CATALOGING RESOURCES and NEEDS for UM FLAGSHIP CONSTELLATIONS with the Research Resources Directory (R2D1)

Jason Hale September 25, 2017

What We will Do

Introduce the UM Research Resources Directory (R2D1)

Learn to find resources with R2D1

Learn to list/edit resources with R2D1

Learn to list NEEDS with R2D1

Quick overview of Flagship Constellations

Learn to associate Resources/Needs with Flagship

Constellations or other Applications

What is the Research Resources Directory (R2D1)?

A **centralized listing** of both centrally and locally administered resources of potential interest to a broad community of UM researcher/scholars, and internal and external stakeholders.

Provides a common/standardized interface with only the basic information about resources. Entries point users to "Web pages of record" or human points of contact for detailed info.

Why Has the R2D1 Directory Been Created?

- Called for in the UM2020 Strategic Plan.
- To facilitate cross-disciplinary collaboration, interinstitutional collaboration, and sharing and utilization of resources.
- To allow UM administrators and researchers to respond quickly, efficiently, accurately, and consistently to external opportunities and requests.
- To facilitate the development of more complete, accurate, and competitive grant proposals.

What R2D1 is NOT

- NOT a physical property control system.
- NOT a replication of information in Faculty Activity Report.
- NOT something that faculty will be required to use, get credit for using, or be punished for not using.
- NOT a replacement for, or replication of, departmental/ local Web sites (rather, it is a central, standardized directory of pointers to those pages)

What Kinds of Resources Should Be Listed?

- Resources that others outside of your department might want (to requests/negotiate) access to
- Services that others might want access to
- Capabilities that others might need to know about
- Any capability that you would want to be considered for inclusion in institutional responses to outside inquiries
- Anything that is unique (such as a unique interdisciplinary course)
- Capabilities that could lead to enhanced collaboration

What Kinds of Resources Should NOT Be Listed

- Commodities and supplies
- Common or standard office or lab equipment (printers, desktop computers, administrative departmental servers, golf carts)
- Courses that are only offered to students in your own department
- Resources that are too specialized or un-accessible to be of interest to others

What Kinds of NEEDS Should Be Listed?

- Needs that institutional leaders and administrators should know about so that they can help direct resources or seek funding sources to meet these needs
- Examples:
 - Experts in an area that would compliment your research
 - Equipment that would enable your research to move to the next level
 - Etc.

What Kinds of NEEDS Should NOT Be Listed

Anything that would benefit only one faculty member or department

Glossary of Terms

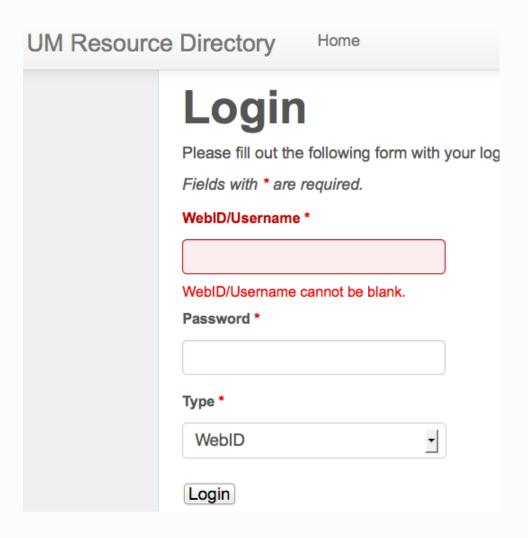
- Entries are records/listings in the R2D1 Directory.
- Each R2D1 Entry represents a real-world resource or need.
- Each real-world Resource or Need should be represented by only 1 directory Entry.
- A **Resource Entry** will generally have only **1 Category** that tell the what TYPE the real-world resource is. (*e.g., Instrumentation, Program*).
- A Need Entry will generally have 2 Categories, one of which is "Need or Gap", and the other is the category of the resource that is needed.
- An Entry may have zero or many Applications that tell what kinds of problems the corresponding real-world resource can address (e.g., Energy Development, Space Exploration, Environmental Protection/ Remediation, etc.)

Flagship Constellations in R2D1

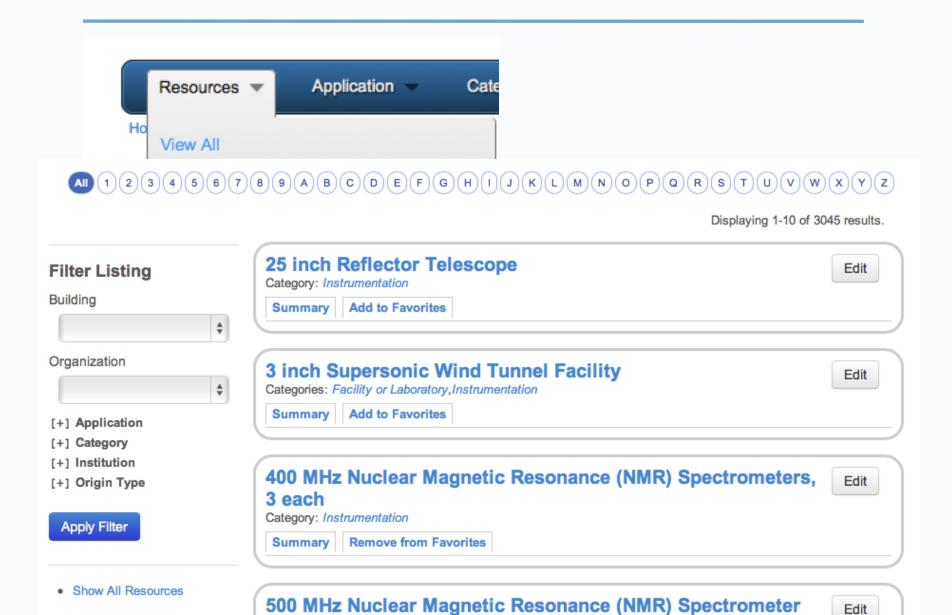
- UM Flagship Constellation Themes are examples of Applications
- UM Flagship Constellation focus areas/ gravitational themes/ research thrust areas are also implemented as Applications in R2D1
- UM Flagship Constellation is also a Category in R2D1

