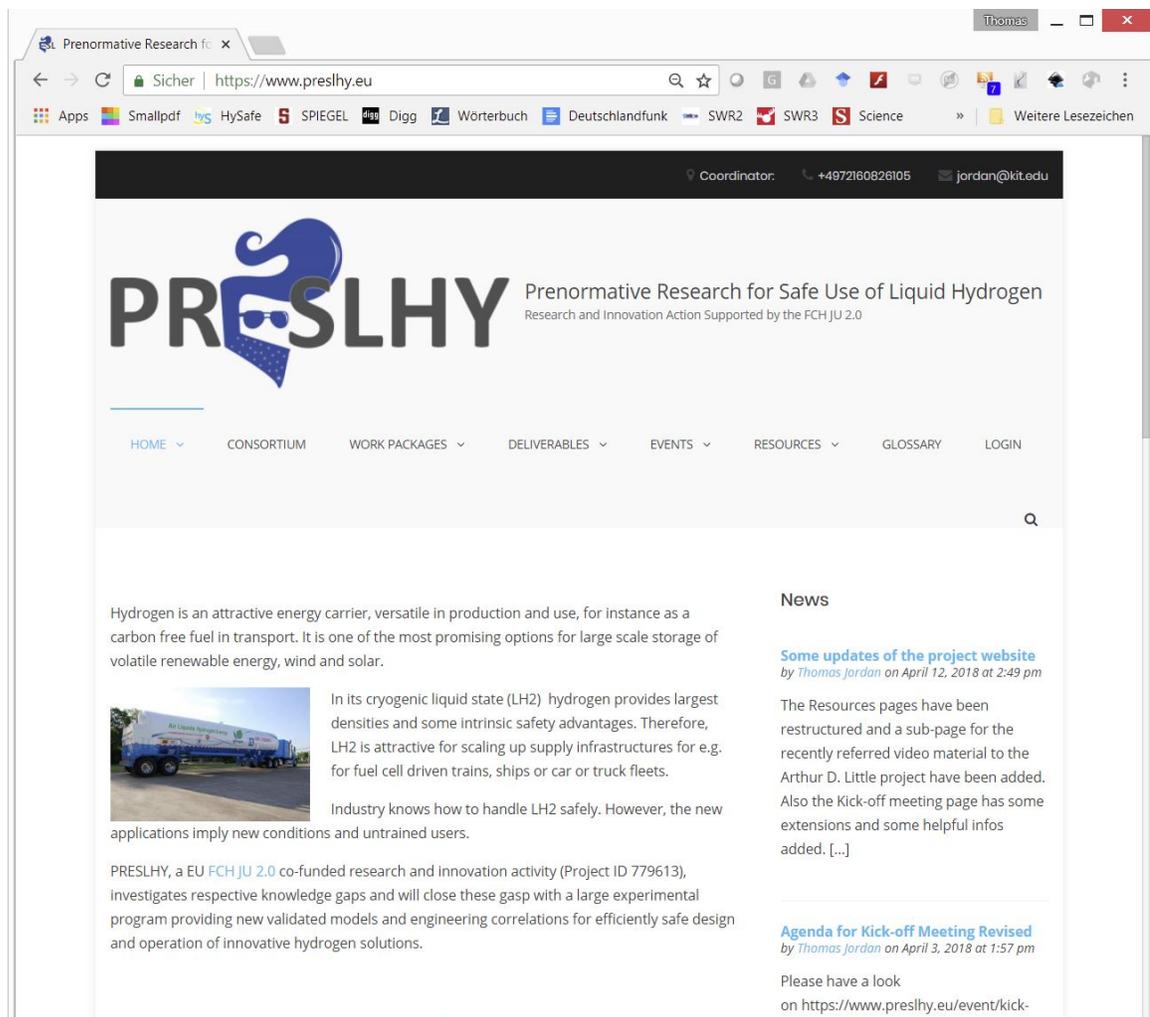


Figure 1: PRESLHY Website

The functionality of the website, which is described below, is easily extended by plugins, which may be found in a huge repository <https://wordpress.org/plugins/> . Most of these extensions are free, others are commercial and provide broader services. Alternatively, WordPress plugin might be easily developed using PHP, the reference website scripting language.

For the PRESLHY website the domain www.preslhy.eu could be reserved. This domain address provides the entry point to the website and anchors the home page (see Figure 1)

2 Design

For the actual design, the view and control of a WordPress website a theme, different than the standard design may be selected. A theme encapsulates all principle design elements. As there is a thorough and consistent separation of content, view and behavior in WordPress, choosing a new different designs is easily done by a simple mouse click. This plug and play modification of the look of website usually requires only few adaptations for some special issues.

On <https://wordpress.org/themes/> a multitude of predefined themes are available. A careful selection process guided by the required qualities clearness, simplicity and built-in functionality was yielding Suffice, Compact One, Structural and Sydney as potential initial candidates. After some testing the free Suffice theme has been selected.

2.1 Suffice theme

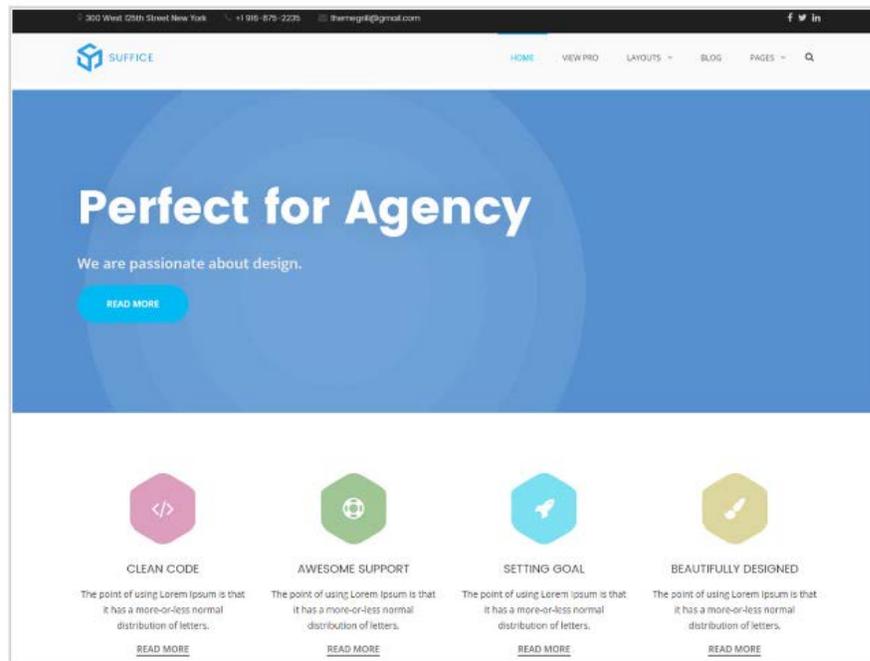


Figure 2: Homepage of the Suffice theme

Suffice is a highly flexible multipurpose WordPress theme that is crafted with the great attention to details. This theme is not just clean and sleek in design but is equally powerful by its features. Integration to SiteOrigin page builder and Suffice Toolkit plugin makes it one of the most customizable and easy to use themes. In addition, it is completely compliant with WooCommerce and uses the best SEO practices for best performance of the website. Suffice features versatile header styles, advanced color options, multiple widget areas and premium widgets. Hence, with this simple drag and drop theme the website may be easily adapted to new tasks.

With Suffice the website has been set up such that it is easy to find relevant information and to provide a clear split of static content and volatile issues like events or news. The general design of the windows, header, columns, footer, etc. including the color code shall imply a clear, technical and objective tone.

The window structure of the website provides a header with contact details, a second header with title and logo, a third header with navigation menu, a left central column for static page content, right column for news and a footer with upcoming events and picture gallery (see Figure 3).

