

2015 Materials Commons Training

Welcome

- You can find these slides at:
 - <https://github.com/materials-commons/mctraining/blob/master/slides/2015%20Materials%20Commons%20Training.pdf>
 - Or: <https://github.com/materials-commons/mctraining>.
 - Under the “slides” directory
- This will be a step by step tutorial
- We will go through all the core functionality for Materials Commons and show you how to use them
 - At each step we will explain the concepts
 - You may want to keep a link to the slides and refer to them when you start using Materials Commons
- There are approximately 90 slides so lets get started

Materials Commons Is

- A place to safely store and version your data
- A tool for capturing your provenance workflow
- A search engine for quickly finding files and data
- A way to organize your work in projects
- A site for project collaboration and sharing

Definitions

- Process
 - Measures or changes samples and data
 - Changing a sample is known as a “transformation”. Examples: Heat Treatment, Sectioning, Cogging
- Template
 - A template describes a process including
 - Required and optional fields/settings
- Sample
 - The object to measure or change
- Attribute
 - What we are measuring. Examples: Length, composition, particle size distribution

Typical Workflow

1. Create a project or use an existing one
 2. Create Samples
 3. Upload files and data
 4. Attach Provenance
 5. Collaborate
 6. Exploration and Notes
 7. Analysis
-

Materials Commons

The image shows a login interface with a light gray background. At the top is a white input field labeled "Email...". Below it is another white input field labeled "Password..." with a small asterisk (*) indicating it is required. At the bottom is a large blue rectangular button with the word "Login" in white capital letters.

Email...

Password... *

Login



PROVENANCE



SAMPLES



REVIEWS



FILES



NOTES

Logging In

- You will have a starting account and project.
 - Account:
 - Password:
 - Your starting home screen should look similar to the next slide
 - All projects will look the same
-

proj1 1

[Home](#)[Processes](#)[Files](#)[Samples](#)[Reviews](#)[Settings](#)

PROCESSES

No Processes.

SAMPLES

No Samples

REVIEWS

No Reviews.

FILES

proj1

- [Al+Mn-isosurface+ROI-composition-2-mN.BMP](#)
- [Al+Mn-isosurface+ROI-composition-2-zn.BMP](#)
- [Al+Mn-isosurface+ROI-composition-2.BMP](#)
- [Al+Mn-isosurface+ROI-composition-ZN-Mn.BMP](#)
- [Al+Mn-isosurface+ROI-composition-ZN.BMP](#)
- [Al+Mn-isosurface+ROI-composition.BMP](#)

Materials Commons Home Screen Overview

- Now we will review the Home Screen and how to navigate around the Materials Commons web application
 - The next set of screens have additional information on them that aren't yet in your home screen
 - The layout is the same - the additional information is for demonstrations purposes only
-

MaterialsCommons

SEARCH PROJECT...

AZ91 Precipitation Evolut... 27

Home Processes Files Samples Reviews Settings

Switch/Create Projects

Main Navigation Tabs

Processes ! Processes tab gives access to processes and provenance

Files ! Files tab allows you to see your directory tree and files

Samples ! Samples tab gives you access to all your samples

Reviews ! Reviews tab allows you to see outstanding requests and create new ones

Settings ! Settings tab allows you to manage project access and collaborations

SAMPLES

Search Project

Account Settings and Logout

today < >

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

1 notes
1 samples
2 processes

The screenshot displays the MaterialsCommons web application interface. At the top, there is a navigation bar with tabs for Home, Processes, Files, Samples, Reviews, and Settings. The 'Processes' tab is currently selected. To the left of the navigation bar, there is a 'Switch/Create Projects' section. The main content area is divided into several sections: 'Main Navigation Tabs' (with descriptions for Processes, Files, Samples, Reviews, and Settings), a 'SAMPLES' section with a 'Search Project' button, and a 'Account Settings and Logout' link. On the right side, there is a calendar for the current month, showing the days from Sunday to Saturday. Below the calendar, there are summary statistics: 1 note, 1 sample, and 2 processes.

MaterialsCommons

SEARCH PROJECT...

AZ91 Precipitation Evolut... 27 Home Processes Files Samples Reviews Settings Help gtarcea@umich.edu

PROCESSES

APT Data Analysis - 08/21/2015 @ 1:38PM gtarcea@umich.edu Fri Aug 21 2015

As Received - 08/21/2015 @ 1:38PM gtarcea@umich.edu Fri Aug 21 2015

SAMPLES

sample1 gtarcea@umich.edu Fri Aug 21 2015

REVIEWS

No Reviews.

FILES

AZ91 Precipitation Evolution
AZ91 APT results
APT results for AZ91
Dataset 1
Al+Mn-isosurface+ROI-composition-2-mN....
Al+Mn-isosurface+ROI-composition-2-zn.B...
Al+Mn-isosurface+ROI-composition-2.BMP

NOTES

object.png note gtarcea@umich.edu Fri Aug 21 2015
My note

The Panels on screen give you an overview of your project

The calendar lets you see your history of events such as process and sample creation

August 2015

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

today < >

AZ91 Precipitation Evolut...

Home

Processes

Files

P PROCESSES

APT Data Analysis - 08/21/2015 @ 1:39PM gtarcea@umich.edu

Fri Aug 21 2015

As Received - 08/21/2015 @ 1:38PM gtarcea@umich.edu

Fri Aug 21 2015

1. Click on an item to see an overview of it**R REVIEWS**

No Reviews.

N NOTES

object.png note

gtarcea@umich.edu

Fri Aug 21 2015

My note

APT Data Analysis - 08/21/2015 @ 1:39PM**DETAILS:**

Description about process:

--None--

Reason you performed the process:

--None--

Owner: gtarcea@umich.edu

Does Transform: false

SETUP: SYSTEM INFORMATION**SAMPLES:**

sample1

Fri Aug 21 2015, gtarcea@umich.edu

FILES:

Files Used:



R38_01710-v01-FIXED BIN-0.2NM.BMP

Files Produced:

--None--

OK

Cancel

Overview popup of process**August 2015**

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

1 notes
1 samples
2 processes

Materials Commons Help

- Materials Commons has an online help guide
 - The help guide is available in the app and you can activate from each page
 - The help guide is a key to supporting Materials Commons
 - We will be expanding the help guide and adding additional help features as we go forward
-

AZ91 Precipitation Evolut... 27

Home

Processes

Files

Samples

Reviews

Settings

PROCESSES

Measurement of the length and width of Mg1: maojias@umich.edu

Mon Aug 31 2015

Measurement of the length and width of Mg1: maojias@umich.edu

Thu Aug 27 2015

Measurement of the length and width of Mg1: maojias@umich.edu

Mon Aug 31 2015

SVDC AZ91 magnesium alloy: maojias@umich.edu

Thu Aug 27 2015

REVIEWS

No Reviews.

SAMPLES

Aging treatment at 168C for 10 hours

maojias@umich.edu Thu Aug 2

Aging treatment at 168C for 5 hours

maojias@umich.edu Thu Aug 27 2015

Aging treatment at 168C for 50 hours

maojias@umich.edu Thu Aug 27 2015

FILES

AZ91 Precipitation Evolution

AZ91 APT results

AZ91 TEM results

1. Click Help to open our online help guide

The help guide is available in any window

AZ91 Precipitation Evolut... 27

Home

Processes

Files

Samples

Reviews

Settings

Maximize guide

Close guide

Draft

PROCESSES

Measurement of the length and width of Mg1: maojias@u...
Mon Aug 31 2015

Measurement of the length and width of Mg1: maojias@u...
Thu Aug 27 2015

SVDC AZ91 magnesium alloy maojias@u...
Thu Aug 27 2015

REVIEWS

No Reviews.

SAMPLES

Aging treatment at 168C for 10 hours
maojias@umich.edu Thu Aug 27 2015

Aging treatment at 168C for 5 hours
maojias@umich.edu Thu Aug 27 2015

Aging treatment at 168C for 50 hours
maojias@umich.edu Thu Aug 27 2015

FILES

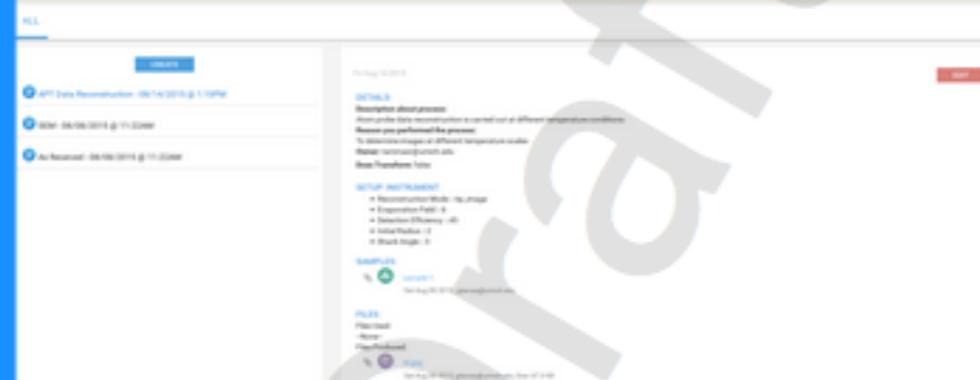
Toggle userguide open/closed

AZ91 Precipitation Evolut... 27

[Home](#)[Processes](#)[Files](#)[Samples](#)[Reviews](#)[Settings](#)[Reviews](#)[Samples](#)[Processes](#)

Provenance

Provenance panel will list all the processes created for a project.

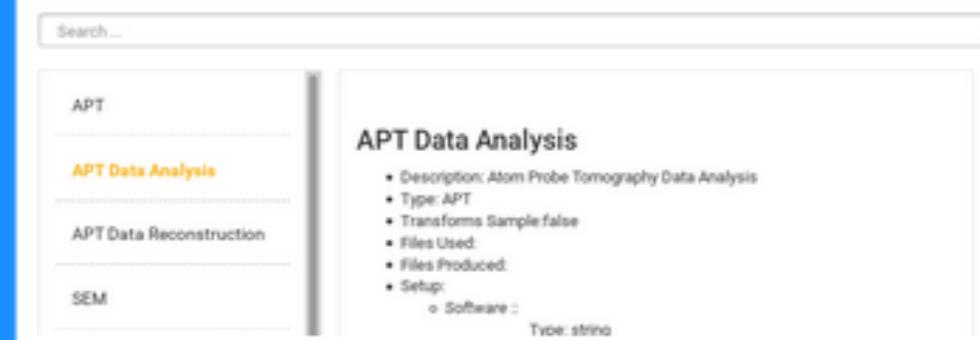


How to create a provenance:

Step1 : Choose Template/Process

In order to create provenance first you have to choose a Process. Based on the process you choose, setup attributes may vary.

Choose Template



1. Scroll down and click on Processes

**Help section for processes opens
(depending on your screen size it
might be hard to read)**

REVIEWS

No Reviews.

NOTES

No Notes.

Aging treatment at 168C for 50 hours

miaojas@umich.edu

Thu Aug 27 2015

FILES

[AZ91 Precipitation Evolution](#)

[AZ91 APT results](#)

[AZ91 TEM results](#)

September 2015

today < >

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	31	1	2	3	4	5
	3 proces					
6	7	8	9	10	11	12

AZ91 Precipitation Evolut... 27

[Home](#)[Processes](#)[Files](#)[Samples](#)[Reviews](#)[Settings](#)

Userguide (Draft)



[Glossary](#)

[Nav bar](#)

[Home Page](#)

[Reviews](#)

[Samples](#)

[Processes](#)

Provenance

Provenance panel will list all the processes created for a project.

How to create a provenance:

Step1 : Choose Template/Process

In order to create provenance first you have to choose a template or process from the dropdown menu. Then click on the 'Create' button. A new window will open where you can enter the details of the process. Once you have entered the details, click on the 'Save' button. The process will be listed in the provenance panel.

PROCESSES

Lets solve the readability problem!

1. Click the maximize icon to make the userguide larger.

SVDC AZ91 magnesium alloy maojas@umich.edu Thu Aug 27 2015

REVIEWS

No Reviews.