How to Log In

www.research.olemiss.edu/R2D1



View All Resources



View Summary of a Resource

Displaying 1-10 or outo results 25 inch Reflector Telescope Edit Category: Instrumentation Summary Add to Favorites 3 inch Supersonic Wind Tunnel Facility Edit Categories: Facility or Laboratory, Instrumentation Add to Favorites Summarv 400 MHz Nuclear Magnetic Resonance (NMR) Spectrometers, Edit 3 each Category: Instrumentation Remove from Favorites Summary

500 MHz Nuclear Magnetic Resonance (NMR) Spectrometer

Edit

View Summary of a Resource

3 inch Supersonic Wind Tunnel Facility

Categories: Facility or Laboratory, Instrumentation

Summary

Add to Favorites

Description

Provides full-length glass walls for excellent flow visualization and optical measurements. Utilizes a 200 hp two-stage Roots vacuum pump to pull air through the test section at up to Mach 3.

Institution: Contacts

University of Mississippi Primary:NATHAN MURRAY

Academic Department/Unit Secondary:

NATIONAL CENTER FOR PHYSICAL ACOUSTICS

Building Last Update

JAMIE L. WHITTEN NATL CTR FOR PHY ACSTS 01/09/2015

Full Listing

Edit

View Summary of a Resource

3 inch Supersonic Wind Tunnel Facility

Categories: Facility or Laboratory, Instrumentation

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 Institution Name
 Organization Name
 Last Update

 University of Mississippi
 NATIONAL CENTER FOR PHYSICAL ACOUSTICS 10/06/2015

Building Name Contacts

JAMIE L. WHITTEN NATL CTR FOR PHY ACSTS Primary: MURRAY, NATHAN

Location within Building Secondary:

1111

Urls

http://ncpa.olemiss.edu/

Acknowledgements

Edit Applications

Applications

Defense and Security

For aerodynamics testing

Transportation

For aerodynamics testing

Edit Categories

Categories

Instrumentation

A sophisticated device, apparatus, or piece of equipment used for conducting science. For example, mass spectrometers, microscopes, telescopes, and vibrometers. Could also refer to a virtual instrument (such as a database).

Categories: Resource Entries

An Entry may be associated with Categories

- A Category is the fundamental TYPE of a resource
- Most Resource Entries will have only 1 Category; some may have 2 or 3.

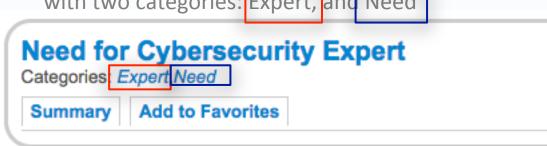




Categories: Need Entries

An Entry may be associated with Categories

- A Category is the fundamental TYPE of a resource
- Most Need Entries will have only 2 Categories;
 - The category of the needed resource, and
 - The additional category *Need*. This category is how we know this entry is for a need, not an existing resource.
 - Example: The BIG DATA Flagship Constellation has a NEED for a Cyber Security Expert. Thus, they created an R2D1 Entry with two categories: Expert, and Need



Categories

Academic/Research Support

Edit Category

Resources

Animal Model

Edit Category

A collection of living, non-human animals for research and investigations of human disease.

Resources

Collection/Repository

Edit Category

A physical or virtual collection of specimens, artifacts, data, etc. . For example, the Blues Archive, or the Pullen Herbarium.

A service available to UM researchers, faculty, or students. For example, tutoring, grant reviews, or writing consultation.

Resources

Community/Group

Edit Category

A formal or informal group of people organized for a common purpose. For example: the STEM Living Learning Community, the Quantum Chemistry Research Group, or the UM Climate Change Study Group. [NOTE: Names of individuals should NOT appear in the resource name, but may appear in the description.)

Resources

~24 categories are defined in R2D1. Contact ORSP to suggest categories be added or merged.

Course

Edit Category

An academic course of interest beyond the offering department, such as a course offered for credit towards more than one program (such as one of the CME courses taken by both accounting and Mech Engr. students), a service course offered by one department for programs outside that department (e.g., Programming for Engineers taught in the CIS dept.), or one of some particular application interest (e.g., energy).

Resources

Entity

Edit Category

This is a category of resources from SAP. Will probably not be used to create resources with this tool.

Resources

Expert

Edit Category

A faculty, staff member, or even a student, who has demonstrable competence or expertise in an area of potential interest or benefit to a larger community. For example, peer-reviewed publications in one or more scientific (sub)disciplines; fluency in a foreign language; mastery of a musical instrument; possession of an amateur radio license; etc. Each person should have a maximum of one Expert listing, which can include several "expertise" areas in the same description field.

Resources

Facility or Laboratory

Edit Category

A Facility or Laboratory is a physical space, on the scale of a room, but smaller than a building, that has a designated purpose. Laboratories should not be named after individual faculty members who control them.

Resources

Funding Opportunity

Edit Category

An internal or external program of funding for projects, especially one of particular institution-level interest, including recurring Limited Submissions. For example, externally, the NSF IGERT program, the NASA EPSCoR Program, or the NIH High End Instrumentation program. Internally, the ORSP Faculty Travel Grants Program.

Resources

Instrumentation

Edit Category

A sophisticated device, apparatus, or piece of equipment used for conducting science. For example, mass spectrometers, microscopes, telescopes, and vibrometers. Could also refer to a virtual instrument (such as a database).

Resources

Internship or Fellowship

Edit Category

Summer or longer opportunity for students to gain real-world experiences for pay.

Resources

Other IT Service

Edit Category

A computing service or product that is NOT provided or mediated by the UM Office of Information Technology (OIT), for instance a departmentally maintained Web application, a departmental software license, or a third party cloud service whose contract is not managed by OIT.

Resources

Other Organized Research Unit (ORU)

Edit Category

An other ORU is an institutionally recognized organization that provides interdisciplinary or inter-institutional research or support infrastructure for a given purpose, but that is not listed as an SAP Organization. For example, the Mississippi Research Consortium (MRC) or the Gulf of Mexico Hydrates Research Consortium.