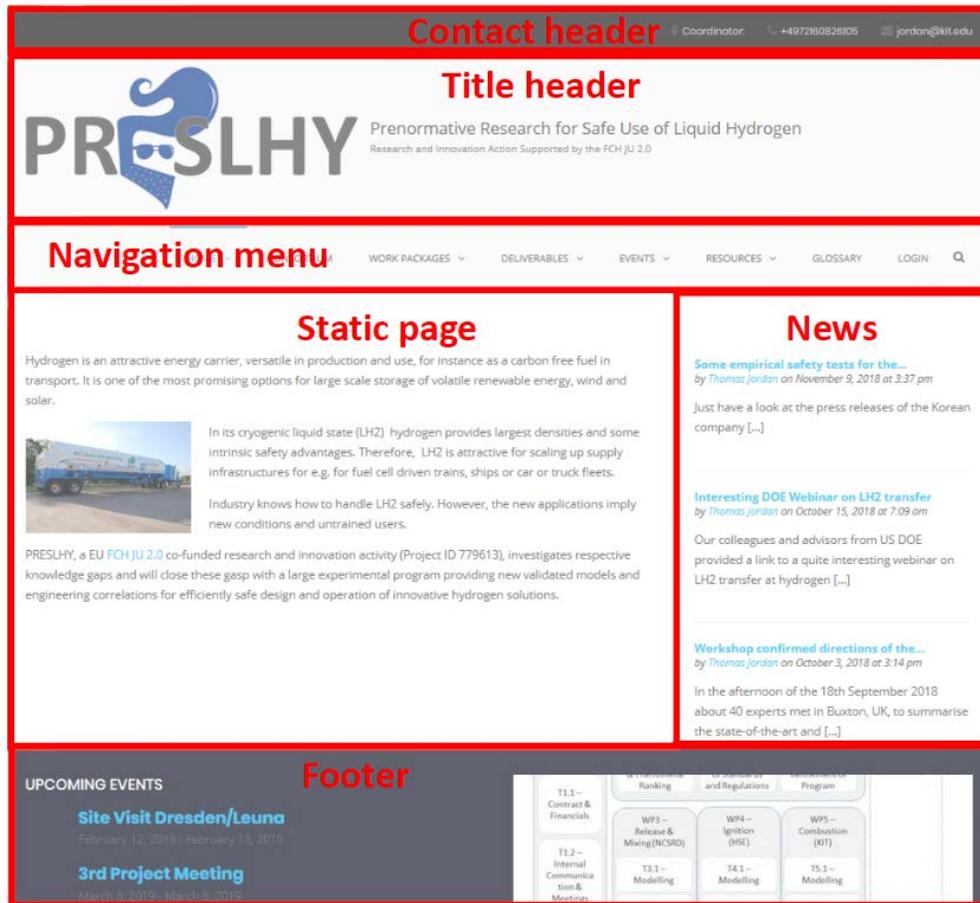


Figure 3: Window structure of the PRESLHY website

3 Content

The content of the PRESLHY website is structured according to the recommended structure for European projects, as layed out in the Best Practice Guidelines for EU Project Websites http://www.eurosfair.prdd.fr/7pc/documents/1271333123_project_website_guidelines_en.pdf. The structure is shown in Figure 4 below.

3.1 Main Menu

The main menu is directly accessible from the navigation menu (see Figure 3). There are main menu items, like “Home”, “Work Packages”, “Deliverables”, etc. which have a substructure. Existent sub-menus are indicated in the navigation header with an arrow pointing downwards. Clicking on these arrows unfolds the respective sub-menu. The full structure of the website, as shown in Figure 4, has been intentionally limited to those two tiers for ensuring cleanness and accessibility.

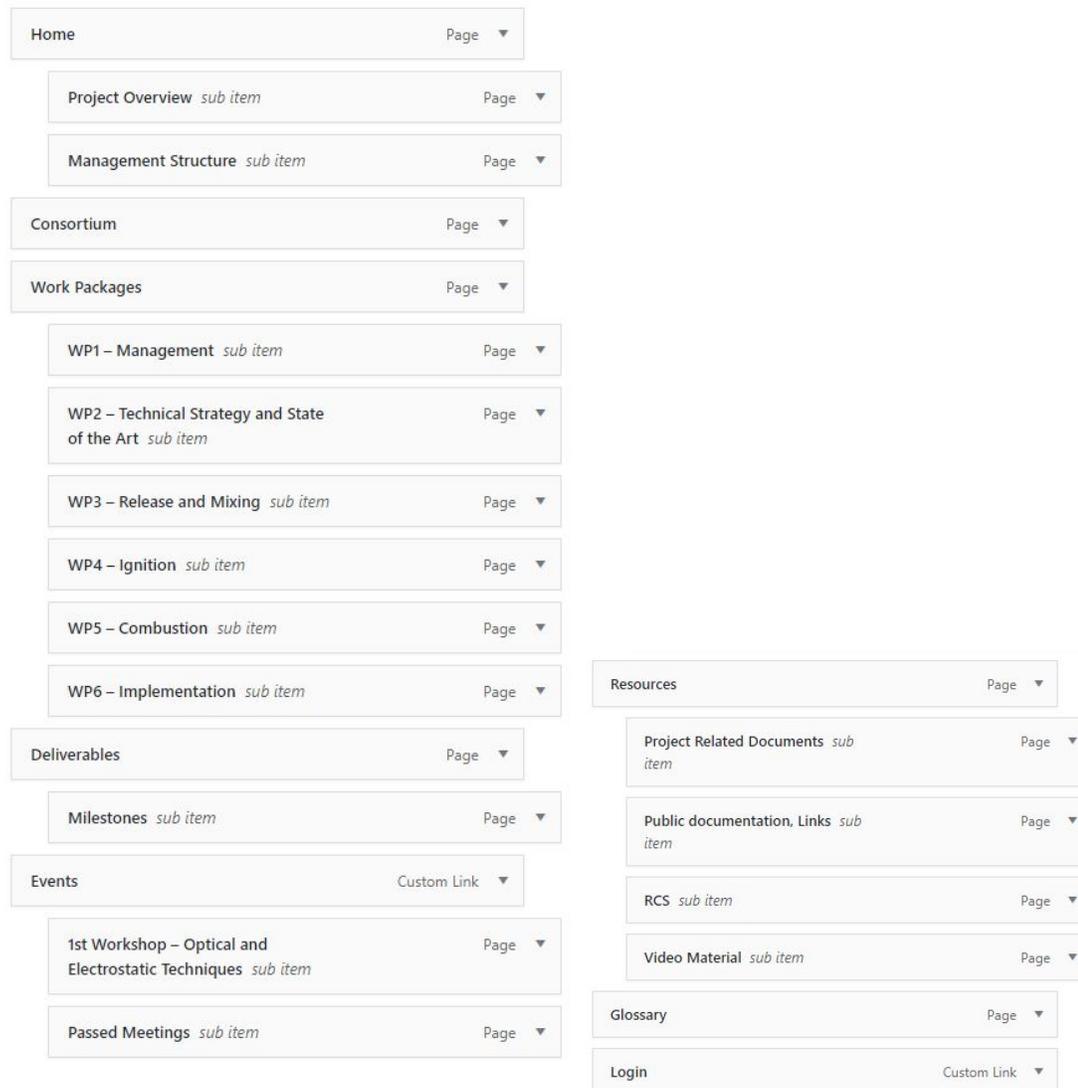


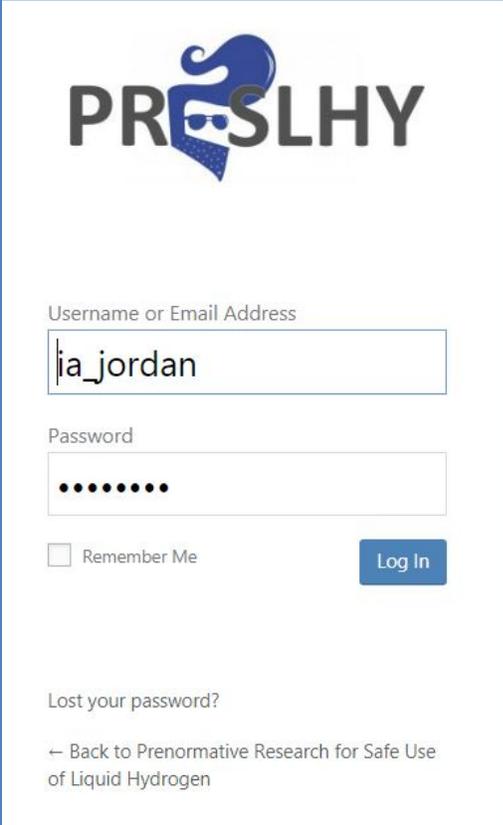
Figure 4: Menu structure, corresponding to the static page structure

3.2 Internal Website

Besides the obvious function of any website for external communications, the WordPress implementation of the PRESLHY website also provides suitable means for the project internal communication. As described in the next chapter there are tools for login, user administration, content access control, group emailing and newsletter functionality included in the PRESLHY website.

For accessing the Internal Website and all administrative functionality a login to the internal website is required. The login is accessible either directly from the website via the menu item “Login”, see Figure 3 or Figure 4, or by entering the website address <https://www.preslhy.eu/wp-login.php> directly into the address line of any browser. This will call the specially designed PRESLHY login page, see Figure 5.

All consortium members have received login data, consisting of a user name and an initial password. The coordinator will provide new login data on request.



The image shows a screenshot of the PRESLHY login page. At the top center is the PRESLHY logo, which consists of the word "PRESLHY" in a bold, sans-serif font, with a stylized blue figure integrated into the letter "S". Below the logo is a login form. The form has two input fields: "Username or Email Address" with the text "ja_jordan" entered, and "Password" with masked characters represented by dots. Below the password field is a checkbox labeled "Remember Me" and a blue button labeled "Log In". At the bottom of the form, there is a link "Lost your password?". Below the form, there is a footer link: "← Back to Prenormative Research for Safe Use of Liquid Hydrogen".