SAMPLES

treatment at 168C for 10 hours maojas@umich.edu Thu Aug 27 2015

treatment at 168C for 5 hours maojas@umich.edu Thu Aug 27 2015

treatment at 168C for 50 hours maojas@umich.edu Thu Aug 27 2015

FILES

- AZ91 Precipitation Evolution
- AZ91 APT results
- AZ91 TEM results

Userguide (Draft)[Glossary](#)[Nav bar](#)[Home Page](#)[Reviews](#)[Samples](#)[Processes](#)

Provenance panel will list all the processes

ALL

CREATE

[APT Data Reconstruction - 08/14/2015 @ 1:10PM](#)[SEM - 08/08/2015 @ 11:22AM](#)[As Received - 08/08/2015 @ 11:22AM](#)

Fri Aug 14 2015

DETAILS:

Description about process:

Atom probe data reconstruction is carried out at different temperature conditions

Reason you performed the process:

To determine images at different temperature scales

Owner: tammasr@umich.edu

Does Transform: false

SETUP: INSTRUMENT

The arrows changed to indicate that we can shrink the window

This is what the guide looks like when it is maximized.

You can switch between small and large window size. This allows you to keep the guide open while you are working and refer back to it - increasing its size when it helps with readability.

EDIT

AZ91 Precipitation Evolut... 27

[Home](#)[Processes](#)[Files](#)[Samples](#)[Reviews](#)[Settings](#)

Userguide (Draft)

Glossary

Nav bar

Home Page

Reviews

Samples

Samples

Panel will list all the samples inside a project. When you click on the sample name you can see more information about the sample.

ALL SAMPLES

sample1

HEAD

DETAILS

Name: sample1
Owner: gtarcea@umich.edu
Description:

TRANSFORMATION

This section will provide sample 1 initial measurements and how these measures have been transformed overtime.

As Received - 06/06/2015 @ 11:23AM

Length: 8mm
Width: 6mm
Thickness: 2mm

Measurements

APT Data Reconstruction - 06/14/2015 @ 1:10PM

APT Data Reconstruction - 06/14/2015 @ 1:10PM

FILES

APT

Sample Creation - 06/06/2015 @ 11:23AM

APT Data Reconstruction - 06/14/2015 @ 11:09AM

APT Data Reconstruction - 06/14/2015 @ 11:09AM

How to create sample:
Sample creation is driven through process. "As Received" is a process which allows to create new

Draft

ALL SAMPLES

Aging treatment at

Aging treatment at

Aging treatment at
168C for 50 hours

1. Click Samples tab (with help guide open)

DETAILS

Name: Aging treatment at 168C for 10 hours

Owner: miaojas@umich.edu

Description:

The samples were solution treated at 413C for 20 hours followed by aging treatment at 168C

TRANSFORMATION

This section will provide Aging treatment at 168C for 10 hours initial measurements and how these measures have been transformed overtime.

The guide is available on all tabs

**Here we see the guide open
when we are on the samples
screen.**

Note: Right now the guide doesn't switch to the section corresponding to the tab you are on.

Creating Your First Sample

- All starting samples are created through a process called “As Received”. “As Received” is an example of a “Process Template”
- The only required field is the sample name
- You will have an “As Received” process for every starting sample
- A starting sample is a sample that wasn’t created in some other way
 - For example if you section a process only the starting sample has an “As Received” process. The samples created by sectioning do not have an “As Received” process.

Process Templates and Transformations

- Process templates describe different process types
- A process performs an action such as measurement or transformation
- A transformation changes a sample in some way. For example heat treatment, polishing, or sectioning are all examples of transformations.
- A measurement process takes measurements of an attribute. Example attributes are composition, length, and particle size distribution
 - Measurements have different types such as fraction, number, histogram, and many others
 - Many attribute measurements also have units

Definitions Again

- Process
 - Measures or changes samples and data
 - Changing a sample is known as a “transformation”. Examples: Heat Treatment, Sectioning, Cogging
- Template
 - A template describes a process including
 - Required and optional fields/settings
- Sample
 - The object to measure or change
- Attribute
 - What we are measuring. Examples: Length, composition, particle size distribution

MaterialsCommons

SEARCH PROJECT...

Help

proj1@mc.org

1. Click Process tab

2. Press Create button

**3. Optionally filter list by typing name
(Here we filtered list by typing "As R")**

4. Select "As Received"

5. Press "OK" to use this template

You can view template details after you have selected a template

As R

As Measured

As Received

Description: As Received process is used to create new samples.

Type: as_received

Transforms Sample: false

Files Used:

Files Produced:

Setup:

- Manufacturer ::

Type: string

Unit:

Required: false

OK Cancel

MaterialsCommons

SEARCH PROJECT... Help proj1@mc.org

proj1 1 Home Processes Files Samples Reviews Settings

As Received - 08/27/2015 @ 12:28PM Back to processes list

How would you describe your process?
What

Why did you do this?
Why

Set Up

+ Setup

New Sample

Samples

Files Used

Files Produced

Name your process
As Received - 08/27/2015 @ 12:28PM

How would you describe your process?
What

Why did you do this?
Why

1. Optional change process name

2. Add descriptives
(These are used as context reminders and also help in searches.)

3. Add any process setup details

4. Name your sample

5. Describe your sample

This area will display the information entered on the right

Also used for context and searches

Bug in this release, these won't work.
(Fix is pending workshop)

Files

What files are used by this process?
+ ADD

What files are produced by this process?
+ ADD

CANCEL SUBMIT

As Received - 08/27/2015 @ 12:28PM

[Back to processes list](#)**How would you describe your process?**

This is for details that describe the process. For example I found this sample lying under a table and decided to use it.

Why did you do this?

This is for details that describe why you did it. For example I created this sample so I could test cycles to failure on a dusty cropopper toy plane.

Set Up

- Manufacturer :: Under the couch

New Sample

Name: sample1

Description: This describes details of the sample. For example this sample is a plastic and metal dusty cropopper toy plane from the Planes: Fire and Rescue movie.

Samples**Files Used****Files Produced****Name your process**

As Received - 08/27/2015 @ 12:28PM

How would you describe your process?

This is for details that describe the process. For example I found this sample lying under a table and decided to use it.

Why did you do?

This is for details that describe why you did it. For example I created this sample so I could test cycles to failure on a dusty cropopper toy plane.

+ Setup**Create Sample****Name your sample**

sample1

How would you describe your sample?

This describes details of the sample. For example this sample is a plastic and metal dusty cropopper toy plane from the Planes: Fire and Rescue movie.

Files**What files are used by this process?**

- + ADD

What files are produced by this process?

- + ADD

Details we filled out in template**Template after filling out entries. Note left side shows us the details we have filled in.****1. Press Submit to finish****CANCEL****SUBMIT**

MaterialsCommons

SEARCH PROJECT...

Help proj1@mc.org

proj1 1 Home Processes Files Samples Reviews Settings

ALL

Processes View After Submit

CREATE

p As Received - 08/27/2015 @ 12:28PM

Thu Aug 27 2015

DETAILS:
Description about process:
This is for details that describe the process. For example I found this sample lying under a table and decided to use it.
Reason you performed the process:
This is for details that describe why you did it. For example I created this sample so I could test cycles to failure on a dusty cropopper toy plane.
Owner: proj1@mc.org
Does Transform: false

SETUP: INSTRUMENT
• Manufacturer :: Under the couch

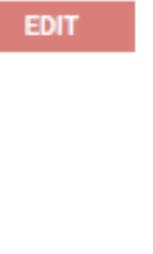
SAMPLES:
 sample1 
Thu Aug 27 2015, proj1@mc.org

FILES:
Files Used:
--None--
Files Produced:
--None--

1. Click to get quick popup view of an item

List of all Processes

Process Details

Click Edit to change details of your process 

MaterialsCommons

proj1 1 Home Processes Files Samples

SEARCH PROJECT... Help proj1@mc.org

sample1

ALL

CREATE

As Received - 08/27/2015 @ 12:28PM

EDIT

DETAILS

Name: sample1 * :: Denotes current process measurements

Owner: proj1@mc.org

Description:

This describes details of the sample. For example this sample is a plastic and metal dusty crop hopper toy plane from the Planes: Fire and Rescue movie.

PROPERTIES

ATTACHMENTS

OK Cancel

After clicking on sample we get a quick view popup

MaterialsCommons

SEARCH PROJECT... Help proj1@mc.org

proj1 1 Home Processes Files Samples Reviews Settings

ALL SAMPLES

sample1

1. To see all your samples click "Samples" tab

DETAILS
Name: sample1
Owner: proj1@mc.org
Description:
This describes details of the sample. For example this sample is a plastic and metal dusty cropopper toy plane from the Planes: Fire and Rescue movie.

TRANSFORMATION
This section will provide sample1 initial measurements and how these measures have been transformed overtime.
[As Received - 08/27/2015 @ 12:28PM](#)

FILES

List of all samples in project

Selected sample details

1250

Adding measurements and transformations

- The next step is to start adding measurements to your sample
 - Here we are going to measure the existing sample
 - After that we will apply a transformation process
 - A transformation process changes our sample in some way
 - After the transformation we will look at the state of our measurements
 - We could then perform additional measurements after the transformation

CREATE

As Recd

1. Click Create to choose a template

Choose Template

Search ...

Annealing

APT

APT Data Analysis

APT Data
Reconstruction

As Measured

As Received

Broad Ion Beam Milling

Cogging

Compression

Computation

As Measured

- Description: As Measured process allows you to add in all your As Received measurements
- Type: OTHER
- Transforms Sample:false
- Files Used:
- Files Produced:
- Setup:

2. Select "As Measured".

This is a catch all template to use when none of the other processes seems to fit.

OK

Cancel

3. Press "OK" to use this template.

ALL**As Measured - 08/27/2015 @ 1:38PM**[Back to processes list](#)**How would you describe your process?****Why did you do this?****Set Up****Samples****Files Used****Files Produced****Name your process**

As Measured - 08/27/2015 @ 1:38PM

How would you describe your process?

What

Why did you do?

Why

[+ Setup](#)**Samples****To add your sample click the "+ ADD" button.****Files****What files are used by this process?****What files are produced by this process?****You will be shown a list of samples. Though only one is shown, if there were other samples you could select more than one.**

proj1 1 Home Processes

How would you describe your process?

Why did you do this?