Resources

Other Program

Edit Category

An ongoing, organized activity that someone is in charge of, and that doesn't fall within another category or Origin type. A program might spawn a series of projects.

Resources

Outreach & Public Engagement

Edit Category

A means or opportunity for engaging or educating constituents outside of UM, such as K-12 teachers and students; families; specific professional organizations; and the general public.

Resources

Professional Service

Edit Category

A service that is available and advertised for a regular fee. For example, photography services, or lab sample analyses.

Resources

Project

Edit Category

An activity with a specific purpose, a begin date, and an ending. Could be an externally sponsored program project, but

Shop

For example, machine shops, electrical shops, sign shops, paint shops, etc.

Resources

Stockroom

Storage and stock rooms, especially those housing materials used for research.

Resources

Training & Professional Development

An extracurricular (not-for-university-credit) training or professional development opportunity. For example, the MCSR Computational Chemistry Camp; HR's Training on Demand; HR's STEPS Seminars; and the Library's Plagiarism Video.

Resources

Undergraduate Research Opportunity

A program, lab, or opportunity for undergraduate students to conduct research under the supervision of a faculty/researcher. For example, the Ole Miss Physical Chemistry Research Program.

Resources

Visiting Scholar

Resources

Edit Category

Edit Category

Edit Category

Edit Category

Edit Category

Categories: NEED is a new category in R2D1

Need

Edit Category

This category is for needs or gaps in capabilities, rather than actual resources we have. When using this category, only describe what we DO NOT CURRENTLY HAVE. "Need" is a secondary category associated with all Need Entries. The Resource Entry name should start with "Need for..." e.g., "Need for a Shared Instrumentation Facility"

Resources

Applications

An Application is a societal problem, challenge, or interest area to which a resource may be applied.

- Each Entry may be associated with zero to many Applications
- Associating an Entry with an Application allows:
 - ORSP and other central entities to quickly identify all resources/capabilities associated with an interest area
 - UM researches to find and collaborate with one another to address interdisciplinary challenges, and to organize and respond quickly to problem-based funding opportunities and current events (e.g., disasters)
 - Resources to be listed once, but described in customized, institutionally vetted/standardized ways to diverse stakeholders (economic developers, media, etc.)

Applications

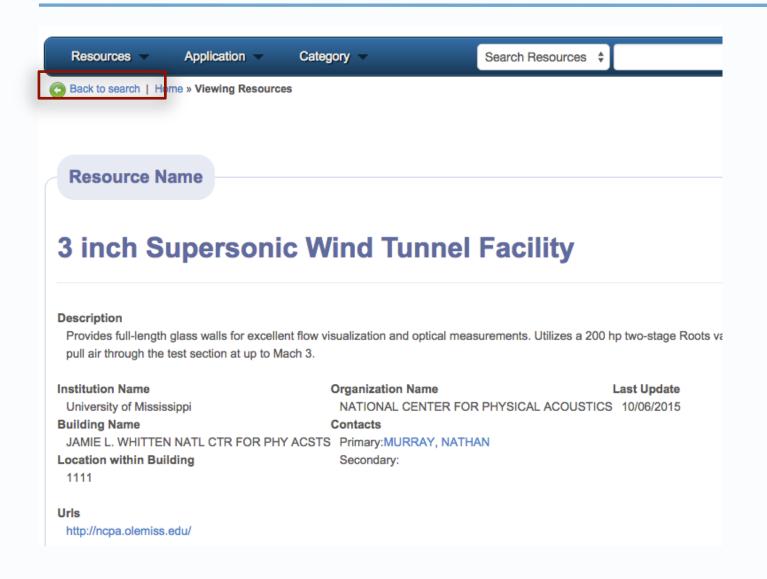
Application ▼ Category -Search Resources An Application refers to more general societal problem, challenge, or interest area to which a resource might be applied. [...] Advanced Manufacturing Leadership Advanced Networking Legal/Regulatory Materials Aerospace Agribusiness Media Mental Health Automotive Cancer Microscopy Mississippi Delta Child Welfare Childhood Nutrition Molecular Biology Creative Economy National Intelligence Defense and Security Obesity Diabetes Ocean Science **Digital Humanities** Outreach and Public Engagement Drug Discovery Povertv **Economic or Community Development** Race and Ethnicity **Energy Exploration and Development** Renewable Energy (DEPRECATED) Environment RESTORE ACT Environmental Chemistry Service Center Shared Use Opportunity Flagship Constellation - Big Data Flagship Constellation - Brain Wellness Ship Building Flagship Constellation - Community Space Exploration Wellbeing Special Research Strength Claim Flagship Constellation - Disaster Resilience STEM Education

54 Applications are currently defined in R2D1.

Including 4 UM Flagship
Constellation Themes

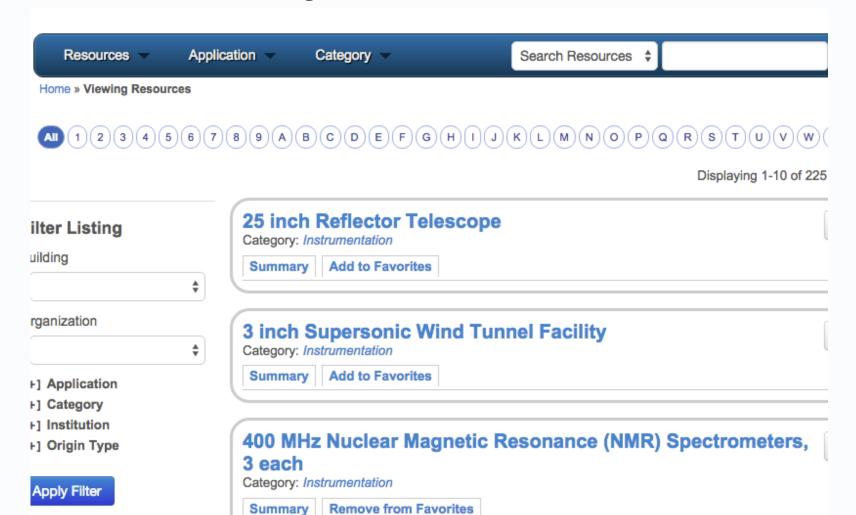
Contact ORSP to suggest new Applications.