Figure 5: PRESLHY login page

After pressing entering the login data and pressing the “Log In” button, the user will be forwarded to main administration page called “Dashboard”. From here all extended functionality of the website is available. Even the functionality may be extended by adding special plugins.

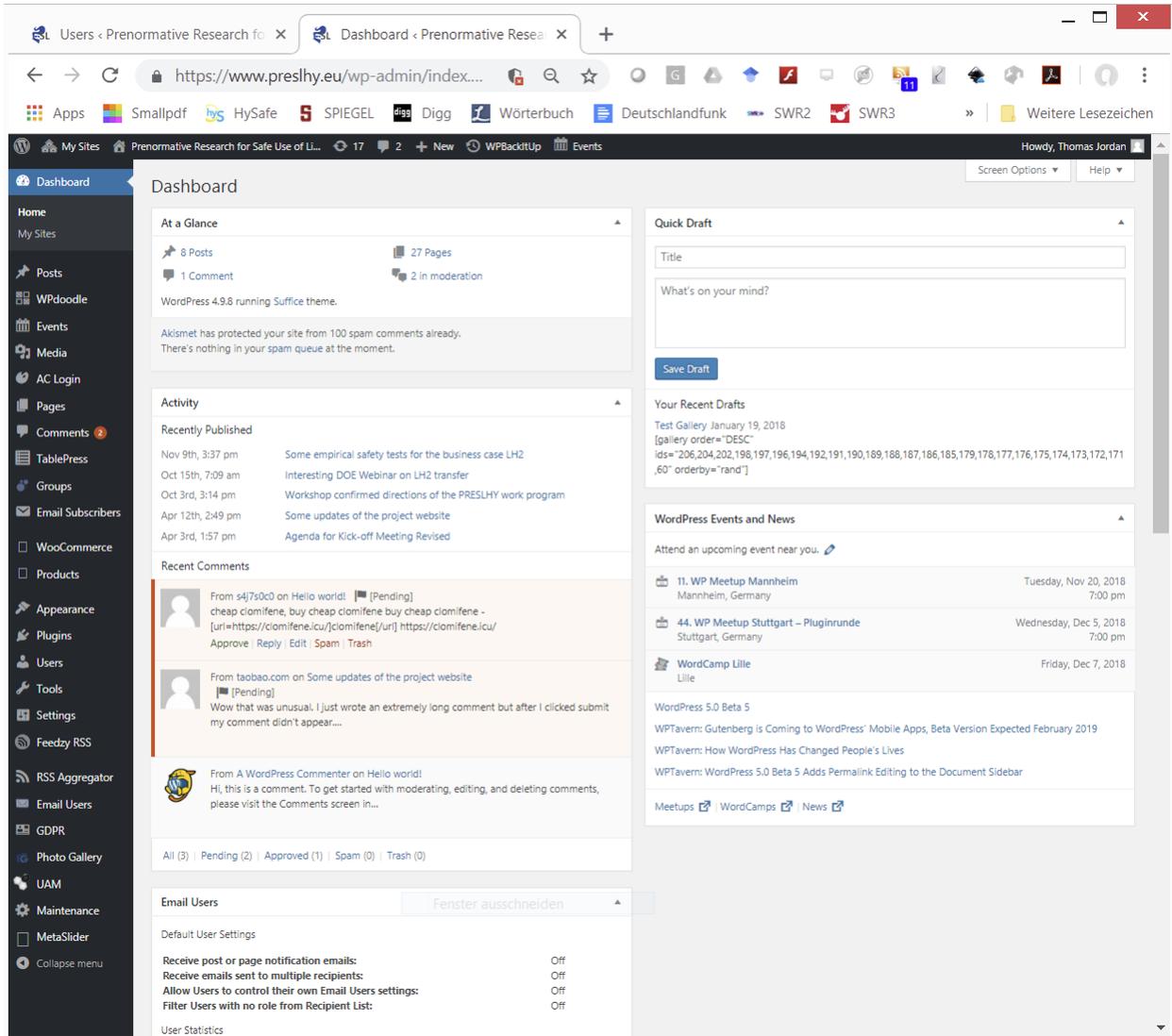


Figure 6: Dashboard view on PRESLHY internal website

4 Functionality

The functionality of a WordPress website is realized via plugins. There are a couple of standard plugins providing fundamental functionality required for any website. Besides this fundamental functionality, which is still a little centered around blogging purposes, special functionality may be added by installing further plugins.

By selecting the “Plugin” menu item of the Dashboard all additionally installed plugins maybe inspected. Currently there are 49 active and 11 inactive plugins.

The active plugins provide following special functionality:

- Customised login (for special PRESLHY login, see Figure 5)
- Improved source editors (for instance see Figure 17)
- Anti-spam (in particular Akismet Anti-Spam plugin)
- Tree view of menu structures
- Group emailing
- Document embedding
- Document and photo galleries
- RSS feeds (for collecting and displaying news from own and other websites)
- Group administration
- Administration of flat databases, i.e. tables
- Events management
- Page backup
- Etc.

Installing further plugins typically requires “Network admin” login. The reason for this is, that the WordPress installation used for PRESLHY is actually a multi-site installation, which accommodates also the websites for HySafe and the ICHS conference series.

In the following some special functions, important for the PRESLHY project management and internal communication, will be further explained.

4.1 User Administration

In the current state the user administration is realized mainly via the standard plugin “Users”. Selecting the Dashboard menu item will open the “Users” sub-menu as shown in Figure 7.

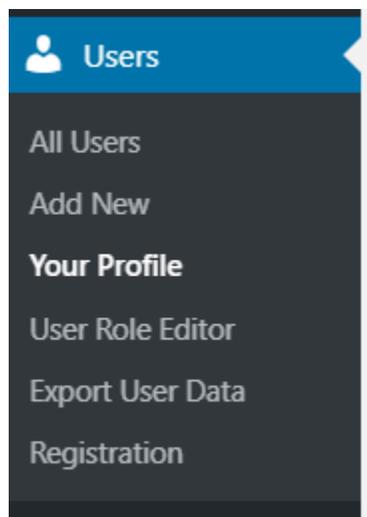


Figure 7: Managing Users

“All Users” will provide a list of users in a compact table format as shown in Figure 8.

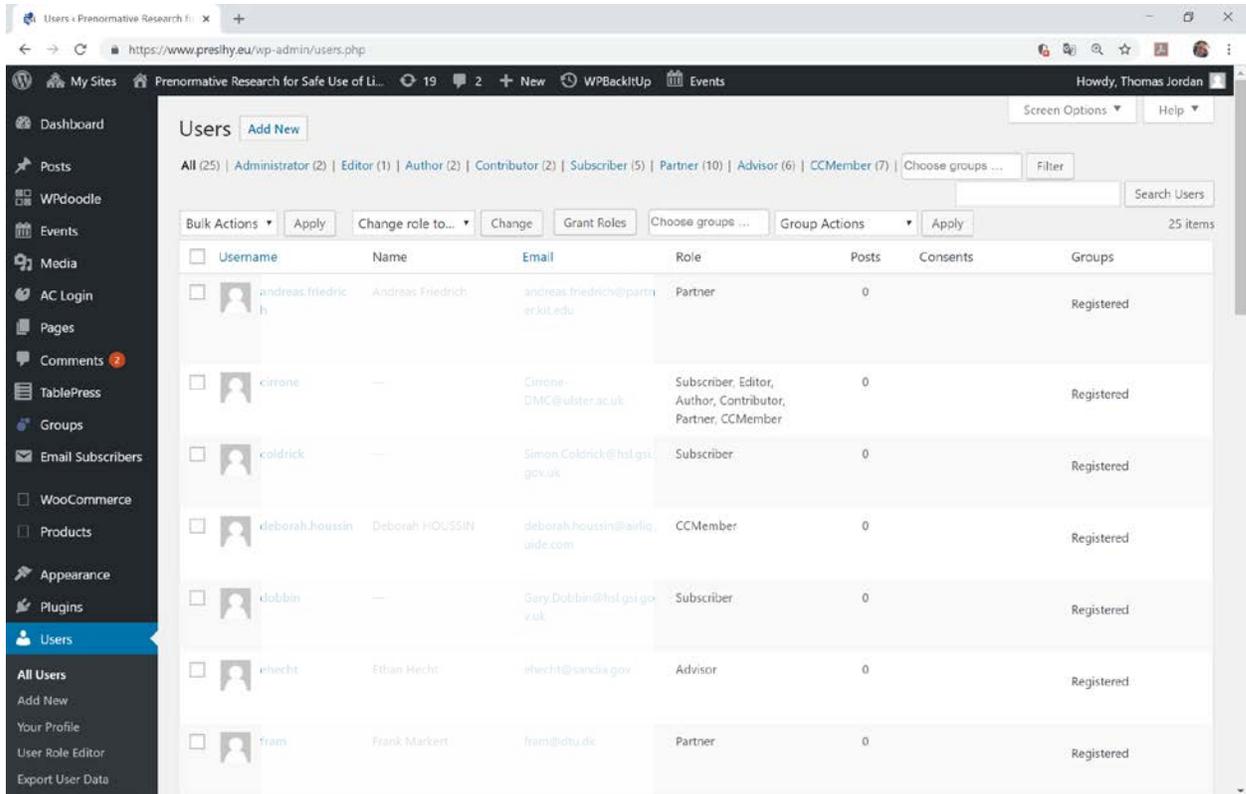


Figure 8: Table with all users displayed after clicking “All Users”

In this “All Users” view direct filtering of “Users” along their roles is possible by clicking the respective role names on top. Clicking on “Partner” for instance, will give you the list of the users representing the consortium partner institutions of PRESLHY.