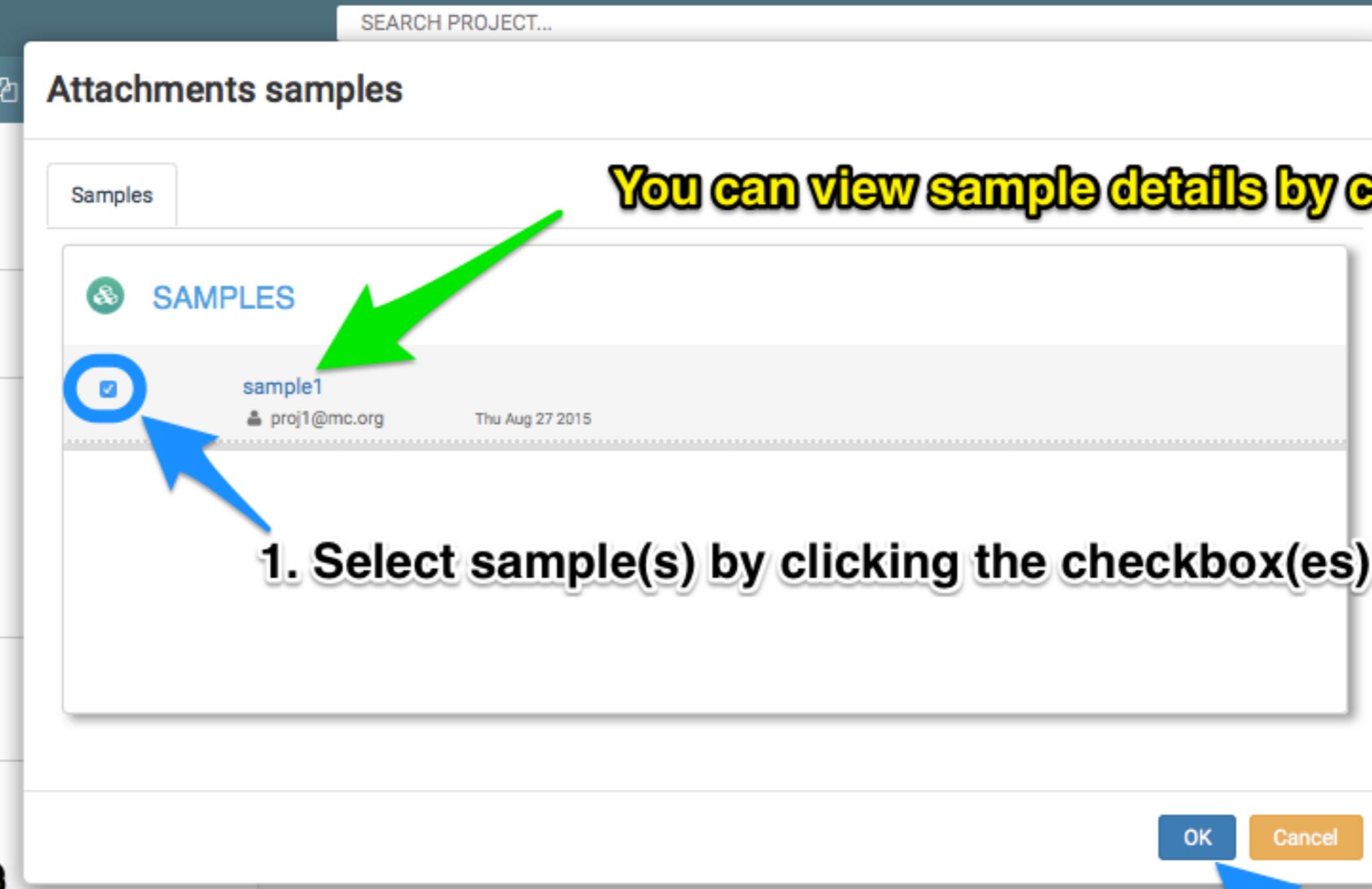
Set Up

Samples

sample1

Measurements:

Files:

Files Used
Files Produced**Your selected samples
will show up here**

Files

What files are used by this process?

+ ADD

What files are produced by this process?

+ ADD

CANCEL

SUBMIT

**2. Press "OK" when you are
done picking samples.**

Files types

- Before adding files lets discuss the different file types
- Files can be associated with
 - A process
 - A file associated **only** with a process doesn't directly have anything to do with the sample
 - Its descriptive to the process
 - Example: Code for transforming data
 - A process and samples
 - A file associated with a process and a sample is associated with the process, but describes the sample
 - Example: Image showing sample grains
 - Files are either inputs to a process
 - Or outputs from a process
 - Input Files
 - Files/data used by the process
 - Output Files
 - Files/data produced by the process
 - Output files from one process can be used as inputs to another process
 - This links the processes together in a flow

proj1 1

[Home](#)[Processes](#)[Files](#)[Samples](#)[Reviews](#)[Settings](#)

How would you describe your process?

Why did you do this?

Set Up

Samples



Measurements:

Files:

Files Used

Files Produced

How would you describe your process?

What

Why did you do?

Why

+ Setup

Samples



sample1

+ Measurement



Files

What files are used by this process?



What files are produced by this process?



CANCEL

SUBMIT

1. Add files used or produced by this process by clicking on the appropriate "+ ADD" button.

proj1 1 Home Processes

Attachments input_files

How would you describe your process?

Why did you

You search for files by typing in a search string

Set Up

Or you can click through the directory tree

- proj1
 - Al+Mn-isosurface+ROI-composition-2-mN.BMP
 - Al+Mn-isosurface+ROI-composition-2-zn.BMP
 - Al+Mn-isosurface+ROI-composition-2.BMP
 - Al+Mn-isosurface+ROI-composition-ZN-Mn.BMP
 - Al+Mn-isosurface+ROI-composition-ZN.RMP

Measurements:
Files:
Files Used
Files Produced**Click on a file will show you a quick popup of it****1. Choose one or more files by selecting their checkboxes**

OK Cancel

2. Press "OK" when done

Files

What files are used by this process?

+ ADD

What files are produced by this process?

+ ADD

CANCEL

SUBMIT

proj1 1 Home Processes

How would you describe your process?

Why did you do this?

Set Up

Samples



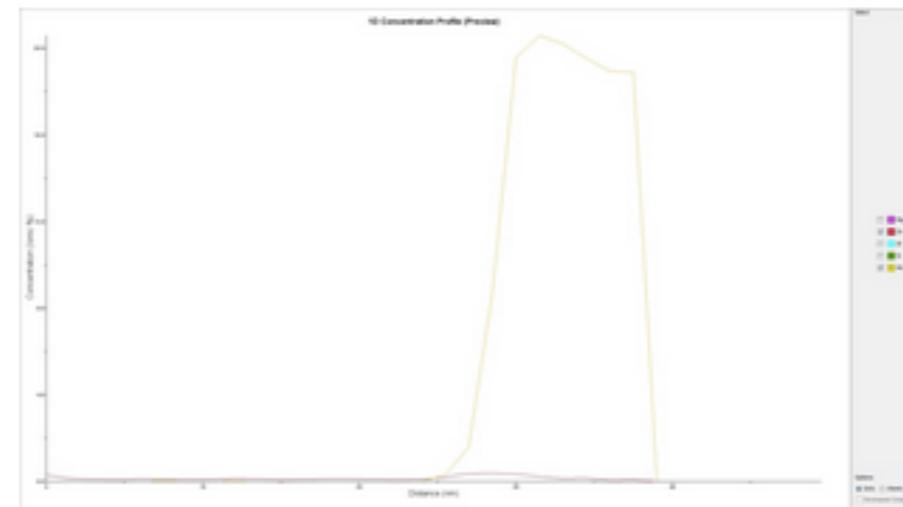
Measurements:

Files:

Files Used

Files Produced

Al+Mn-isosurface+ROI-composition-2-mN.BMP



Owner: proj1@mc.org

Size: 5.91 MB

Created: Thu Aug 27 2015

Modified:

Media Type: image/bmp

Notes:

The file popup will display the image or contents if it is supported.

OK

Cancel

- Al+Mn-isosurface+ROI-composition-ZN-Mn.BMP
- Al+Mn-isosurface+ROI-composition-ZN.BMP

OK

Cancel

Files

What files are used by this process?



What files are produced by this process?



CANCEL

SUBMIT

proj1 1

[Home](#)[Processes](#)[Files](#)[Samples](#)[Reviews](#)[Settings](#)

How would you describe your process?

Why did you do this?

Set Up

Samples

sample1

Measurements:

Files:

Files Used

Al+Mn-isosurface.BMP

R38_01584-v02-2.indexed.csv

Files Produced

Files we selected

How would you describe your process?

What

Why did you do?

Why

+ Setup

Samples

+ ADD

sample1

Measurement

Link input files to sample

Files

What files are used by this process?

+ ADD

Al+Mn-isosurface.BMP

R38_01584-v02-2.indexed.csv

What files are produced by this process?

+ ADD

1. Now that we've selected files a new link has appeared underneath our sample. Click it to associate file(s) with the sample (and not just with the process).

proj1 1 Home Processes Files Samples

How would you describe your process?

Why did you do this?

Set Up

Samples



**1. Click Link all files
This will associate
all listed files with
the sample.**

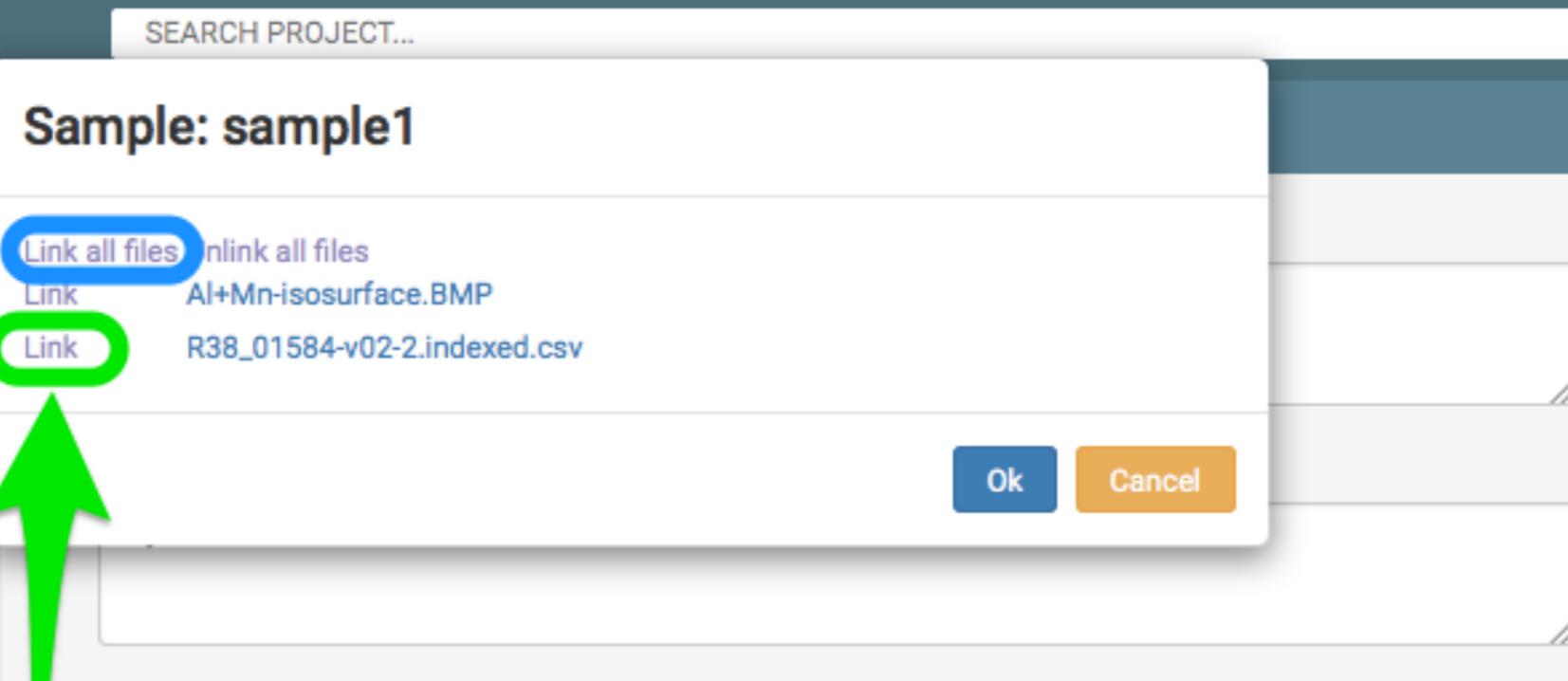
Mea

Files:

Files Used

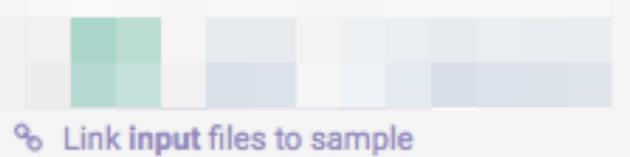


Files Produced



+ Setup

**You can also choose
individual files to associate
with a sample.**

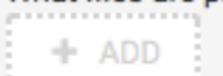


Files

What files are used by this process?



What files are produced by this process?



How would you describe your process?

Why did you do this?

Set Up

Samples



Measurements:

Files:

- Al+Mn-isosurface.BMP
- R38_01584-v02-2.indexed.csv

Files Used



Files Produced

Files linked to sample

How would you describe your process?

What

Why did you do?