To Go Back to Resource Listing: Back to Search

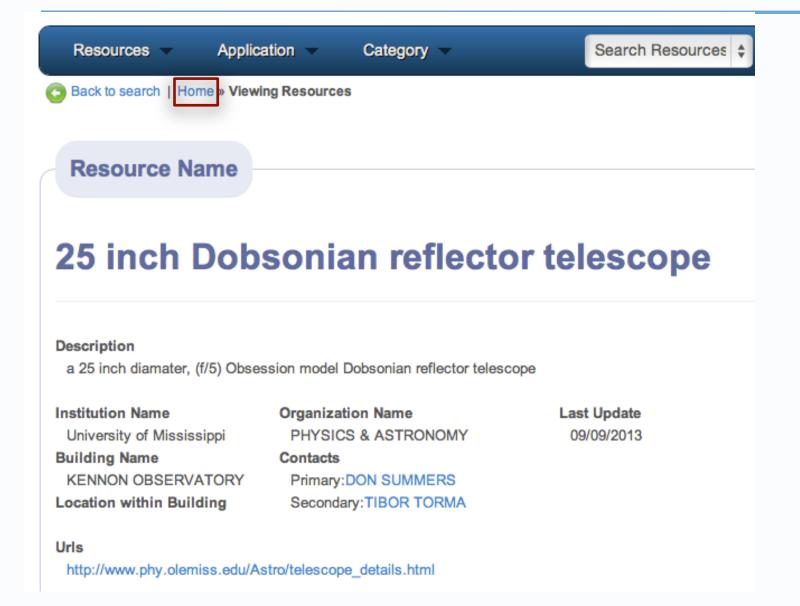


Back to Search

Takes you back to the listing you were viewing before you viewed the full listing.

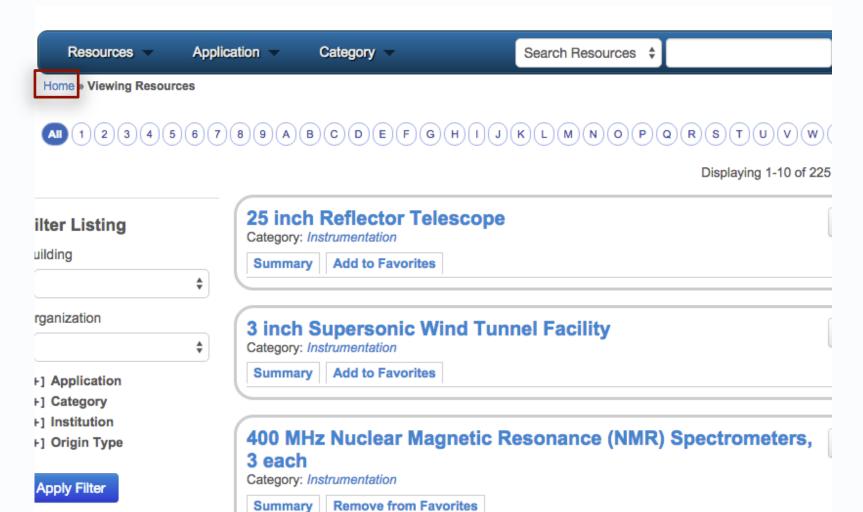


To Start Over: Home



Home

Forgets the listing you were looking at; takes you back to home page to view ALL RESOURCES, as if you just logged in.



Where Do Resource Directory Entries Originate?

Some entries are manually entered by R2D1 Users.

- Individual Faculty or Researchers who request admin accounts may enter/maintain entries for resources they control (such as an instrument or an outreach capability) or for which they are listed as primary or secondary points of contact.
- Designated Representatives employees on behalf of their departments, schools, centers, or administrative offices. For example, an assistant dean may enter resources on behalf of a school, or an admin. assistant may do so for a department. These designated representatives will often be listed as points of contact.
- ORSP Research Advocates ORSP Program Development Specialists may create/edit directory resource entries on behalf of, or in consultation with, their clients
- ORSP Management Team Director of Research Resources and Director of Sponsored Programs Administration can create/edit all entries.

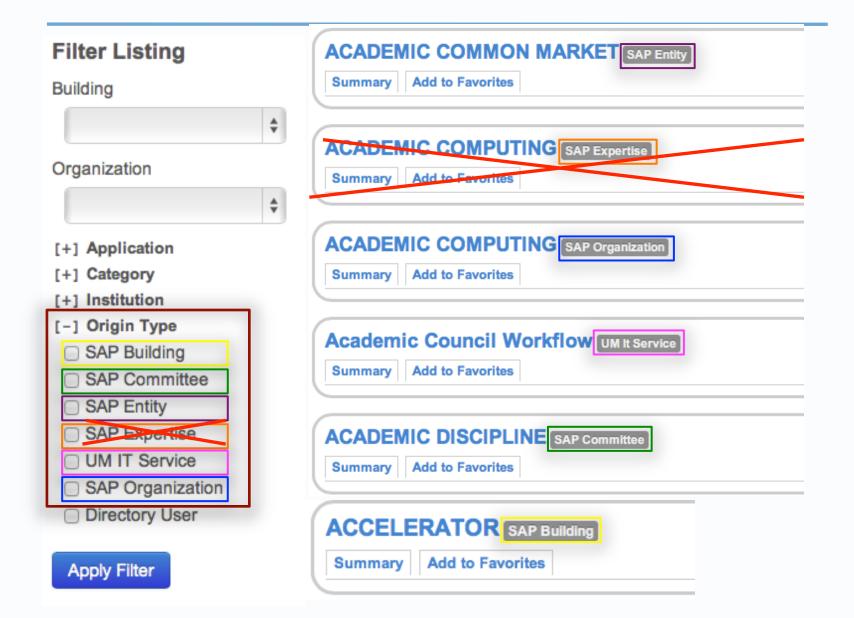
Where Do Resource Directory Entries Originate?