Clicking directly on one of the “Users” gives access to a detailed view and editing interface. The editing capabilities are restricted to the logged in user himself or to the administrator(s) for all users and include changing role associations and access control, like password setting.

“Add New” allows to add new users. It opens an input interface with mainly two options, see Figure 9. Either an existing user or a new user may be added. The first option is caused by the fact that the PRESLHY website is built on a multi-site platform, where users of all websites are managed in a single database. An existing user might be a user, which has been registered before on the ICHS website or on the HySafe website, for instance. Such a user might be added also to the PRESLHY website. Alternatively, an actually new user might be added. If by error an existing user, identified by identical email, shall be added as new user, the system will reject the entry.

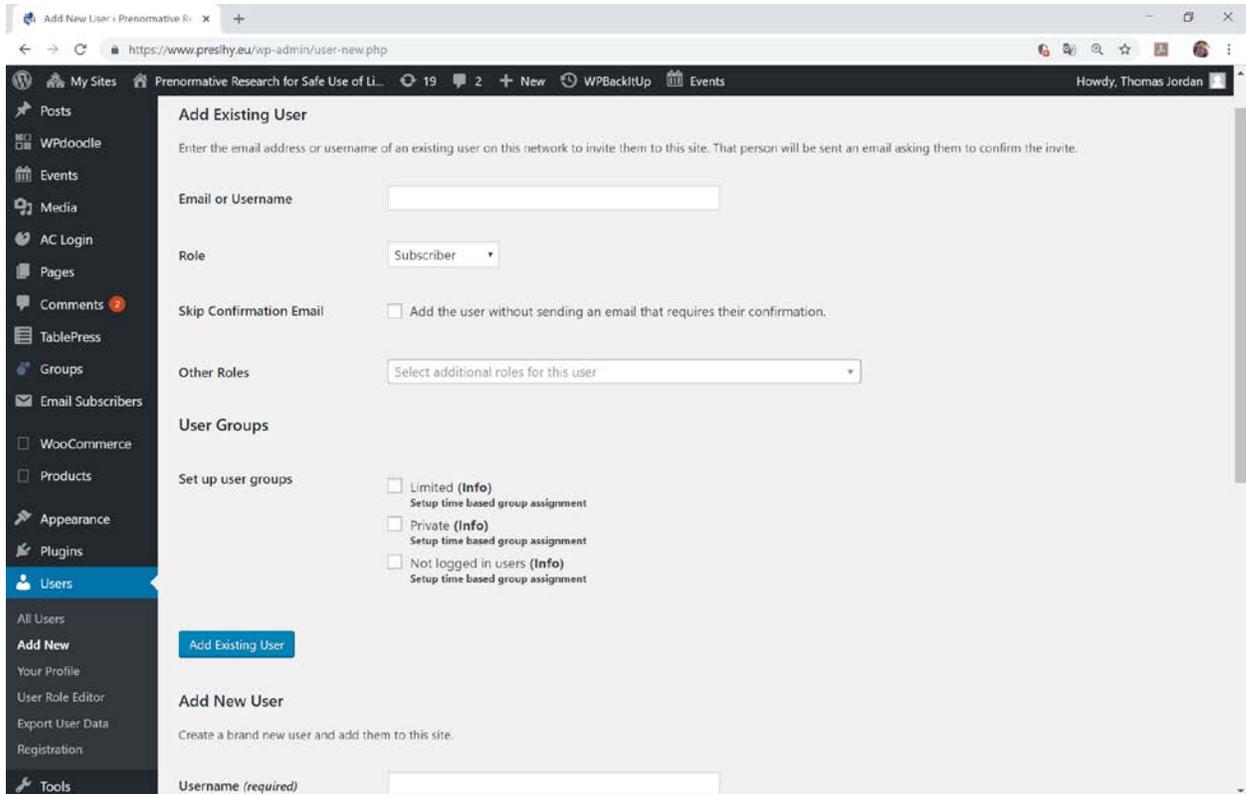


Figure 9: Input interface for adding a User

Each user is associated with a role. The available standard roles, like editor or contributor, have been extended by the following roles:

- Advisor
- CCMember
- Partner

with obvious functions and competences.

All available roles are shown in Figure 10. By selecting the User Role Editor menu item in the Users sub-menu of the dashboard (lower left of Figure 9), roles might be added, edited and deleted.

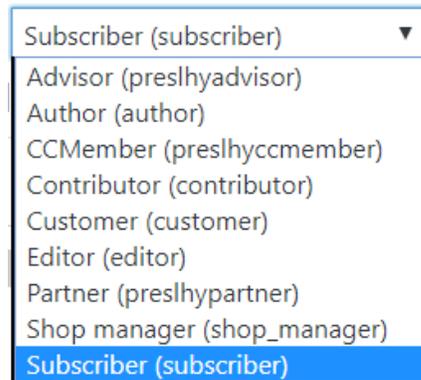


Figure 10: Available roles for PRESLHY website users

An alternative concept of organizing users and provide certain sub-sets with special abilities is provided by the installed plugin “Groups”. Currently this feature is not used and all users are automatically member in the group “Registered” (see Figure 8).

4.2 Newsletter

For editing and distribution of newsletter the widely used and mature MailPoet plugin has been installed. For general information and user instructions see the corresponding website <https://www.mailpoet.com/>.

4.3 Emailing

The “Send to Groups” sub-menu item of the Email Users plugin allows easy emailing to all members (Groups-Registered), to the Advisors (Role – Advisor), Coordination Committee (Role - CCMember) or to the Governing Board (Role – Partner). The plugin allows also to combine the different groups. The corresponding interface is shown in Figure 11.

Send an Email to a Group of Users

Mail format: HTML

Sender: Thomas Jordan <thomas.jordan@kit.edu>

Recipients: You can select multiple groups by pressing the CTRL key. Only the groups having at least one user that accepts group mails appear here.

Subject:

Message:

Send Email >

Figure 11: Email to group of users

4.4 Events

All events of PRESLHY - i.e. project meetings, site visits and workshops - are managed with the combination of the free plugins “The Events Calendar” and “Event Tickets” of Modern Tribe, see <https://theeventscalendar.com/> .

The “Events” menu opens the full list of events as shown in Figure 12. By clicking on “Add New” a new event may be added. With the help of the database of venues and organizers setting up a new event at a known location and with a previous organizer is quite easy and fast. On the actual event page - see Figure 13 for instance - the agenda may be edited and links for background material or presentations, which have been uploaded to the media library, may be easily integrated. Furthermore, the actual event pages offers a direct link to the meeting, named “Permalink” which simplifies access to the event page.

Access to the events is provided by the main menu item “Events” (see Figure 3 and Figure 4). Additionally, the upcoming meetings are shown in the Footer Sidebar 1. This may be changes in the Appearance\Widgets sub-menu of the dashboard.