Why

+ Setup

Samples



Measurement

% Link input files to sample

Files

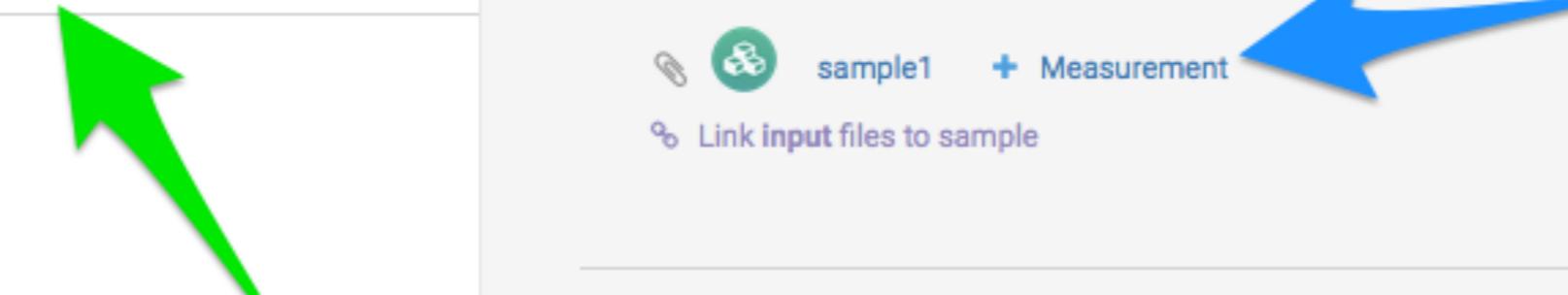
What files are used by this process?



What files are produced by this process?



1. Add measurements by clicking the "+ Measurement" button.



Measurement Types and Templates

- Attributes have a measurement type associated with them
 - Measurement Types are templates
 - This decreases the amount of work to add new types
 - Templates define how we represent and validate measurement values

proj1 1 Home Processes

How would you describe your process?

**List of measurements
that can be added**

Samples

sample1

Measurements:

Files:

- Al+Mn-isosurface.BMP
- R38_01584-v02-2.indexed.csv

Files Used

Al+Mn-isosurface.BMP

R38_01584-v02-2.indexed.csv

Files Produced

Choose Measurement

Search ...

Composition

Area Fraction

Volume Fraction

Dislocation Density

Length

Width

Height

Density

Volume

Young's Modulus

Measurements have different types. We currently support two different chart/graph types. We will be adding more types as we go forward.**1. Select a measurement and add measurements for it.****For demonstration purposes we will select:
length, width, particle size distribution and particle
shape distribution.**

OK

Cancel

What files are produced by this process?



proj1 1 Home Processes

How would you describe your process?

Why did you do this?

Set Up

Samples

sample1

Measurements:

Length

1 cm

1.01 cm

Files:

- Al+Mn-isosurface.BMP
- R38_01584-v02-2.indexed.csv

Files Used

Al+Mn-isosurface.BMP

R38_01584-v02-2.indexed.csv

Files Produced

Choose Measurement

Search ...

Composition

Length

1

cm

+ -

Area Fraction

Length

1.01

cm

+

Volume Fraction

Save

Dislocation Density

Length is saved onto the left sidebar!

Young's Modulus

2. You must press the Save button after entering in measurements to save them to the sample. You will see the measurements show up to the left after pressing Save.

When you are done press OK. You can keep selecting different measurement types until you are finished.

1. Fill in a measurement. To add another Length measurement press the + button.

This bar will appear informing you that your measurements have been saved.

OK Cancel

proj1 1 Home Processes

How would you describe your process?

Why did you do this?

Set Up

Samples

sample1

Measurements:

Length
1 cm
1.01 cm
Width
1 cm
Particle Size Distribution

Files:

1. Click on Chart icon to view Particle Size Distribution

Files Used

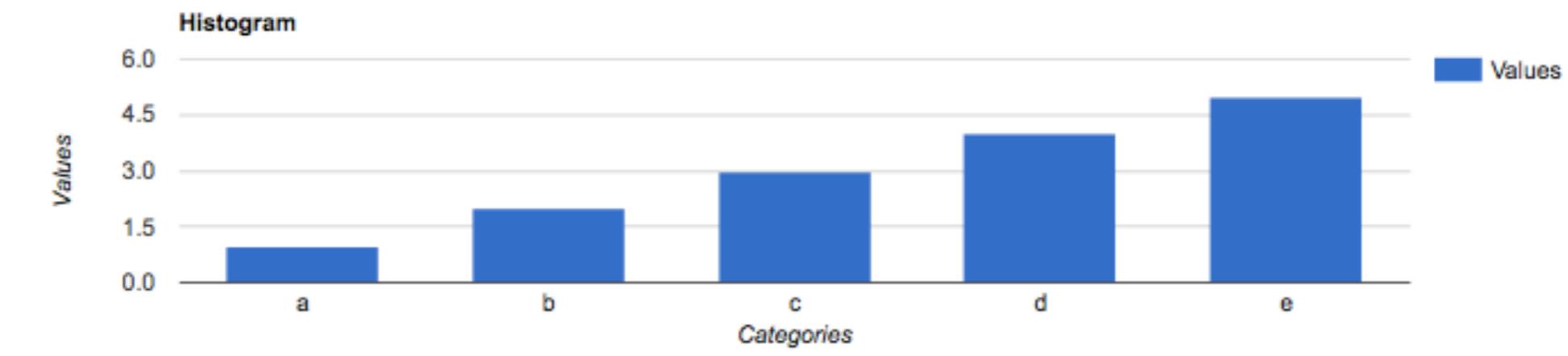
Al+Mn-isosurface.BMP

R38_01584-v02-2.indexed.csv

Files Produced

Particle Size Distribution

Categories	Values
a	1
b	2
c	3
d	4
e	5



OK

Cancel

Files

What files are used by this process?

ADD

Al+Mn-isosurface.BMP

x

R38_01584-v02-2.indexed.csv

x

What files are produced by this process?

ADD

MaterialsCommons

SEARCH PROJECT...

Help proj1@mc.org

proj1 1 Home Processes Files Samples Reviews Settings

As Measured - 08/27/2015 @ 1:38PM Back to processes list

How would you describe your process?
What

Why did you do this?
Why

Set Up

Samples sample1

Measurements:
Length 1 cm
Width 1.01 cm

Particle Size Distribution
Particle Shape Distribution

Files:
Al+Mn-isosurface.BMP
R38_01584-v02-2.indexed.csv

Files Used
Al+Mn-isosurface.BMP
R38_01584-v02-2.indexed.csv

Files Produced

Name your process
As Measured - 08/27/2015 @ 1:38PM

How would you describe your process?
What

Why did you do this?
Why

Setup

Samples sample1 Measurement
Link input files to sample

Files
What files are used by this process?
Al+Mn-isosurface.BMP
R38_01584-v02-2.indexed.csv

What files are produced by this process?
Al+Mn-isosurface.BMP
R38_01584-v02-2.indexed.csv

CANCEL SUBMIT

1. When you are done press submit

MaterialsCommons

SEARCH PROJECT...

Help

proj1@mc.org

proj1 1 Home Processes Files Samples Reviews Settings

ALL

CREATE

Thu Aug 27 2015

DETAILS:

Description about process:
-None-

Reason you performed the process:
-None-

Owner: proj1@mc.org

Does Transform: false

SETUP: INSTRUMENT

SAMPLES:

 sample1
Thu Aug 27 2015, proj1@mc.org

FILES:

Files Used:

 R38_01584-v02-2.indexed.csv
Thu Aug 27 2015, proj1@mc.org, Size: 6.56 KB

 AI+Mn-isosurface.BMP
Thu Aug 27 2015, proj1@mc.org, Size: 5.74 MB

Files Produced:

-None-

View of As Measured Process once we click the submit button.

ALL SAMPLES



DETAILS

Name: sample1

Owner: proj1@mc.org

Description:

This describes details of the sample. For example this sample is a plastic and metal dusty cropopper toy plane from the Planes: Fire and Rescue movie.

TRANSFORMATION

This section will provide sample1 initial measurements and how these measures have been transformed overtime.

As Received - 08/27/2015 @ 12:28PM

Length:

Best Measure: [edit](#)

Measurements:

- 1 cm As Measured - 08/27/2015 @ 1:38PM
- 1.01 cm As Measured - 08/27/2015 @ 1:38PM

Particle Shape Distribution:

Best Measure: [edit](#)

Measurements:

- As Measured - 08/27/2015 @ 1:38PM

Particle Size Distribution:

Best Measure: [edit](#)

Measurements:

- As Measured - 08/27/2015 @ 1:38PM

Width:

Best Measure: [edit](#)

Measurements:

- 1 cm As Measured - 08/27/2015 @ 1:38PM

FILES

Al+Mn-Isosurface.BMP

Thu Aug 27 2015, 5.74 MB



As Measured - 08/27/2015 @ 1:38PM

R38_01584-v02-2.indexed.csv

Thu Aug 27 2015, 6.56 KB

As Measured - 08/27/2015 @ 1:38PM

View of sample once we have added measurements to it from the "As Measured" process.

Transform a Sample

- The next step is to transform a sample
 - After transformation we will look at the sample to see the effect on it
 - Transforming a sample changes something about it
 - Materials Commons represents this by having you tell it if there are any changes to the existing set of attributes. For each attribute you specify:
 - End Attribute: Attribute no longer applies
 - Is Transformed: After transformation existing measurements no longer apply to the transformed version of the sample
 - Not Transformed: After transformation existing measurements still apply to the transformed version of the sample
-

proj1 1

Home

Processes

ALL

CREATE

As Measured - 08/27/2015 @ 1:38PM

As Received - 08/27/2015 @ 12:28PM

1. Choose cogging template**Choose Template**

Search ...

Annealing

APT

APT Data Analysis

APT Data Reconstruction

As Measured

As Received

Broad Ion Beam Milling

Cogging

Compression

Computation

Cogging

- Description: Cogging
- Type: OTHER
- Transforms Sample:true
- Files Used:
- Files Produced:
- Setup:

o Temperature ::

Type: number

Units:

C

F

K

Required: false

o Strain ::

Type: number

Units:

mm/mm

percentage

Required: false

**If "Transforms Sample" is true then
the template will transform a
sample.**

OK

Cancel

ALL

Cogging - 08/27/2015 @ 3:47PM

[Back to processes list](#)

How would you describe your process?

Why did you do this?

Set Up

Transformed Sample

Files Used

Files Produced

Name your process

Cogging - 08/27/2015 @ 3:47PM

How would you describe your process?

What

Why did you do?

Why

+ Setup

Samples



sample1

+ Transformation

Files

What files are used by this process?



What files are produced by this process?



1. Click "+ Transformation" button to tell Materials Commons which Attributes are affected by the transformation.

proj1 1 Home Processes

ALL

Cogging - 08/27/2015 @ 3:47PM

How would you describe your process?

Why did you do this?

Set Up

Transformed Sample

Files Used

Files Produced

Note: Right now the default is "End Attribute" (We are discussing what the default should be)

Transformation

Below are the actions you will have to perform on your sample properties. Each action is explained below

Not Transformed

End Attribute (Default)

Is Transformed

Properties

• Length :

End Attribute

Best Measure: Measurements:

- 1 cm As Measured - 08/27/2015 @ 1:38PM
- 1.01 cm As Measured - 08/27/2015 @ 1:38PM

• Particle Shape Distribution :

End Attribute

Is Transformed
Not Transformed
End Attribute

• Width :

End Attribute

Best Measure: Measurements:

- 1 cm As Measured - 08/27/2015 @ 1:38PM



1. For each Attribute tell Materials Commons what to do with it.

Choices:

a. End Attribute - Delete this attribute going forward.

b. Is Transformed - Measurements are unknown

c. Not Transformed - Keep measurements

Current Default is "End Attribute". We are thinking of changing it.

OK

Cancel

proj1 1

Home

Processes

Files

Samples

Reviews

Settings

Why did you do this?

Set Up

Transformed Sample

sample1

Not Transformed:

- Length

Is Transformed:

- Width

End Attribute (Deleted):

- Particle Shape Distribution
- Particle Size Distribution

Files Used

Files Produced

How would you describe your process?

What

Why did you do?

Why

Before clicking submit we can see what will happen to each attribute.**Samples**

sample1

+ Transformation

**Files**

What files are used by this process?



What files are produced by this process?



CANCEL

SUBMIT

proj1

Home

Processes

Files

Samples

Reviews Settings

Name: sample1

Owner: proj1@mc.org

Description:

This describes details of the sample. For example this sample is a plastic and metal dusty cropopper toy plane from the Planes: Fire and Rescue movie.