Many entries are pre-imported from SAP.

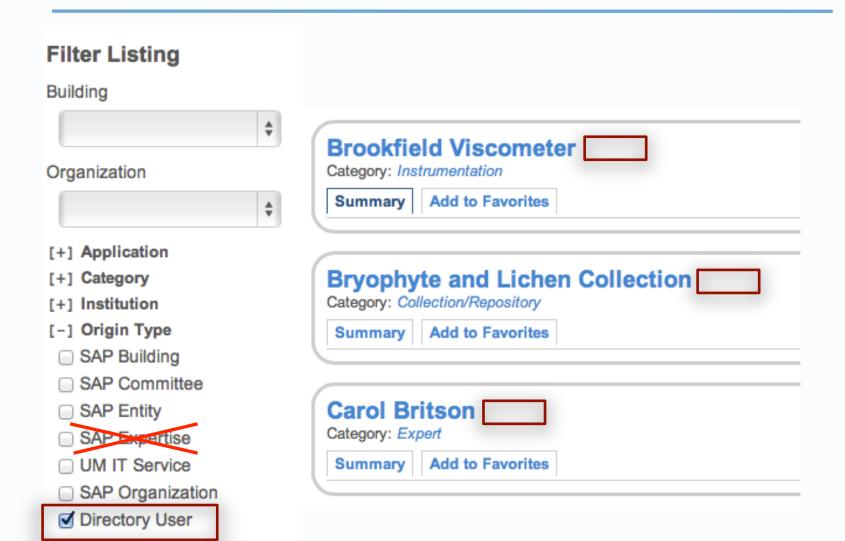
- Organizations Ex. Career Center; Center for Excellence in Teaching & Learning;
 Media & Public Relation; Staff Council. 289 Organizations
- Committees Ex. Accessibility; Graduate Council; Library Council; 236 Committees
- Buildings Ex. Barnard Hall; Data Center; Paris-Yates Chapel. 203 Buildings
- UM IT Services Ex. Analytics Reporting; Anti-Virus Software; Course Registration; myOleMiss; SPSS; Supercomputer Accounts; 168 Services.
- Expertise (from Faculty Experts Guide)
- Other Entities Ex. Allies; Elsie M. Hood Award; Green Initiative. 357 entities.

R2D1 administrative users may assign categories, applications, and other attributes to SAP-originated entries.

Origin Type: SAP



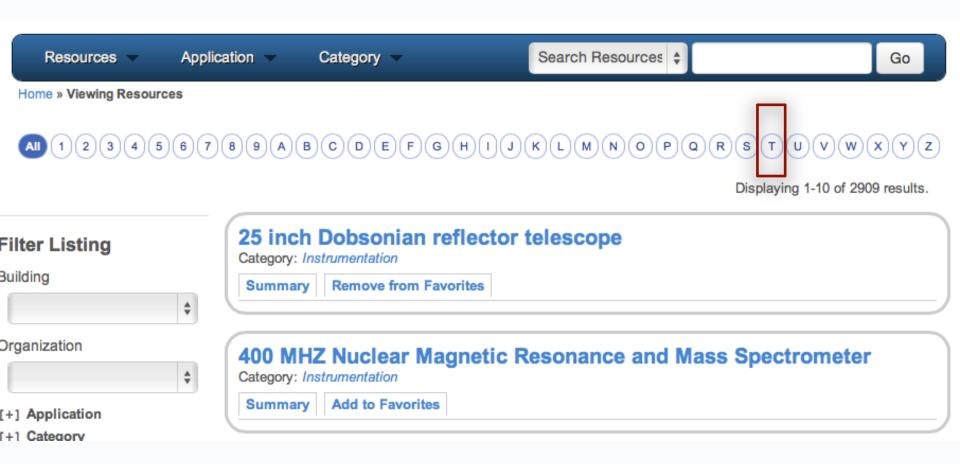
Origin Type: Directory User



Apply Filter

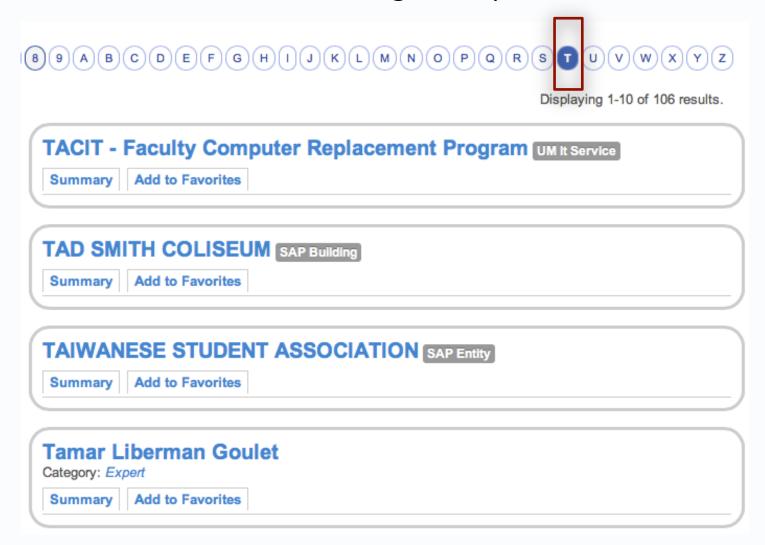
View Resources Staring with a Given Letter....

Click the letter if interest along the top row.