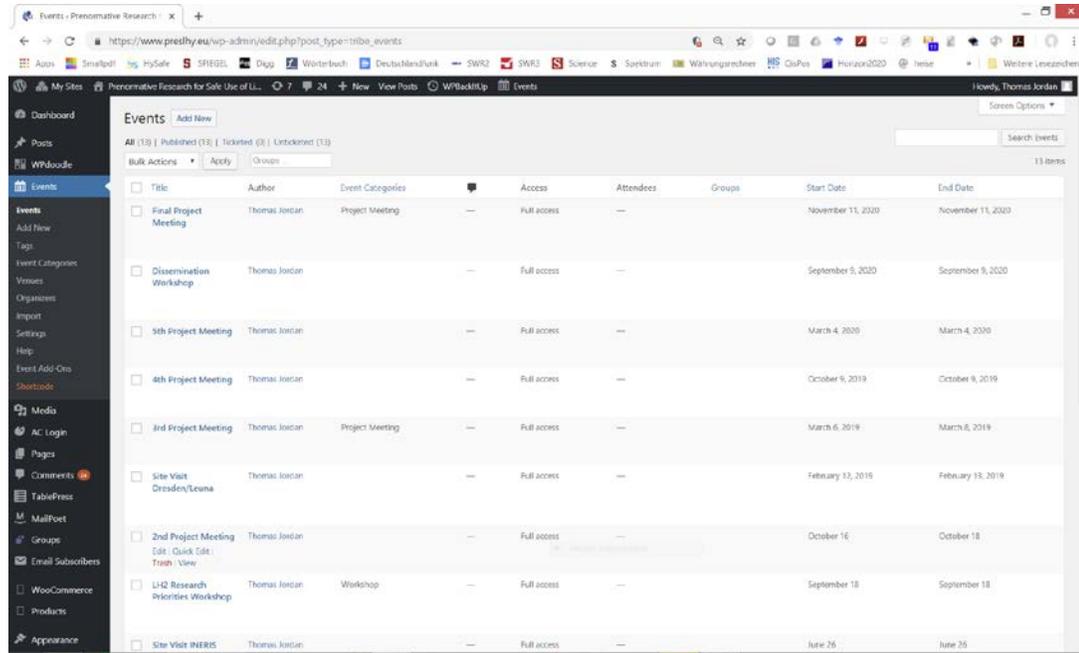


Figure 12: List of all PRESLHY events

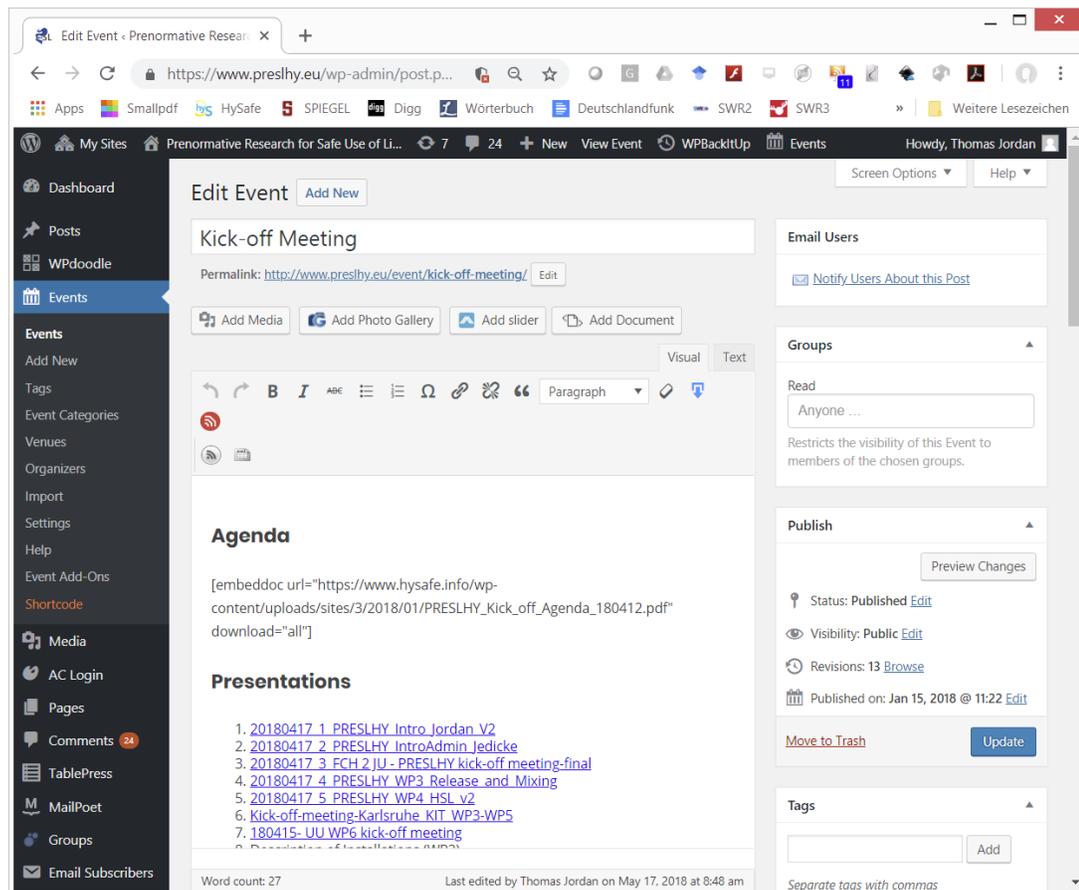


Figure 13: Page of the Kick-off Meeting

The Event Tickets option allows for controlling access to any event and – if required – might even allow for commercial selling of tickets. So far, it is not foreseen to sell tickets commercially for any of the PRESLHY events. However, to limit the number of free tickets allows to control situations with limited space and to have better overview on the list of registered participants.

4.5 Adding and Modifying Content

4.5.1 Media

New files, documents, pictures, etc. are entered via the Media plugin, which is a standard WordPress functionality.

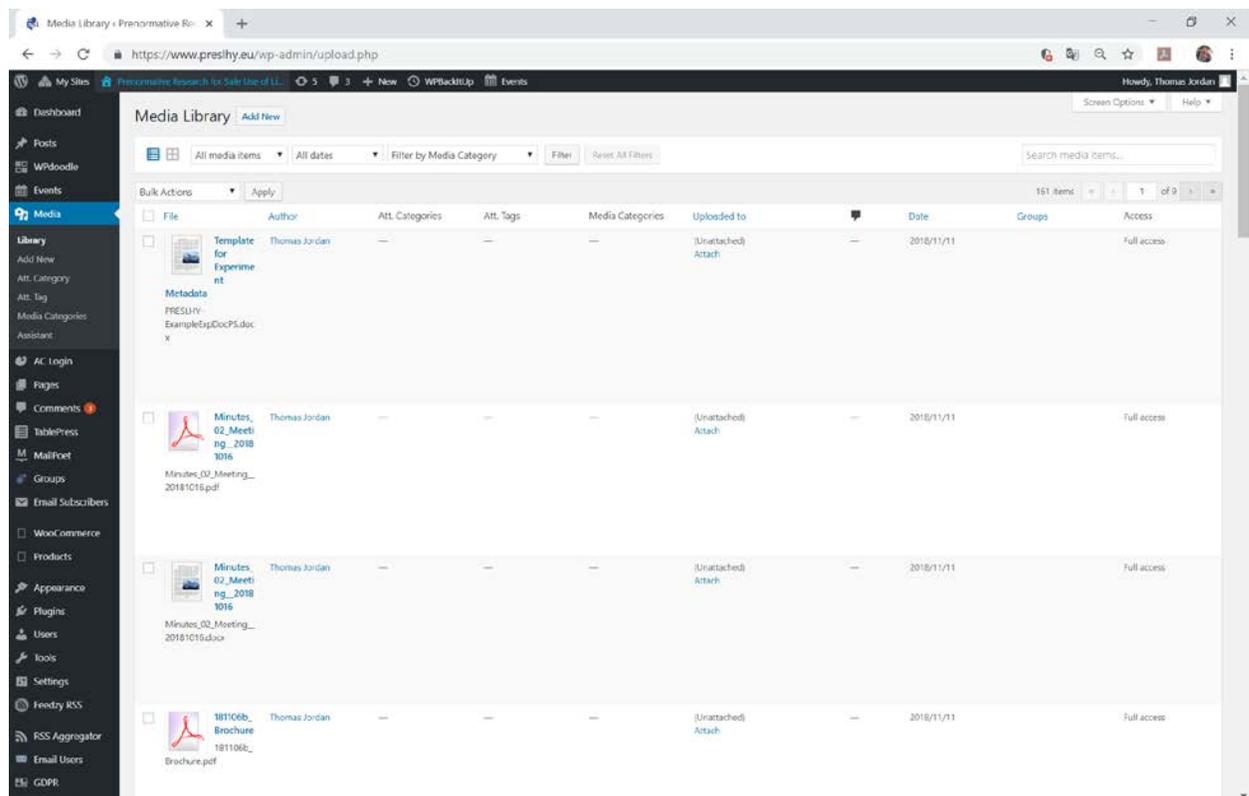


Figure 14: Media Library of the PRESLHY website

The Media Library sub-menu lists all media uploaded to the website. Clicking on any of these media files opens a detailed description of the file with short description, file categories, file URL, etc.

New media is easily uploaded via the Add New sub-menu.