TRANSFORMATION

This section will provide sample1 initial measure

As Received measures have been performed overtime.

Cogging - 08/27/2015 @ 3:47PM

As Received - 08/27/2015 @ 12:28PM

1. Click Samples tab

We are now going to look at the sample after the transformation has been applied

There are two entries here:

"As Received" entry covers all measurements up to but not including the transformation.

"Cogging" entry covers all measurements up to but not including the next transformation.

"As Received" selected so here are the attributes



proj1

Home

Processes

Files

Samples

Reviews

Settings

Name: sample1

Owner: proj1@mc.org

Description:

This describes details of the sample. For example this sample is a plastic and metal dusty crophopper toy plane from the Planes: Fire and Rescue movie.

TRANSFORMATION

This section will provide sample1 initial measurements and how these measures have been transformed overtime.

1. Click Cogging link [Cogging - 08/27/2015 @ 3:47PM](#)  [As Received - 08/27/2015 @ 12:28PM](#)

• Length :

[Best Measure](#) :: [edit](#)[Measurements](#) ::

- 1 cm  As Measured - 08/27/2015 @ 1:38PM
- 1.01 cm  As Measured - 08/27/2015 @ 1:38PM

• Width :

[Best Measure](#) :: [edit](#)[Measurements](#) :: --None--

FILES



AI+Mn-isosurface.BMP

 As Measured - 08/27/2015 @ 1:38PM

R38_01584-v02-2.indexed.csv

Thu Aug 27 2015, 6.56 KB

 As Measured - 08/27/2015 @ 1:38PM**Attributes as they appear after transformation.****Notice that:**

- a. Width has gone to unknown**
- b. Length kept its measurements**
- c. The two Particle distribution attributes are gone**

Using Search to find Samples and Files

- Now we are going to look at how to use search
- Search allows you to search across multiple objects in the system
- Because it is real time you can apply notes and tags to files and then search on them
- Search is smart: It will reindex related items
 - If you add a note to a file used in a sample then searching on that note will also find the sample

Search Field Syntax

- Search currently uses the syntax as described at:
 - <https://www.elastic.co/guide/en/elasticsearch/reference/current/query-dsl-query-string-query.html#query-string-syntax>
 - Examples:
 - field: for a field name,
 - * for wildcard search
 - + to “and” fields together
-

proj1 1

Home

Processes

Files

Samples

Reviews

Settings

PROCESSES

As Measured - 08/27/2015 @ 1:38PM

proj1@mc.org

Thu Aug 27 2015

As Received - 08/27/2015 @ 12:28PM

proj1@mc.org

Thu Aug 27 2015

Cogging - 08/27/2015 @ 3:47PM

proj1@mc.org

Thu Aug 27 2015

1. Click on Home tab**REVIEWS**

No Reviews.

Your project should look similar to this**SAMPLES**

sample1

proj1@mc.org

Thu Aug 27 2015

2. Type in your search here

FILES

proj1

- Al+Mn-isosurface+ROI-composition-2-mN.BMP
- Al+Mn-isosurface+ROI-composition-2-zn.BMP
- Al+Mn-isosurface+ROI-composition-2.BMP
- Al+Mn-isosurface+ROI-composition-ZN-Mn.BMP
- Al+Mn-isosurface+ROI-composition-ZN.BMP
- Al+Mn-isosurface+ROI-composition.BMP

NOTES

No Notes.

August 2015

Sun	Mon	Tue	Wed	Thu	Friday	Sat
26	27					1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

Notice that the calendar has been updated with your new entries

1 samples
3 processes

MaterialsCommons

Help proj1@mc.org

proj1 1 Home Processes Files Samples Reviews Settings

*.BMP

Showing top 8 matches of 8 found.

1. [AI+Mn-isosurface+ROI-composition-2-mN.BMP](#) image/bmp
Path: proj1

2. [AI+Mn-isosurface+ROI-composition.BMP](#) image/bmp
Path: proj1

3. [AI+Mn-isosurface+ROI.BMP](#) image/bmp
Path: proj1

4. [sample1](#)

5. [AI+Mn-isosurface+ROI-composition-2-zn.BMP](#) image/bmp
Path: proj1

6. [AI+Mn-isosurface+ROI-composition-ZN.BMP](#) image/bmp
Path: proj1

7. [AI+Mn-isosurface.BMP](#) image/bmp
Path: proj1

You will be shown up to first 100 best matches

1. Type in: *.BMP and hit return

You can click the link to go to item

Clicking on the image will bring up a quick view popup

Notice how the search also found a sample because the sample had one of the matching files

1361 x 748px

MaterialsCommons

proj1 1 Home Processes Files Samples

*.BMP

AI+Mn-isosurface+ROI.BMP

Showing top 8 matches of 8

1. AI+Mn-isosurface+ROI-composition-2-zn.BMP Path: proj1

2. AI+Mn-isosurface+ROI-composition-ZN.BMP Path: proj1

3. AI+Mn-isosurface+ROI.BMP image/bmp Path: proj1

4. sample1

5. AI+Mn-isosurface+ROI-composition-2-zn.BMP image/bmp Path: proj1

6. AI+Mn-isosurface+ROI-composition-ZN.BMP image/bmp Path: proj1

7. AI+Mn-isosurface.BMP image/bmp Path: proj1

Owner: proj1@mc.org
Size: 5.74 MB
Created: Thu Aug 27 2015
Modified:
Media Type: image/bmp
Notes:

OK Cancel

The quick view popup from clicking the image

1. Click image for search number (3) to see the quick view popup

Adding notes and searching on them

- Now we are going to add notes 2 different files
 - One file will be a part of the sample
 - The other file won't
 - We will see the effect of searching on that note
 - For demonstration purposes we will add the unique word “clam” to one note and “fish” to the other
-

proj1 1 Home Processes

Files

Samples

Reviews Settings

ALL FILES

proj1

- Al+Mn-isosurface+ROI-composition-2-mN.BMP
- Al+Mn-isosurface+ROI-composition-2-zn.BMP
- Al+Mn-isosurface+ROI-composition-2.BMP
- Al+Mn-isosurface+ROI-composition-ZN-Mn.BMP
- Al+Mn-isosurface+ROI-composition-ZN.BMP
- Al+Mn-isosurface+ROI-composition.BMP
- Al+Mn-isosurface+ROI.BMP
- Al+Mn-isosurface.BMP

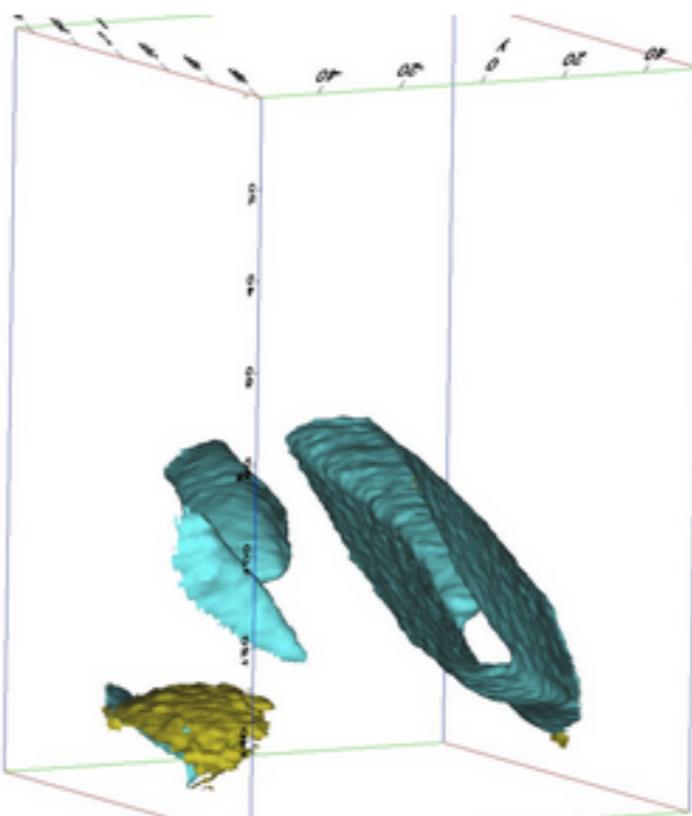
- R38_01584-v01.rmg
- R38_01584-v02-2.indexed.csv
- R38_01584-v02.indexed.csv

1. Click Files tab

AL+MN-ISOSURFACE.BMP

DETAILS

Type: image/bmp Owner: proj1@mc.org Created: Thu Aug 27 2015



TAGS

 Add a Tag

NOTE

Title:

2. Click file "Al+Mn+isosurface.BMP"

3. To edit note click on the small icon at the far right.



proj1 1 Home Processes

Files

Samples

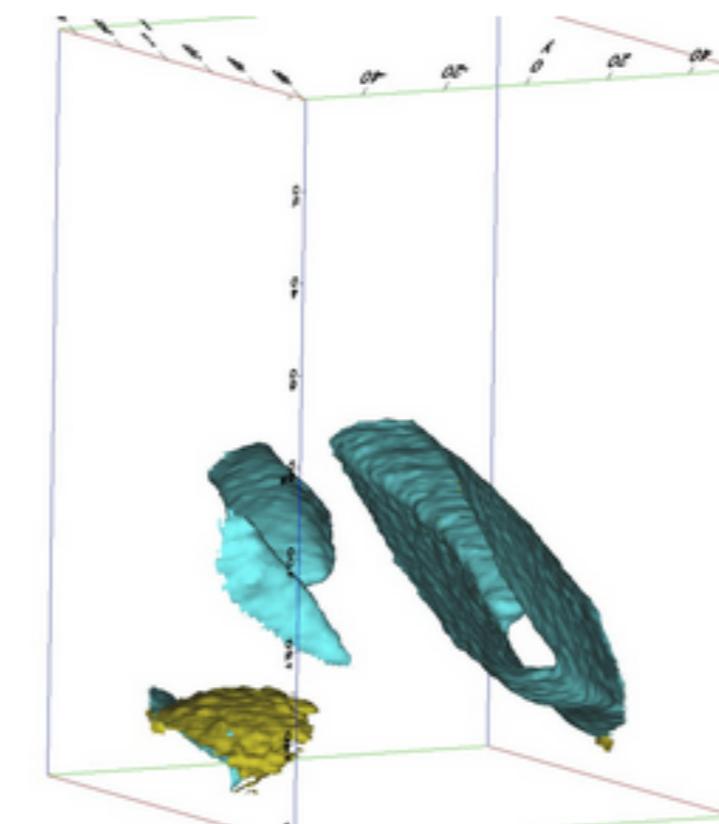
Reviews

Settings

- Al+Mn-isosurface+ROI-composition-2-mN.BMP
- Al+Mn-isosurface+ROI-composition-2-zn.BMP
- Al+Mn-isosurface+ROI-composition-2.BMP
- Al+Mn-isosurface+ROI-composition-ZN-Mn.BMP
- Al+Mn-isosurface+ROI-composition-ZN.BMP
- Al+Mn-isosurface+ROI-composition.BMP
- Al+Mn-isosurface+ROI.BMP
- Al+Mn-isosurface.BMP
- R38_01584-v01.rmg
- R38_01584-v02-2.indexed.csv
- R38_01584-v02.indexed.csv

DETAILS

Type: image/bmp Owner: proj1@mc.org Created: Thu Aug 27 2015



TAGS

Add a Tag

NOTE

Title:

Note:

clam

H2 H5 H6 **B** I U

clams live in salt and fresh water

2. Add title and content**1. Click Note edit icon****3. Press Save when done**

Save Cancel

MaterialsCommons

clam

Help proj1@mc.org

proj1 1 Home Processes Files Samples Reviews Settings

Showing top 2 matches of 2 found.

1. sample1

2. AI+Mn-isosurface.BMP image/bmp
Path: proj1

1. After saving note search for: clam

The sample containing the file with the note was found

The file with the note was found

This screenshot shows the MaterialsCommons interface after a search for the term "clam". The search results page displays two items: "sample1" and "AI+Mn-isosurface.BMP image/bmp". A blue arrow points from the search bar to the first result, "sample1". Two green arrows point from descriptive text to each result: "The sample containing the file with the note was found" and "The file with the note was found".