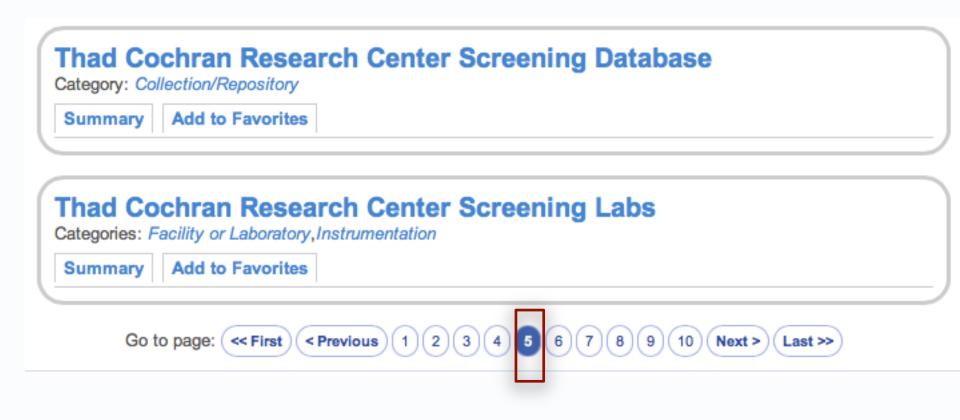
View Resources Staring with a Given Letter....

Click the letter if interest along the top row.



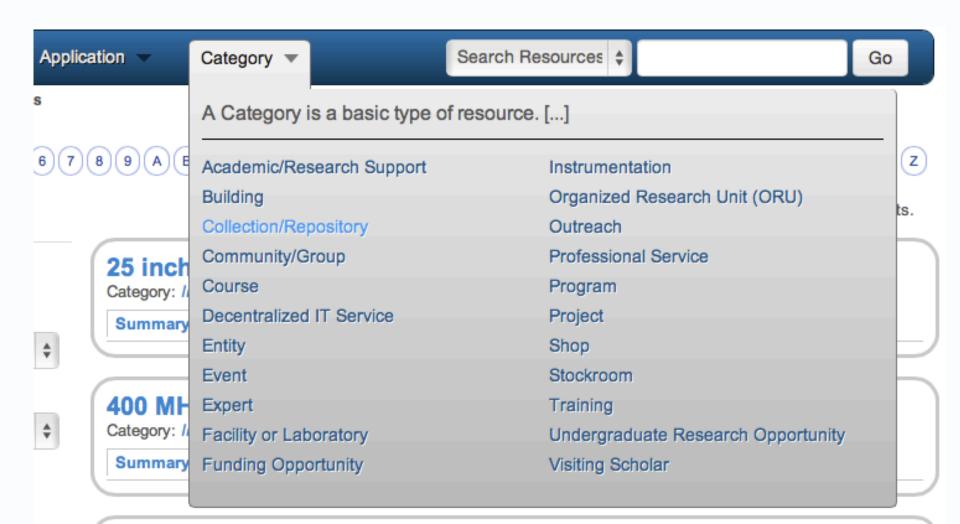
To Browse Forward or Backward within a Listing

Scroll to bottom of screen, and click the numbers or arrows.



View Resources by Category

Selected the desired Category from the Category Drop-down



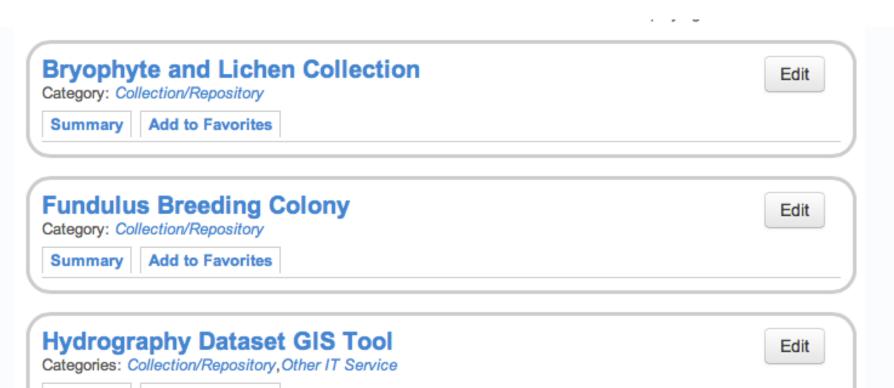
View Resources by Category

List will only include user-originated resource entries in that category (e.g. Collection/Repository).

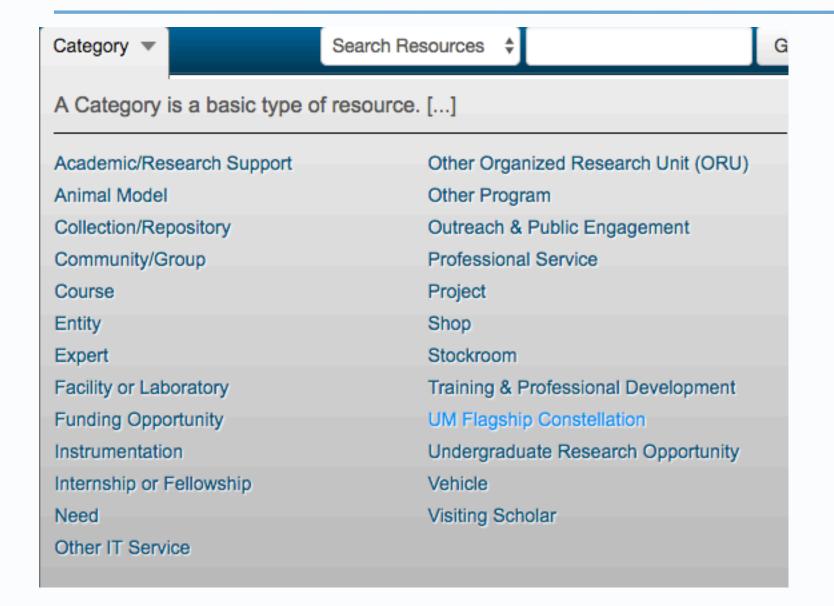
Categories

Collection/Repository

A physical or virtual collection of specimens, artifacts, data, etc. . For example, the Blues Archive, or the Pullen Herbarium.