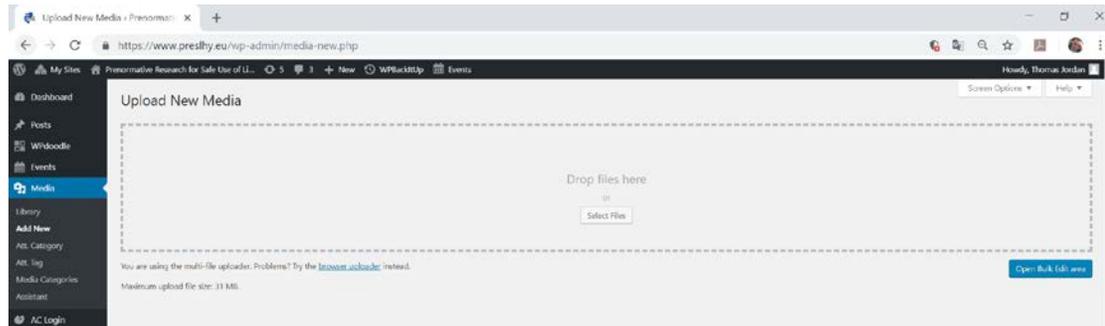


Figure 15: Uploading new media, files, documents to the media library

The Add New media interface allows for easy drag and drop of files or bulk edit and upload, i.e. upload of multiple files via the special button and local file selection menu. Any new uploaded file should be described with qualifiers and short descriptions.

4.5.2 Pages

The static pages, actually constituting the core of the website, maybe be edited and new static pages may be added with the standard “Pages” plugin.

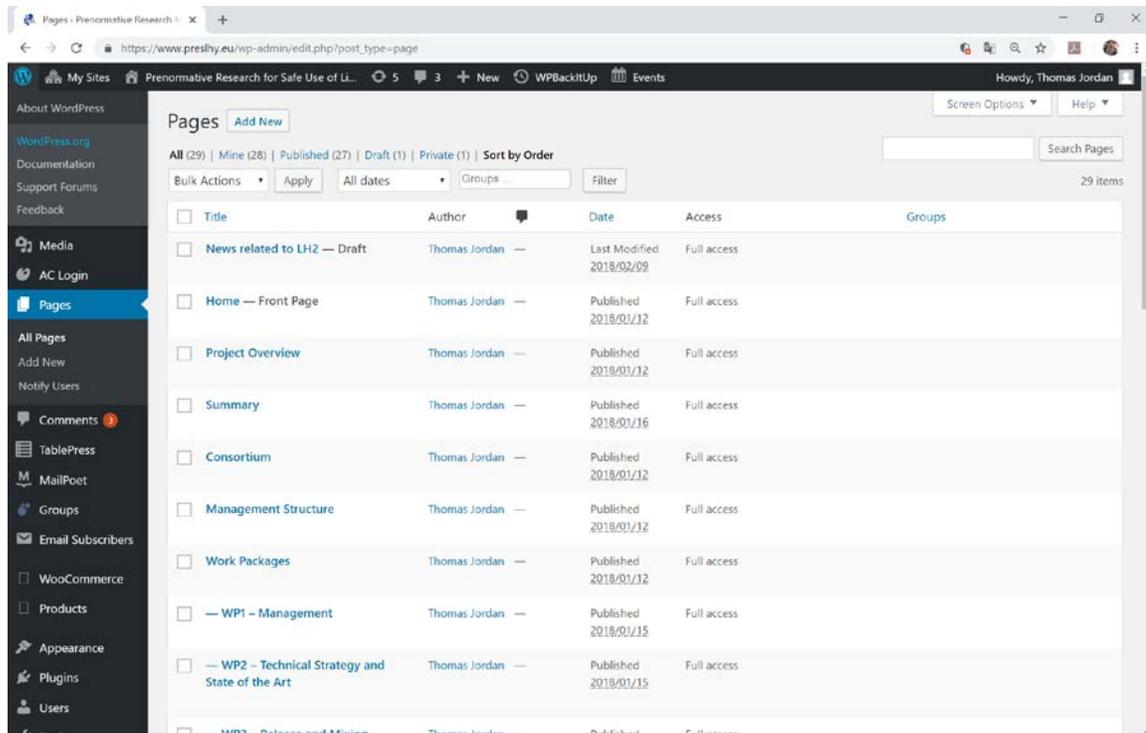


Figure 16: All static pages of the PRESLHY website

Currently, the PRESLHY website is composed of 27 static pages, which are structured as shown in Figure 4.

As stated above further static content may be easily added by adding further pages. This concerns mainly the further development of the PRESLHY work package presentation. As all work package leaders shall have the required rights to add content, in particular beneath the respective work package node, results of the work package shall be entered there.

The “Add New” sub-menu opens an interface shown in Figure 17. Any new page shall be given a title, content (in the large white field of Figure 17), a parent page (the top node of the respective work package, for instance) and an order number. The order number defines the position of the page in the sorted sequence, which is shown in Figure 16 for instance. Currently the order numbers of first level menu items like “Home”, “Project Overview”, “Summary”, “Consortium”,.... are 10, 20, 30, 40, etc. This allows for sufficient additional pages in between.

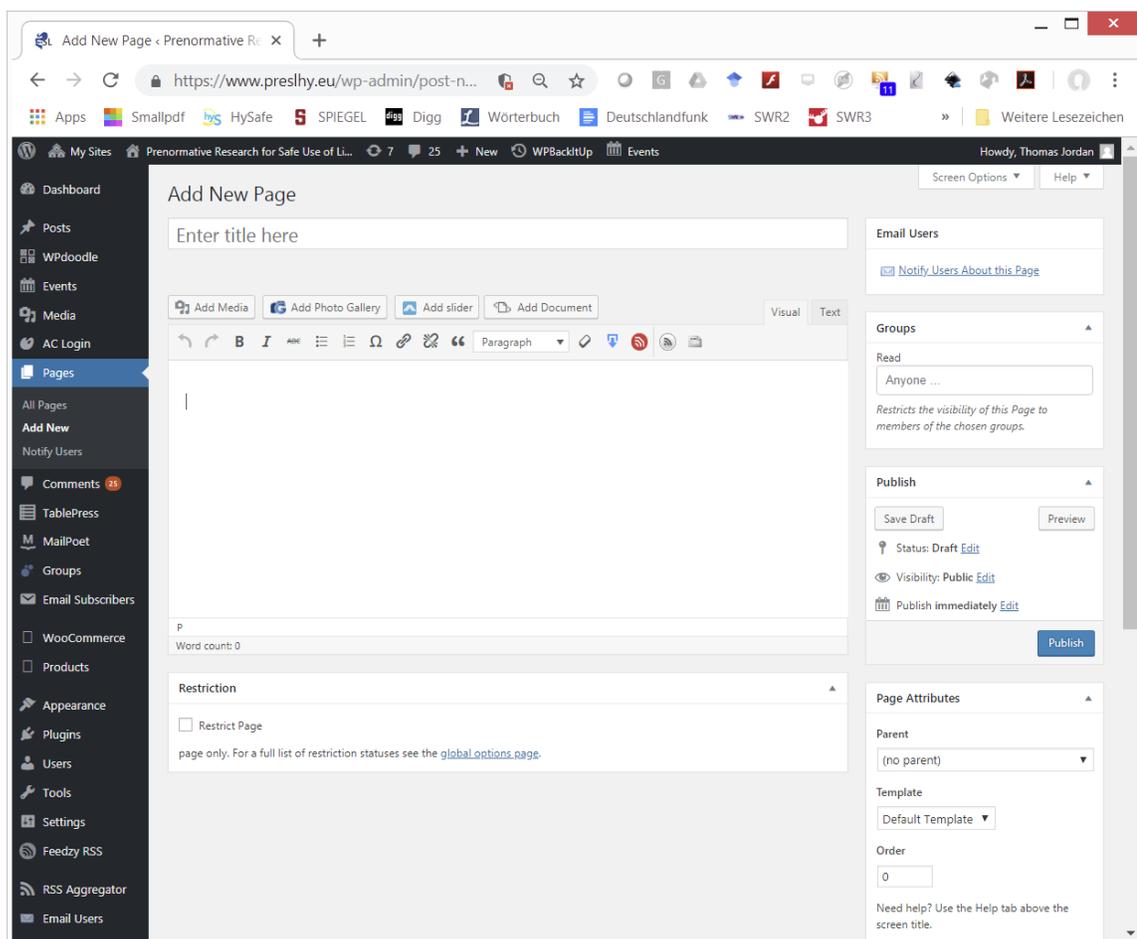


Figure 17: Interface for adding a new static page

Any new edited page shall be first saved as draft and only after checking the content should be made accessible to certain groups of users only or should go public.

However, publishing the page will not make the page an integral part of the visible main structure of the external view of the website. To this end the “Appearance\Menu” sub-menu of the dashboard has to be selected and then the respective page has to be added at the corresponding position of the Main Menu (see Figure 18).