MaterialsCommons

SEARCH PROJECT... Help proj1@mc.org

proj1 1 Home Processes Files Samples Reviews Settings

proj1

- Al+Mn-isosurface+ROI-composition-2-mN.BMP
- Al+Mn-isosurface+ROI-composition-2-zn.BMP
- Al+Mn-isosurface+ROI-composition-2.BMP
- Al+Mn-isosurface+ROI-composition-ZN-Mn.BMP
- Al+Mn-isosurface+ROI-composition-ZN.BMP
- Al+Mn-isosurface+ROI-composition.BMP
- Al+Mn-isosurface+ROI.BMP
- Al+Mn-isosurface.BMP
- R38_01584-v01.rmg
- R38_01584-v02-2.indexed.csv
- R38_01584-v02.indexed.csv

1. Click Files Tab

2. Select the first file in the list

3. Click the note edit icon

4. Fill in title and content

5. Click save when done

AL+MN-ISOSURFACE+ROI-COMPOSITION-2-MN.BMP

RENAME

Thu Aug 27 2015

1D Concentration Profile (Preview)

Concentration (mole %)

Distance (mm)

TAGS

Add a Tag

NOTE

Title: fish

Note: H2 H5 H6 B I U fish make good pets

Save Cancel

Tags: Gene Atom Decompose Complex Series

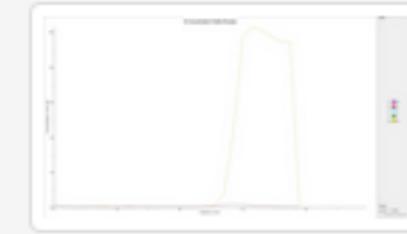
proj1 1

[Home](#)[Processes](#)[Files](#)[Samples](#)[Reviews](#)[Settings](#)

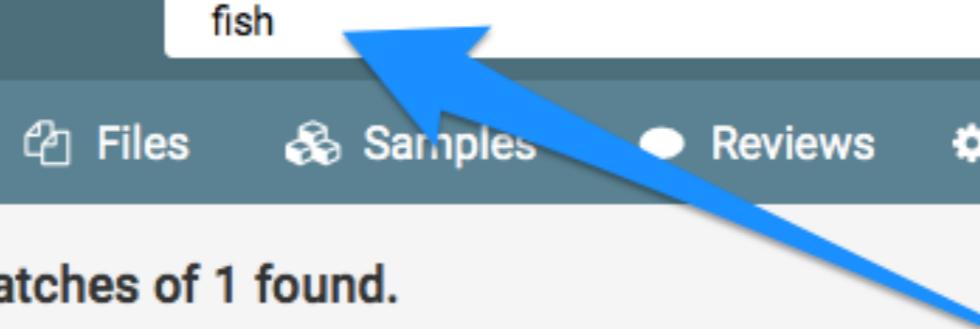
Showing top 1 matches of 1 found.

1. Search for fish1.  Al+Mn-isosurface+ROI-composition-2-mN.BMP image/bmp

Path: proj1



Only matched on the one file containing the note fish. This file is not a part of a sample



Notes

- Notes are quite powerful
 - You can add images and links to them
- In the future we will support equations, tables, etc...
 - Once we switch to 'ckeditor'
- Lets add an image
- Because I like superhero movies we will add an image of Superman to a note

MaterialsCommons

SEARCH PROJECT... Help proj1@mc.org

proj1 Home Processes Files Samples Reviews Settings

1. Click Files tab

2. Click first file

3. Click edit note icon

4. Click add image icon and paste in the url for an image

5. Click save

AL+Mn-isosurface+ROI-composition-2-mN.BMP

AI+Mn-isosurface+ROI-composition-2-zn.BMP

AI+Mn-isosurface+ROI-composition-2.BMP

AI+Mn-isosurface+ROI-composition-ZN-Mn.BMP

AI+Mn-isosurface+ROI-composition-ZN.BMP

AI+Mn-isosurface+ROI-composition.BMP

AI+Mn-isosurface+ROI.BMP

AI+Mn-isosurface.BMP

R38_01584-v01.rmg

R38_01584-v02-2.indexed.csv

R38_01584-v02.indexed.csv

1D Concentration Profile (Preview)

Concentration (mole %)

TAGS

Add a Tag

NOTE

Title: fish

Note: fish make good pets. Fish are super powerful. They make me think of:

H2 H5 H6 “ ” B I U

Save Cancel

Superman

MaterialsCommons

SEARCH PROJECT...

Help

proj1 1 Home Processes Files Samples Reviews Settings

AI+Mn-isosurface+ROI-composition.BMP
AI+Mn-isosurface+ROI.BMP
AI+Mn-isosurface.BMP
R38_01584-v01.rmg
R38_01584-v02-2.indexed.csv
R38_01584-v02.indexed.csv

Yay! We now have a note that contains an image in it. For extra fun add other superheros to create the "Justice League".

Add a Tag

NOTE

Title: fish

fish make good pets. Fish are super powerful. They make me think of:



1363 x 74

File Upload

- Now we will look at uploading files to Materials Commons
- We will upload two files to Materials Commons. Please choose two files from your system.
- We will also create a new directory to load the files into.

MaterialsCommons

SEARCH PROJECT...

Help | proj1@mc.org

proj1 1 Home Processes Files Samples Reviews Settings

ALL FILES

1. Click Files Tab

2. If needed click top level directory

proj1

PROJ1

DETAILS

Type: directory Owner: proj1@mc.org Created: Thu Aug 27 2015

Path: proj1

CREATE FOLDER

AI+Mn-isosurface+ROI-composition-2-mN.BMP

AI+Mn-isosurface+ROI-composition-2-zn.BMP

AI+Mn-isosurface+ROI-composition-2.BMP

AI+Mn-isosurface+ROI-composition-ZN-Mn.BMP

AI+Mn-isosurface+ROI-composition-ZN.BMP

AI+Mn-isosurface+ROI-composition.BMP

AI+Mn-isosurface+ROI.BMP

AI+Mn-isosurface.BMP

R38_01584-v01.rmg

R38_01584-v02-2.indexed.csv

R38_01584-v02.indexed.csv

MaterialsCommons

SEARCH PROJECT...

Help | proj1@mc.org

proj1 1 Home Processes Files Samples Create Folder

ALL 2. Enter your folder name

proj1

- Al+Mn-isosurface+ROI-composition-2-mN.BMP
- Al+Mn-isosurface+ROI-composition-2-zn.BMP
- Al+Mn-isosurface+ROI-composition-2.BMP
- Al+Mn-isosurface+ROI-composition-ZN-Mn.BMP
- Al+Mn-isosurface+ROI-composition-ZN.BMP
- Al+Mn-isosurface+ROI-composition.BMP
- Al+Mn-isosurface+ROI.BMP
- Al+Mn-isosurface.BMP
- R38_01584-v01.rnng
- R38_01584-v02-2.indexed.csv
- R38_01584-v02.indexed.csv

CREATE FOLDER

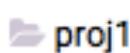
3. Click "Create Folder" button

1. Click "CREATE FOLDER" a "Create Folder" popup will appear

4. Refresh your browser to make the folder appear
(This will be fixed in a subsequent release)

The screenshot shows the MaterialsCommons web application interface. At the top, there's a navigation bar with 'MaterialsCommons', a search bar, 'Help', and a user account icon. Below the navigation bar, there are tabs for 'Home', 'Processes', 'Files', 'Samples', and a 'Create Folder' button. A 'proj1' project is selected. The main content area shows a list of files under 'proj1'. A 'Create Folder' dialog box is open in the center, containing a text input field labeled 'New Items' and two buttons: 'Create Folder' (blue) and 'Cancel' (orange). A large blue arrow points from the text '2. Enter your folder name' to the 'New Items' input field. Another blue arrow points from the text '3. Click "Create Folder" button' to the 'Create Folder' button in the dialog. A third blue arrow points from the text '1. Click "CREATE FOLDER" a "Create Folder" popup will appear' to the 'Create Folder' button in the navigation bar. A red box highlights the text '4. Refresh your browser to make the folder appear (This will be fixed in a subsequent release)'.

ALL FILES



proj1

- [Al+Mn-isosurface+ROI-composition-2-mN.BMP](#)
- [Al+Mn-isosurface+ROI-composition-2-zn.BMP](#)
- [Al+Mn-isosurface+ROI-composition-2.BMP](#)
- [Al+Mn-isosurface+ROI-composition-ZN-Mn.BMP](#)
- [Al+Mn-isosurface+ROI-composition-ZN.BMP](#)
- [Al+Mn-isosurface+ROI-composition.BMP](#)
- [Al+Mn-isosurface+ROI.BMP](#)
- [Al+Mn-isosurface.BMP](#)
- [New items](#) 
- [R38_01584-v01.rmg](#)
- [R38_01584-v02-2.indexed.csv](#)
- [R38_01584-v02.indexed.csv](#)

PROJ1

DETAILS

Type: directory Owner: proj1@mc.org Created: Thu Aug 27 2015

Path: proj1

CREATE FOLDER

**1. Folder you created it.
Click it to upload into
this directory**

proj1 1

[Home](#)[Processes](#)[Files](#)[Samples](#)[Reviews](#)[Settings](#)

ALL FILES

[proj1](#)

- [Al+Mn-isosurface+ROI-composition-2-mN.BMP](#)
- [Al+Mn-isosurface+ROI-composition-2-zn.BMP](#)
- [Al+Mn-isosurface+ROI-composition-2.BMP](#)
- [Al+Mn-isosurface+ROI-composition-ZN-Mn.BMP](#)
- [Al+Mn-isosurface+ROI-composition-ZN.BMP](#)
- [Al+Mn-isosurface+ROI-composition.BMP](#)
- [Al+Mn-isosurface+ROI.BMP](#)
- [Al+Mn-isosurface.BMP](#)

[New Items](#)

- [R38_01584-v01.rmg](#)
- [R38_01584-v02-2.indexed.csv](#)
- [R38_01584-v02.indexed.csv](#)

NEW ITEMS 

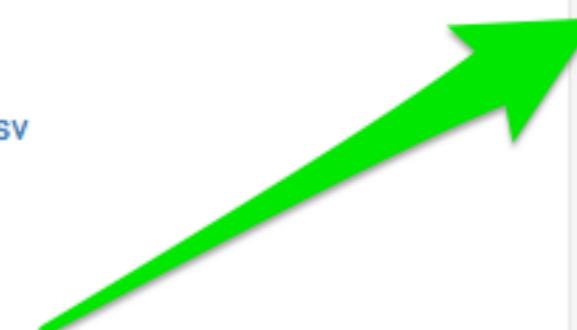
DETAILS

Type: directory Owner: proj1@mc.org Created: Fri Aug 28 2015

Path: proj1/New Items

CREATE FOLDER

**After selecting your folder you
should see it here**



proj1 1 Home Processes

Files Samples Reviews Settings

1. Click file upload iconNEW ITEMS 

proj1

-  Al+Mn-isosurface+ROI-composition-2...
 -  Al+Mn-isosurface+ROI-composition-2...
 -  Al+Mn-isosurface+ROI-composition-2...
 -  Al+Mn-isosurface+ROI-composition-ZN...
 -  Al+Mn-isosurface+ROI-composition-ZN...
 -  Al+Mn-isosurface+ROI-composition.BM...
 -  Al+Mn-isosurface+ROI.BMP
 -  Al+Mn-isosurface.BMP
- New Items
-  R38_01584-v01.rmg
 -  R38_01584-v02-2.indexed.csv
 -  R38_01584-v02.indexed.csv