View Resources by Category

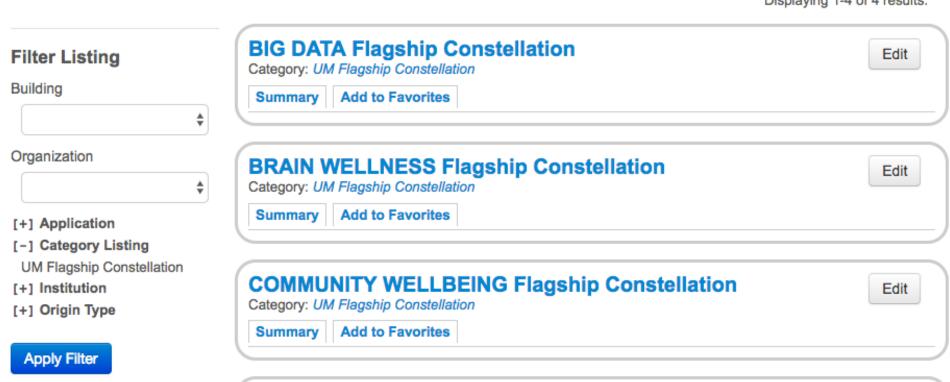


Categories

UM Flagship Constellation

Flagship Constellations are organized, interdisciplinary, intercampus groups formed to collaborate around a particular theme or societal grand challenge. Only the UM Chancellor has the authority to designate a new constellation. As of September 2017, there are four UM Flagship Constellations: 1) Big Data 2) Community Wellbeing 3) Disaster Resilience 4) Brain Wellness





DISASTER RESILIENCE Flagship Constellation

Category: UM Flagship Constellation

Edit

Show All Resources

View Resources by Application

Select the desired Application from the Application Drop-Down

Resources ~	Application ▼ Category ▼	Search Resources \$
Home » Viewing Resource	An Application refers to more general societal problem, challenge, or interest area to which a resource might be applied. []	
	Advanced Manufacturing	Mississippi Delta
	Art	National Intelligence
	Cancer	Obesity
Iter Listing	Defense and Security	Ocean Science
ilding	Diabetes	Outreach and Public Engagement
	Disaster and Emergency	Performance
	Drug Discovery	Poverty
ganization	Economic or Community Development	Recreation
	Energy Development	Renewable Energy
1 Application	Environmental Protection	Service Center
] Application	Gulf of Mexico	Smoking/Tobacco



An Application refers to more generate area to which a resource might be a

View Resources by Application

Advanced Manufacturing

Advanced Networking

Aerospace

Agribusiness

Automotive

Cancer

Child Welfare

Childhood Nutrition

Creative Economy

Defense and Security

Diabetes

Digital Humanities

Drug Discovery

Economic or Community Development

Energy Exploration and Development

Environment

Environmental Chemistry

Flagship Constellation - Big Data

Select the desired Application from the Application Drop-Down

View Resources by Application

Applications

Flagship Constellation - Big Data

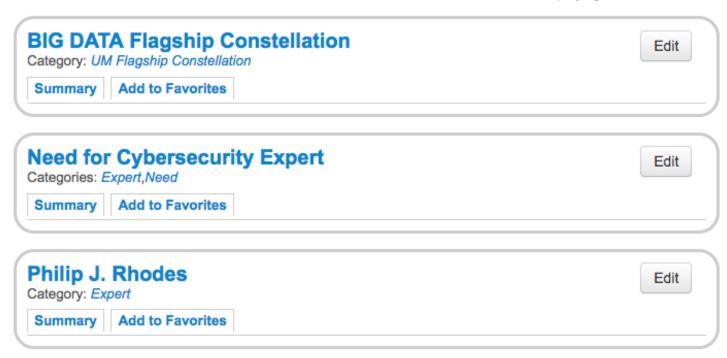
Is your resource or need applicable to solving the following Grand Challenge: Effectively harness and systematically analyze large amounts of data from disparate sources for a wide variety of purposes



Displaying 1-3 of 3 results.

Filter Listing Building Organization [-] Application Listing Flagship Constellation - Big Data [+] Category [+] Institution

[+] Origin Type



Search Directory for Resources

Type the search string in the text box beside the "Search Resources" drop-down, then click "Go".

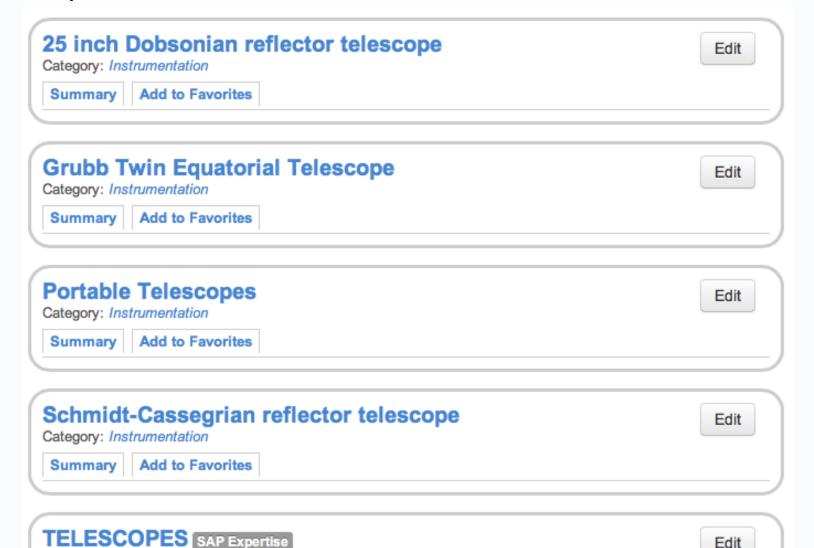
Search algorithm finds exact text matches, not concept matches.

So, to find listings with the word "telescope", "telescopes", or "telescopy", jus type the string with characters that are common to all three words: "telesco"

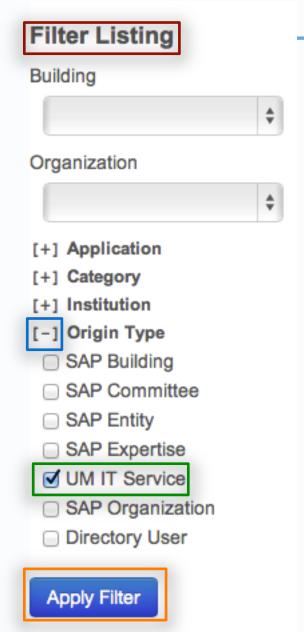


Search Directory for Resources

Only resource entries that match the search criteria will be listed.