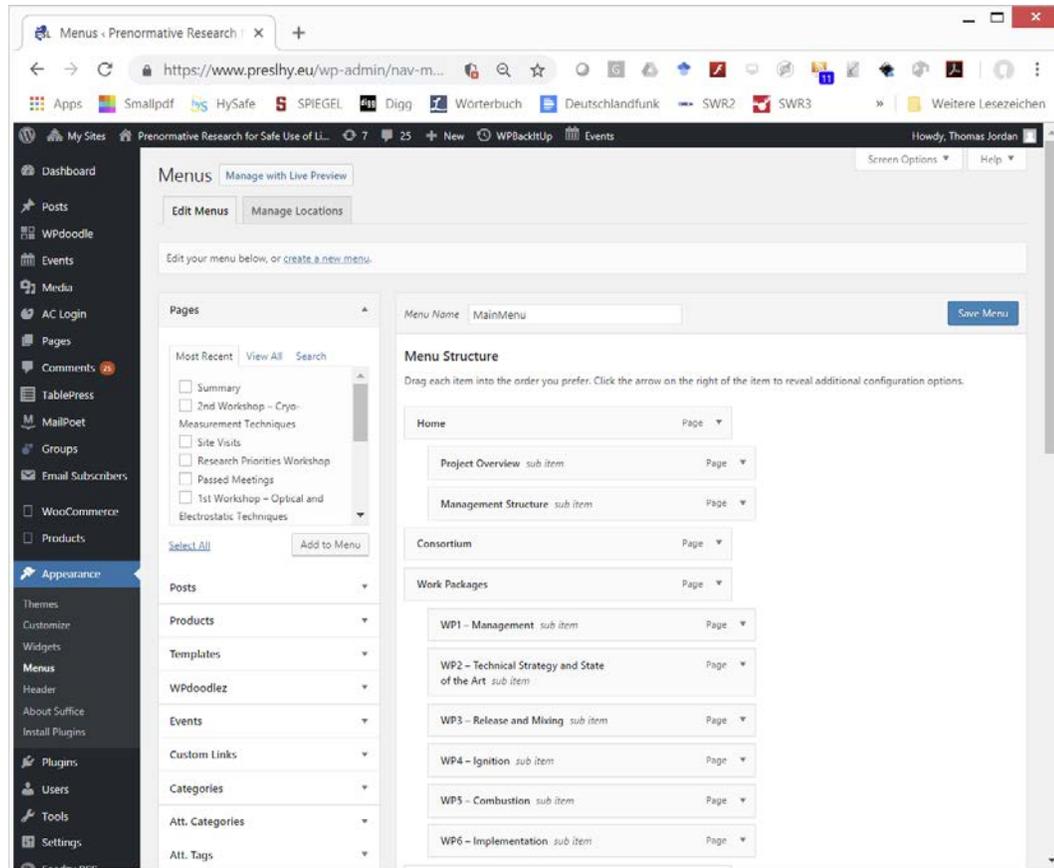


Figure 18: Editing the Main Menu

4.5.3 Tables

The PRESLHY website uses the TablePress plugin (see <https://tablepress.org/>) for administration of structured data like those of consortium partners, advisors, deliverables, literature, abbreviations etc. Figure 20 shows the table of consortium partners as an example for the use of a table. TablePress provides direct information of the usage of this plugin. It provides in place the required short code to be copied in any static page, post or event page, to reflect the table content there.

The shortcode [table id=1 /] is used, for instance as only content of the Consortium page exposed in the Main Menu.

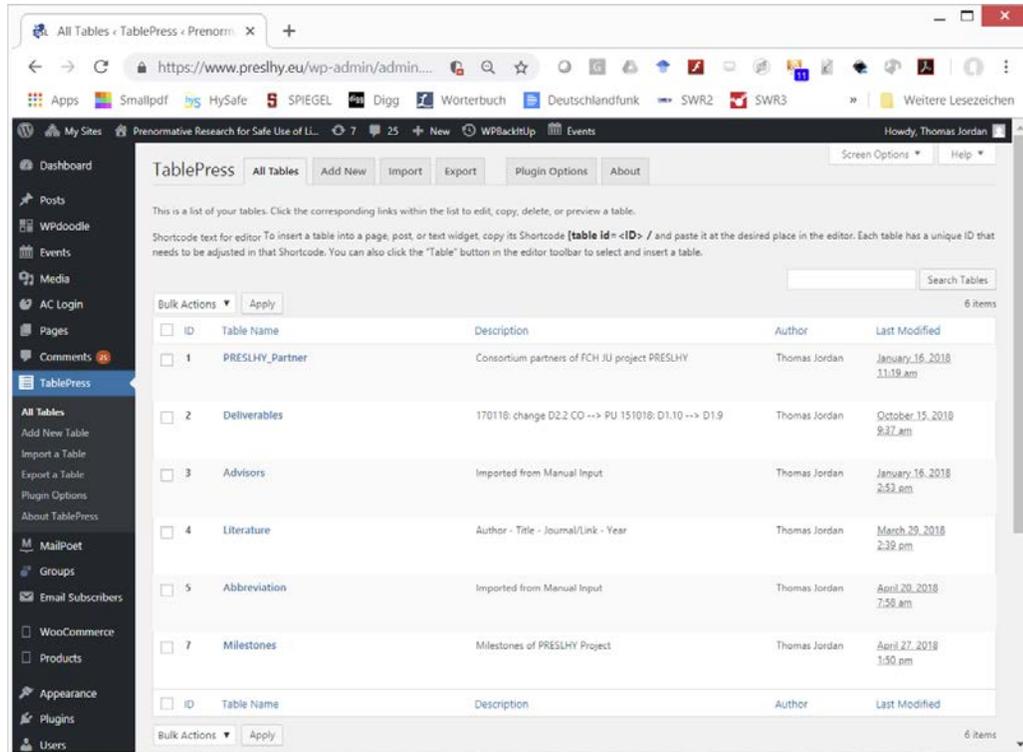


Figure 19: Tables for general data administration

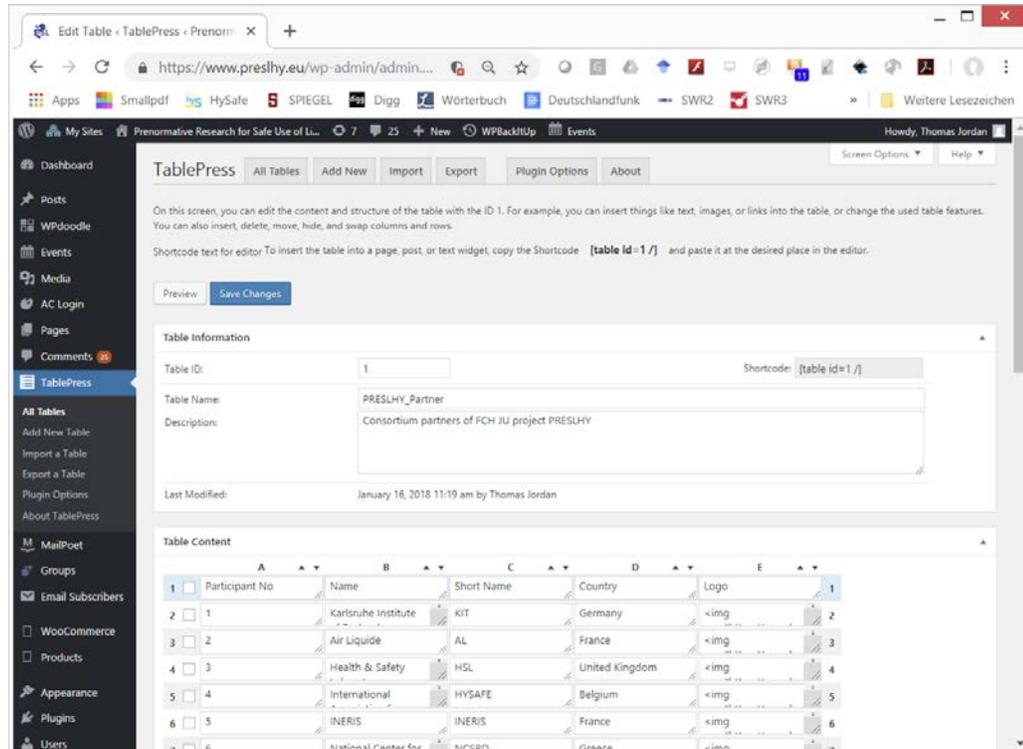


Figure 20: Consortium partner table

Consortium – Prenormative Res: X

https://www.preslhy.eu/consortium/ 67%

Coordinator: +497218082605 jordan@kit.edu

PRESLHY

Prenormative Research for Safe Use of Liquid Hydrogen
Research and Innovation Action Supported by the FCH JU 2.0

HOME CONSORTIUM WORK PACKAGES DELIVERABLES EVENTS RESOURCES GLOSSARY LOGIN

Consortium

Show 10 entries Search:

Participant No	Name	Short Name	Country	Logo
1	Karlsruhe Institute of Technology	KIT	Germany	
2	Air Liquide	AL	France	
3	Health & Safety Laboratory	HSL	United Kingdom	
4	International Association for Hydrogen Safety	HYSAFE	Belgium	
5	INERIS	INERIS	France	
6	National Center for Scientific Research	NCSR	Greece	

Some empirical safety tests for the...
by Thomas Jordan on November 9, 2018 at 3:37 pm
Just have a look at the press releases of the Korean company [...]