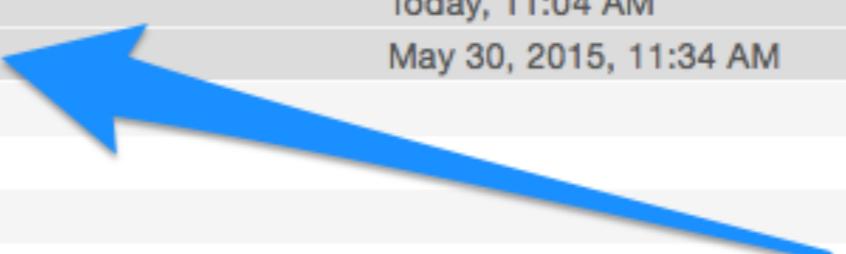
CREATE FOLDER

File Upload

Uploads

Search

Name	Date Modified	Size	Kind
 batman.jpeg	Today, 11:04 AM	34 KB	JPEG image
 gammra.jpg	May 30, 2015, 11:34 AM	4.4 MB	JPEG image

2. Select files to upload**3. Click when
you are done
selecting files** Cancel Open

proj1 1

[Home](#)[Processes](#)[Files](#)[Samples](#)[Reviews](#)[Settings](#)

ALL FILES

1. Press "Upload All" to begin your upload[Upload All](#)[Cancel All](#)

Files to upload:

[proj1/New Items](#)[batman.jpeg 33.7 KB](#)[gammra.jpg 4.38 MB](#)[proj1](#)[AI+Mn-isosurface+ROI-composition-2-mN.BMP](#)[AI+Mn-isosurface+ROI-composition-2-zn.BMP](#)[AI+Mn-isosurface+ROI-composition-2.BMP](#)[AI+Mn-isosurface+ROI-composition-ZN-Mn.BMP](#)[AI+Mn-isosurface+ROI-composition-ZN.BMP](#)[AI+Mn-isosurface+ROI-composition.BMP](#)[AI+Mn-isosurface+ROI.BMP](#)[AI+Mn-isosurface.BMP](#)[New Items](#)[R38_01584-v01.rrng](#)[R38_01584-v02-2.indexed.csv](#)[R38_01584-v02.indexed.csv](#)**Directory you are uploading files into**

Type: directory Owner: proj1@mc.org Created: Fri Aug 28 2015

Path: proj1/New Items

Files you are uploading

proj1 1

[Home](#)[Processes](#)[Files](#)[Samples](#)[Reviews](#)[Settings](#)

ALL FILES

[Upload All](#) [Cancel All](#)

Files to upload:

[proj1/New Items](#)[batman.jpeg](#) 33.7 KBUploaded  [X](#)[gammra.jpg](#) 4.38 MBUploaded  [X](#)[proj1](#)[Al+Mn-isosurface+ROI-composition-2-mN.BMP](#)[Al+Mn-isosurface+ROI-composition-2-zn.BMP](#)[Al+Mn-isosurface+ROI-composition-2.BMP](#)[Al+Mn-isosurface+ROI-composition-ZN-Mn.BMP](#)[Al+Mn-isosurface+ROI-composition-ZN.BMP](#)[Al+Mn-isosurface+ROI-composition.BMP](#)[Al+Mn-isosurface+ROI.BMP](#)[Al+Mn-isosurface.BMP](#)[New Items](#)[R38_01584-v01.rnng](#)[R38_01584-v02-2.indexed.csv](#)[R38_01584-v02.indexed.csv](#)**1. Press "Cancel All" to close the uploads side bar**NEW ITEMS 

DETAILS

Type: directory Owner: proj1@mc.org Created: Fri Aug 28 2015

Path: proj1/New Items

Each files upload status is displayed.

While uploading you will see a progress bar. The system uploads multiple file blocks simultaneously. You can upload any size file (though large files may take a long time).

**2. Refresh the page to see your uploaded files
(This will be fixed in a subsequent release)**

proj1 1

[Home](#)[Processes](#)[Files](#)[Samples](#)[Reviews](#)[Settings](#)

ALL FILES

[proj1](#)

- [Al+Mn-isosurface+ROI-composition-2-mN.BMP](#)
- [Al+Mn-isosurface+ROI-composition-2-zn.BMP](#)
- [Al+Mn-isosurface+ROI-composition-2.BMP](#)
- [Al+Mn-isosurface+ROI-composition-ZN-Mn.BMP](#)
- [Al+Mn-isosurface+ROI-composition-ZN.BMP](#)
- [Al+Mn-isosurface+ROI-composition.BMP](#)
- [Al+Mn-isosurface+ROI.BMP](#)
- [Al+Mn-isosurface.BMP](#)

[New Items](#)

- [batman.jpeg](#)
- [gamma.jpg](#)
- [R38_01584-v01.rn](#)
- [R38_01584-v02-2.indexed.csv](#)
- [R38_01584-v02.indexed.csv](#)

GAMMRA.JPG 

DETAILS

Type: image/jpeg Owner: proj1@mc.org Created: Fri Aug 28 2015



RENAME

Uploaded files appear in directory**1. Click on file to view it****Files are indexed and converted at the time they are uploaded.**

Reviews

- Reviews allow you to bring multiple items in a project together and start a conversation around them.
- By grouping items together others can easily view them.
- Reviews allow you to add comments to the review.
- We are looking at other features we can add to Reviews

proj1 1

[Home](#)[Processes](#)[Files](#)[Samples](#)[Reviews](#)[Settings](#)[MY REVIEWS](#) [DUE](#) [ALL](#) [ARCHIVED](#)**CREATE****2. Click "CREATE" button to start a new review**

Fri Aug 28 2015 12:22:41 GMT-0400 (EDT)

ASSIGN TO

ATTACHMENT

**3. Pick people to assign it to (they must be a part of the project).
For this account/training your only choice will be yourself****4. Click "+ ADD" to attach samples, files and processes to the review.****Review form opens here after pressing "CREATE"****1. Click "Reviews" tab**

The screenshot shows the 'Reviews' tab selected in the top navigation bar. Below it, a large blue box highlights the 'CREATE' button on the left and the main review form on the right. A green arrow points from the text 'Review form opens here after pressing "CREATE"' to the right side of the blue box. Inside the blue box, four numbered steps provide instructions for creating a review:

1. Click "Reviews" tab
2. Click "CREATE" button to start a new review
3. Pick people to assign it to (they must be a part of the project).
For this account/training your only choice will be yourself
4. Click "+ ADD" to attach samples, files and processes to the review.

The review form itself includes fields for 'ASSIGN TO', 'ATTACHMENT', 'MESSAGE' (with a 'SUBJECT' input), and a rich text editor toolbar at the bottom.

proj1 1 - Home Processes

MY REVIEWS DUE ALL

CREATE

2. Select files by clicking their checkbox

Attachments

Files Samples Processes

FILES

SEARCH FILES...

proj1

- Al+Mn-isosurface+ROI-composition-2-mN.BMP
- Al+Mn-isosurface+ROI-composition-2-zn.BMP
- Al+Mn-isosurface+ROI-composition-2.BMP
- Al+Mn-isosurface+ROI-composition-ZN-Mn.BMP
- Al+Mn-isosurface+ROI-composition-ZN.BMP

OK Cancel

2-zn.BMP sample1 Cogging - 08/27/2015 @ 3:47PM

MESSAGE SUBJECT

1. Click "Files" tab (if not already selected) to select files

A blue arrow points from the text "1. Click 'Files' tab (if not already selected) to select files" to the "Files" tab in the top navigation bar of the modal window.

A large blue arrow points from the text "2. Select files by clicking their checkbox" to the list of files in the modal window, specifically highlighting the checkboxes next to the file names.

MaterialsCommons

SEARCH PROJECT...

Help

proj1@mc.org

proj1 1 Home Process

MY REVIEWS DUE ALL

CREATE

Attachments

Files Samples Processes

SAMPLES

sample1
proj1@mc.org Thu Aug 27 2015

1. Click "Samples" tab

2. Select samples by clicking their checkbox.

OK Cancel

2-zn.BMP
sample1
Cogging - 08/27/2015 @ 3:47PM

MESSAGE

SUBJECT

1364 x 74

proj1 1 Home Process

MY REVIEWS DUE ALL

CREATE

2. Choose processes by clicking their checkbox

Attachments

Files Samples Processes

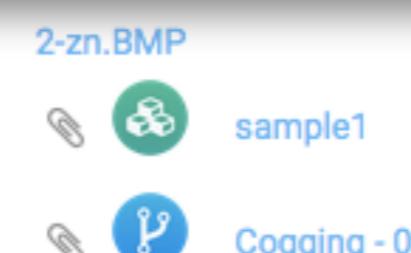


1. Select "Processes" tab

PROCESS		
<input checked="" type="checkbox"/>	Cogging - 08/27/2015 @ 3:47PM	proj1@mc.org
<input type="checkbox"/>	As Measured - 08/27/2015 @ 1:38PM	proj1@mc.org
<input type="checkbox"/>	As Received - 08/27/2015 @ 12:28PM	proj1@mc.org



3. Click "OK" when you are done making selections.



MESSAGE

SUBJECT

MaterialsCommons

SEARCH PROJECT... Help proj1@mc.org

proj1 1 Home Processes Files Samples Reviews Settings

MY REVIEWS DUE ALL ARCHIVED

CREATE

People assigned the review appear here.

All your attachments appear here

Fri Aug 28 2015 12:22:41 GMT-0400 (EDT)

ASSIGN TO

proj1@mc.org

Only one person assigned to this review

ATTACHMENT

+ ADD

- AI+Mn-isosurface+ROI-composition-2-mN.BMP
- AI+Mn-isosurface+ROI-composition-2-zn.BMP
- sample1
- Cogging - 08/27/2015 @ 3:47PM

MESSAGE

SUBJECT

H2 H5 H6 **99** B I U %

CANCEL SEND

1364 x 74

MaterialsCommons

SEARCH PROJECT...

Help proj1@mc.org

proj1 1 Home Processes Files Samples Reviews Settings

MY REVIEWS DUE ALL ARCHIVED

CREATE

Fri Aug 28 2015 12:22:41 GMT-0400 (EDT)

ASSIGN TO

proj1@mc.org

ATTACHMENT

+ ADD

AI+Mn-isosurface+ROI-composition-2-mN.BMP
AI+Mn-isosurface+ROI-composition-2-zn.BMP
sample1
Cogging - 08/27/2015 @ 3:47PM

MESSAGE

Are fish really super powerful?

H2 H5 H6 B I U

Objects in mirror are closer than they appear (hat tip: Gary Larson)

1. Enter Review title

2. Enter review note

3. Send the review

1. Enter Review title

2. Enter review note

3. Send the review

CREATE

Are fish really super powerful?

1

**The review that was sent
with the full message**



Fri Aug 28 2015

REQUESTED BY  proj1@mc.org

ASSIGNED TO  proj1@mc.org

ATTACHMENTS

-   AI+Mn-isosurface+ROI-composition-2-mN.BMP
proj1/AI+Mn-isosurface+ROI-composition-2-mN.BMP
-   AI+Mn-isosurface+ROI-composition-2-zn.BMP
proj1/AI+Mn-isosurface+ROI-composition-2-zn.BMP
-   sample1
-   Cogging - 08/27/2015 @ 3:47PM

COMMENTS

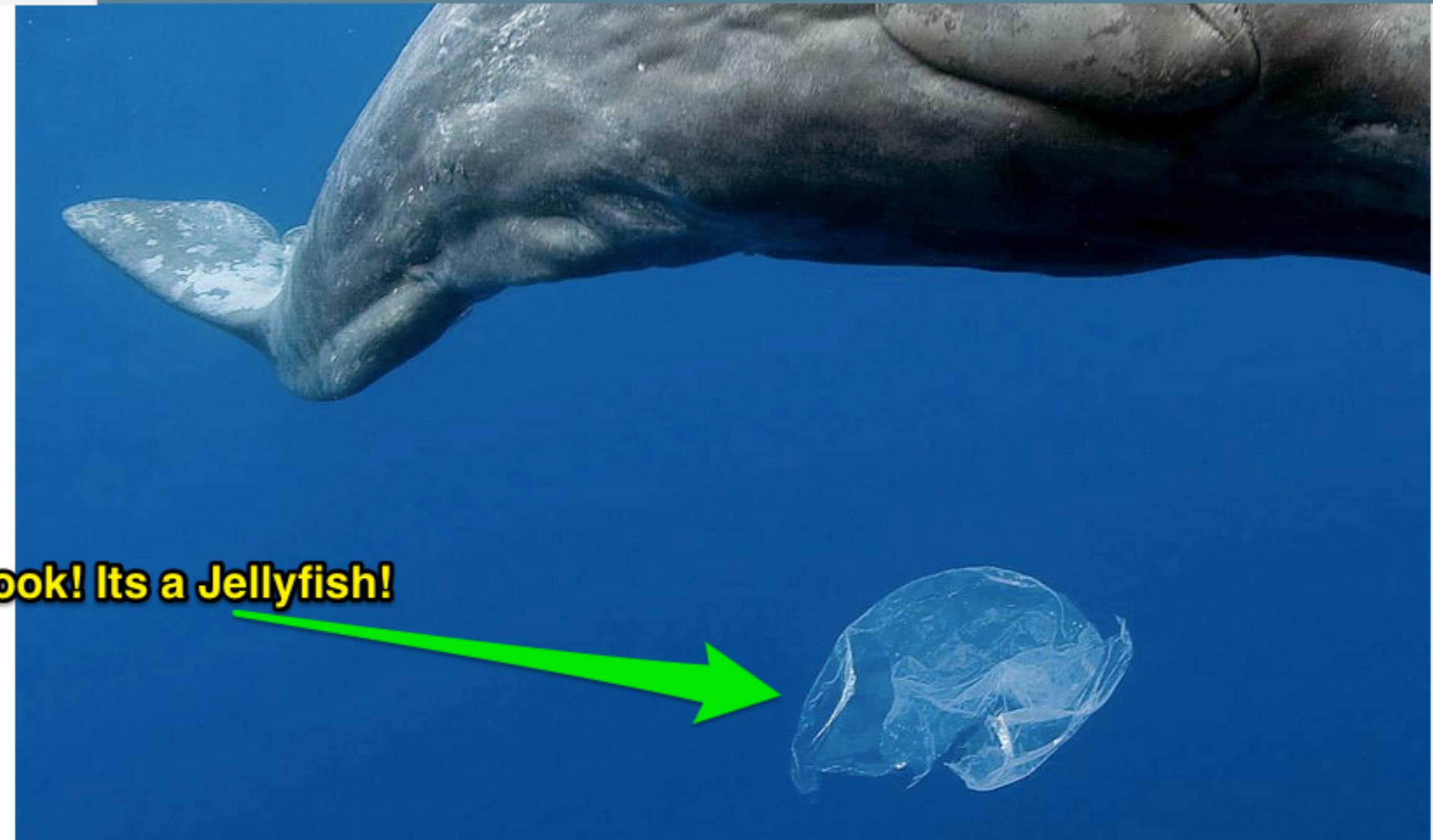
 proj1@mc.org

I've looked at fish and I really think that whales might be more powerful. Fish look wimpy by comparison.



proj1 1 Home Processes Files Samples

Reviews Settings

**Hey look! Its a Jellyfish!**

Fri Aug 28 2015

No way jelly fish rule!

COMMENT

CLOSE AND ARCHIVE

1. Type in comment for review**Click "COMMENT" button to add it.**

proj1 1

[Home](#)[Processes](#)[Files](#)[Samples](#)[Reviews](#)[Settings](#)

What is the Jellyfish up to?

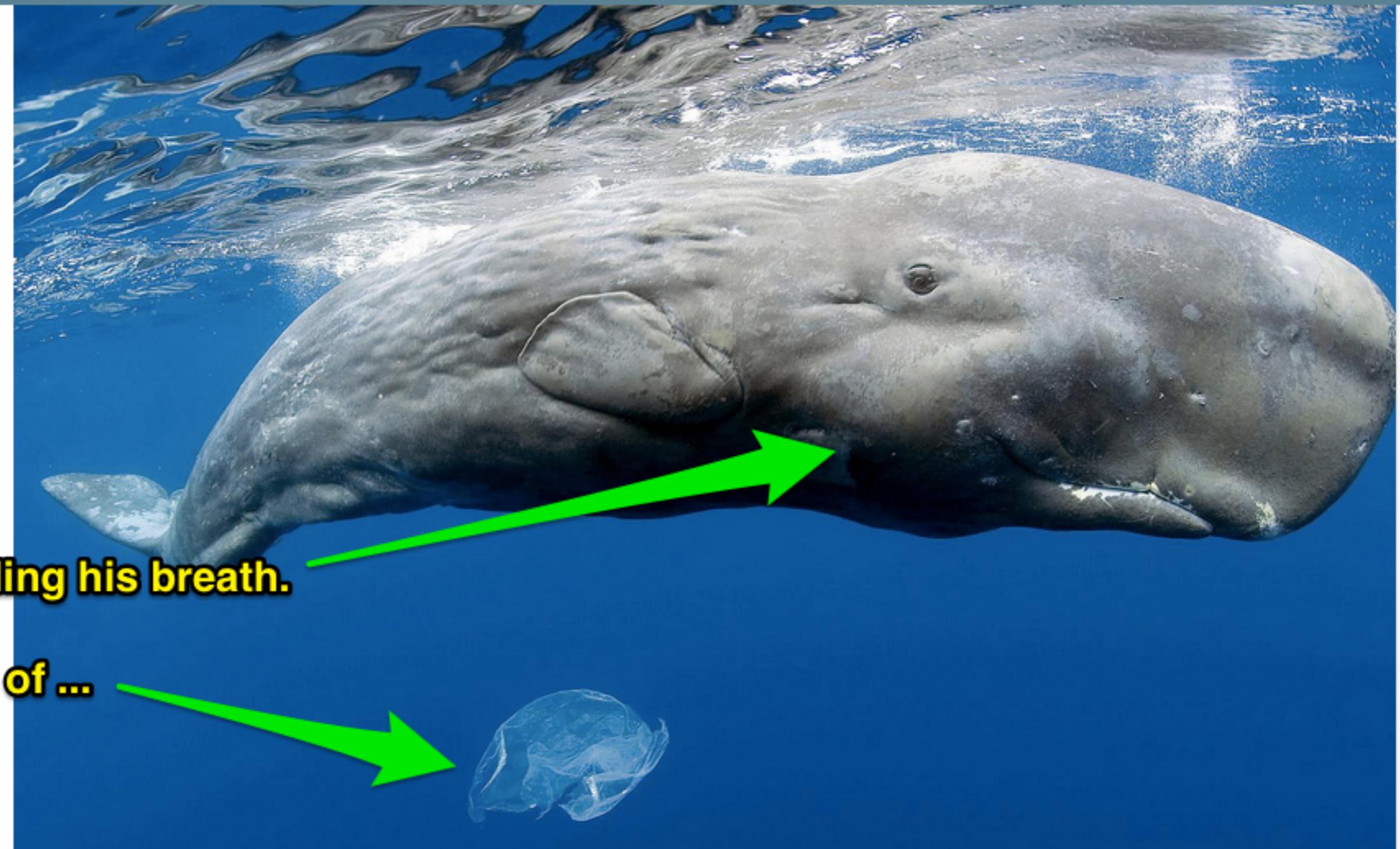
Fri Aug 28 2015

No way jelly fish rule!

COMMENT

Click "CLOSE AND ARCHIVE" when Review is done.

[CLOSE AND ARCHIVE](#)



It looks like the whale is holding his breath.

Or maybe his cheeks are full of ...

Fri Aug 28 2015

proj1@mc.org

No way jelly fish rule!

Fri Aug 28 2015

Add a comment...

COMMENT

CLOSE AND ARCHIVE

MY REVIEWS DUE ALL ARCHIVED

CREATE

Are fish really super powerful?

1. Clicked ARCHIVED to see all your closed reviews.

Fri Aug 28 2015

REQUESTED BY

proj1@mc.org

ASSIGNED TO

proj1@mc.org

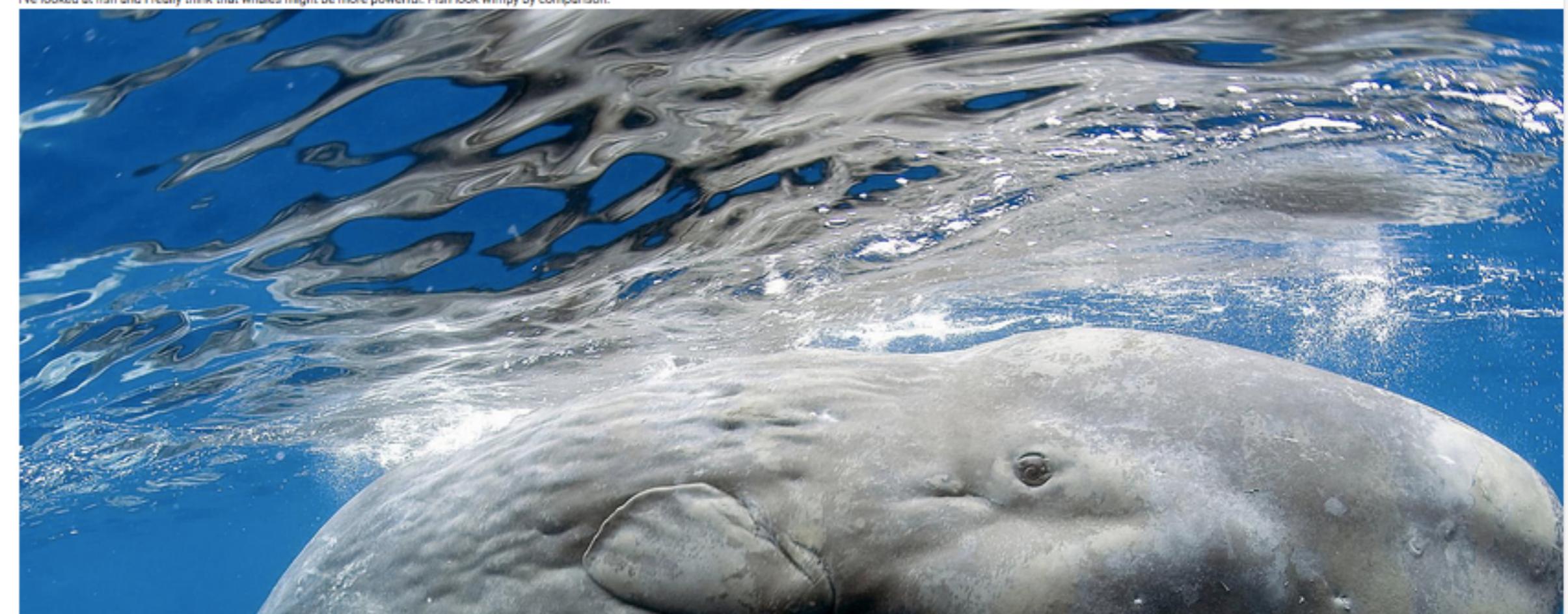
ATTACHMENTS

- Al+Mn-isosurface+ROI-composition-2-mN.BMP
proj1/AI+Mn-isosurface+ROI-composition-2-mN.BMP
- Al+Mn-isosurface+ROI-composition-2-zn.BMP
proj1/AI+Mn-isosurface+ROI-composition-2-zn.BMP
- sample1
- Cogging - 08/27/2015 @ 3:47PM

COMMENTS

proj1@mc.org

I've looked at fish and I really think that whales might be more powerful. Fish look wimpy by comparison.



Next Steps

We are focused on making the rollout of Materials Commons successful. If you are interested in using Materials Commons we currently have the following set of criteria:

- Looking for Beta users who can work with us who understand
 - The system is evolving (Beta software - there will be issues)
 - Are willing to participate in providing high quality feedback
 - Who meet one of the following criteria:
 - Collaborating with PRISMS Center members on
 - PRISMS Use Case
 - PRISMS Software Application
 - Other approved collaborations
 - Or Anyone who:
 - Attends PRISMS MC Training
 - Can use existing templates (including User-defined “As-Measured” template)
 - Agrees to make information public in a reasonable time (e.g. 3 months after Beta end)
 - **We are looking to create partnerships that make us all successful!**
-

And That Concludes The Materials Commons Training Session

- You can find all the source code for Materials Commons at:
 - <https://github.com/materials-commons>
- The PRISMS Center website is located at:
 - <http://prisms-center.org>