Interesting DOE Webinar on LH2 transfer
by Thomas Jordan on October 15, 2018 at 7:09 am
Our colleagues and advisors from US DOE provided a link to a quite interesting webinar on LH2 transfer at hydrogen [...]

Workshop confirmed directions of the...
by Thomas Jordan on October 3, 2018 at 3:14 pm
In the afternoon of the 18th September 2018 about 40 experts met in Buxton, UK, to summarise the state-of-the-art and [...]

Figure 21: View of the Consortium partner table (page directly accessible via the menu item “Consortium”)

4.6 Data Protection

The European General Data Protection Regulation (GDPR) requires information about what kind of data is stored on the respective websites for what kind of purpose.

If a user visits the PRESLHY website the first time generally, or after cleaning his systems and deleting all cookies of the browser system, he has to agree to the “Privacy Preferences”. The privacy preferences text, summarizing the privacy policy of the project, is presented in Appendix – PRESLHY Privacy Policy.

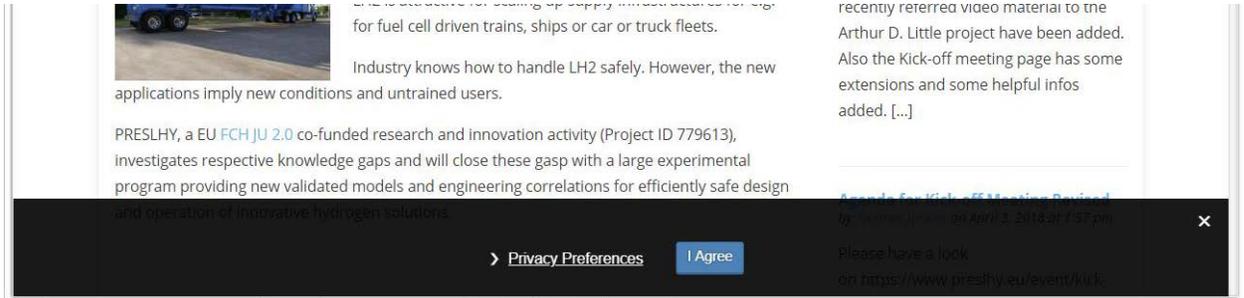


Figure 22: Privacy preferences bar with button for agreement shown to any new PRESLHY website visitor

The described functionality is implemented via the free “GDPR” plugin by Trew Knowledge, see <https://wordpress.org/plugins/gdpr/> .

5 Maintenance

Maintenance is organized via the Dashboard after administrator login as shown in Figure 6. So maintenance requires administrator rights, for some cases even network administrator rights, which includes access rights to all other websites of the multi-site installation.

The actual maintenance tasks consist of regularly updating plugins and themes, eventually installing new or deleting inactive plugins or themes, and archiving the whole WordPress installation. The administrator has also central responsibility in responding to external requests and comments.

As the WordPress software has been installed on a virtual server, also the operating system including the respective PHP software versions have to be controlled to support all functionality and proper performance.

Also a potential forwarding email address like info@preslhy.eu has to be entered and edited on the level of the operating system. This requires root access rights to the server itself. Currently, this email forwarding is not used for safety issues.

6 Appendix – PRESLHY Privacy Policy

“Your privacy is very important to us. At the management team of the PRESLHY project we have a few fundamental principles that we follow:

We don’t ask you for personal information unless we truly need it. (We can’t stand services that ask you for things like your gender or income level for no apparent reason.)

We don’t share your personal information with anyone except to comply with the law, develop our products, or protect our rights.

We don’t store personal information on our servers unless required for the on-going operation of our site.

The PRESLHY management team operates www.preslhy.eu on the basis of a WordPress multi-site installation in parallel to the IA HySafe website www.hysafe.info and the ICHS website www.ichs2019.com.

Therefore the policy to respect your privacy regarding any information we may collect while operating our websites is based on the respective HySafe policy.

Website Visitors

Like most websites, also the PRESLHY website collects non-personally-identifying information of the sort that web browsers and servers typically make available, such as the browser type, language preference, referring site, and the date and time of each visitor request. PRESLHY’s purpose in collecting non-personally identifying information is to better understand how visitors use its website. From time to time, PRESLHY may release non-personally-identifying information in the aggregate, e.g., by publishing a report on trends in the usage of its website.

The PRESLHY website also collects potentially personally-identifying information like Internet Protocol (IP) addresses for logged in users and for users leaving comments on our blogs. The project consortium only discloses logged in user and commenter IP addresses under the same circumstances that it uses and discloses personally-identifying information as described below, except that blog commenter IP addresses are visible and disclosed to the administrators of the blog where the comment was left.

Gathering of Personally-Identifying Information

Certain visitors to PRESLHY website choose to interact with the project consortium in ways that require to gather personally-identifying information. The amount and type of information that the PRESLHY website management team gathers depends on the nature of the interaction. For example, we ask visitors who comment on our blog to provide a username and email address. Those who wish to receive updates via email, we collect their emails. In each case, we collect such information only insofar as is necessary or appropriate to fulfil the purpose of the visitor’s interaction with HySafe. HySafe does not disclose personally-identifying information other than as described below. And visitors can always refuse to supply personally-identifying information, with the caveat that it may prevent them from engaging in certain website-related activities.

Aggregated Statistics

The PRESLHY website management team may collect statistics about the behaviour of visitors to its websites. For instance, HySafe may monitor the most popular pages on respective web services or use spam screened by the Akismet service to help identify spam. The PRESLHY website management team may display this information publicly or provide it to others. However, the PRESLHY website management team does not disclose personally-identifying information other than as described below.

Protection of Certain Personally-Identifying Information

The PRESLHY website management team discloses potentially personally-identifying and personally-identifying information only to those of its members, contractors and affiliated organizations that (i) need to know that information in order to process it on the project's behalf or to provide services available at the PRESLHY website, and (ii) that have agreed not to disclose it to others. Some of those members, contractors and affiliated organizations may be located outside of your home country; by using the PRESLHY website, you consent to the transfer of such information to them. The PRESLHY website management team will not rent or sell potentially personally-identifying and personally-identifying information to anyone. Other than to its members, contractors and affiliated organizations, as described above, HySafe discloses potentially personally-identifying and personally-identifying information only in response to a subpoena, court order or other governmental request, or when the PRESLHY website management team believes in good faith that disclosure is reasonably necessary to protect the property or rights of PRESLHY consortium, third parties or the public at large. If you are a registered user of the PRESLHY website and have supplied your email address, PRESLHY may occasionally send you an email to tell you about news, new features, solicit your feedback, or just keep you up to date with what's going on with PRESLHY and our products and work packages. We primarily use our various blogs to communicate this type of information, so we expect to keep this type of email to a minimum. If you send us a request (for example via a support email or via one of our feedback mechanisms), we reserve the right to publish it in order to help us clarify or respond to your request or to help us support other users. The PRESLHY website management team takes all measures reasonably necessary to protect against the unauthorized access, use, alteration or destruction of potentially personally-identifying and personally-identifying information.

Cookies

A cookie is a string of information that a website stores on a visitor's computer, and that the visitor's browser provides to the website each time the visitor returns. PRESLHY website uses cookies to help the PRESLHY management team identify and track visitors, their usage of PRESLHY's website, and their website access preferences. PRESLHY website visitors who do not wish to have cookies placed on their computers should set their browsers to refuse cookies before using PRESLHY's websites, with the drawback that certain features of PRESLHY's websites may not function properly without the aid of cookies.

Ads

Ads appearing on any of our websites may be delivered to users by advertising partners, who may set cookies. These cookies allow the ad server to recognize your computer each time they send you an online advertisement to compile information about you or others who use your computer. This information allows ad networks to, among other things, deliver targeted advertisements that they believe will be of most interest to you. This Privacy Policy covers the use of cookies by PRESLHY and does not cover the use of cookies by any advertisers.

Comments

Comments and other content submitted to Akismet anti-spam service are not saved on our servers unless they were marked as false positives, in which case we store them long enough to use them to improve the service to avoid future false positives.

Privacy Policy Changes

Although most changes are likely to be minor, PRESLHY website may change its Privacy Policy from time to time, and in PRESLHY's sole discretion. PRESLHY management encourages visitors to frequently check this page for any changes to its Privacy Policy. Your continued use of this site after any change in this Privacy Policy will constitute your acceptance of such change."