View Resources by Origin Type



Find the Filter Listing section on the left.

Click the + beside Origin Type to see choices.

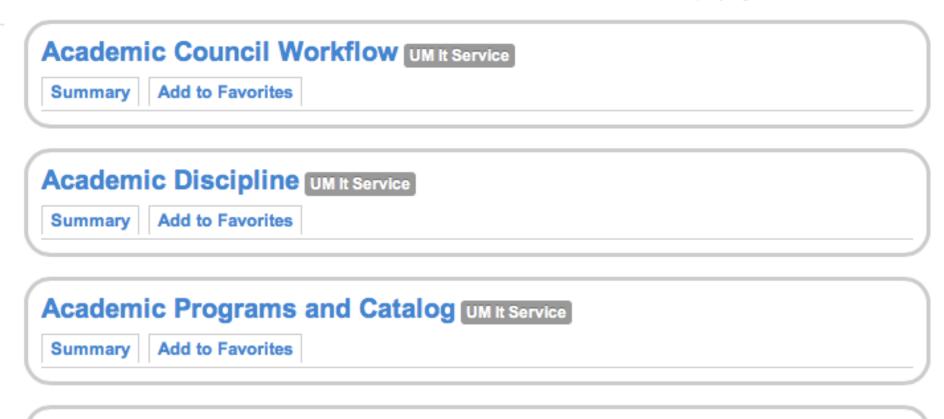
Select the Origin Type(s) to include in list.

Select Apply Filter.

View Resources by Origin Type

Only resource entries with the selected Origin will be listed.

Displaying 1-10 of 168 results.



Access or Reactivate Mathematica, MATLAB, SPSS, XWin32, or ChemDraw UM It Service

Summary Add to Favorites

Exercise Using Filters to Narrow the Listing

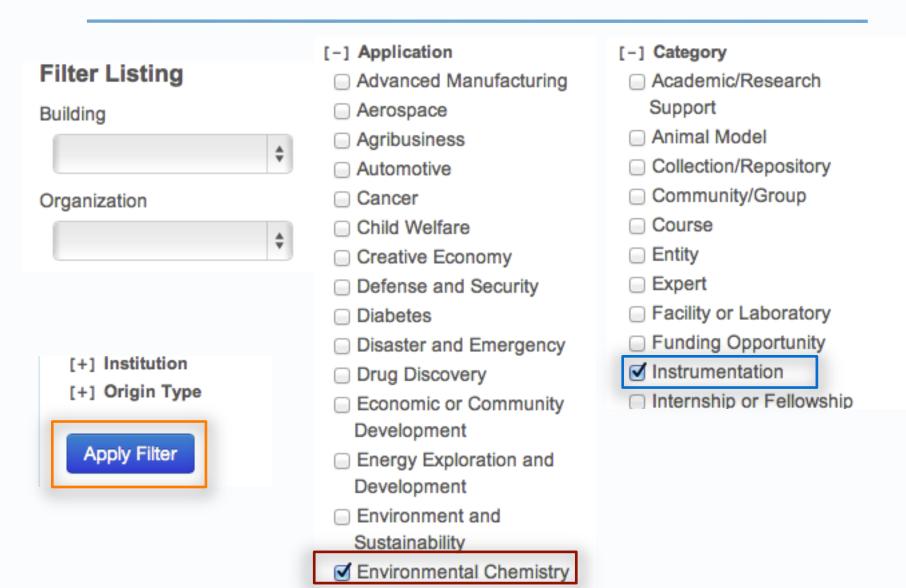
Assignment: View all resource entries in the

Instrumentation category

that have an

Environmental Chemistry application

Exercise Using Filters to Narrow the Listing



□ Candar

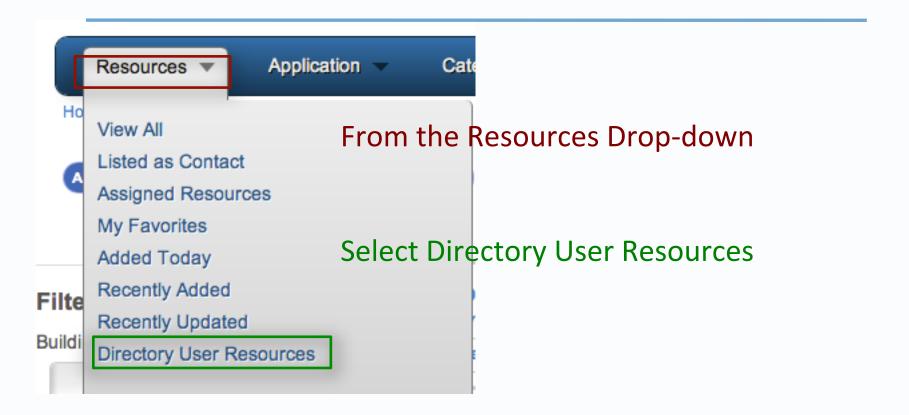
Exercise Using Filters to Narrow the Listing: Results

Displaying 1-7 of 7 results. Chromatograph, Ion, Dionex DX 500 Filter Listing Edit Category: Instrumentation Building Add to Favorites Summary Organization Elemental Analysis CHN Platform (Perkin Elmer 5400) Edit Category: Instrumentation Add to Favorites Summary [-] Application Advanced Manufacturing Aerospace Inductively Coupled Plasma Mass Spectrometer (ICP-MS), Edit Agribusiness Themo Fisher Element-XR Automotive Category: Instrumentation Cancer Add to Favorites Summary Child Welfare Creative Economy Defense and Security Inductively Coupled Plasma Mass Spectrometer (ICP-MS), Edit Diabetes Themo Fisher X-Series 2 Disaster and Emergency Category: Instrumentation Drug Discovery Add to Favorites Summary Economic or Community Development

Energy Exploration and

Davalanment

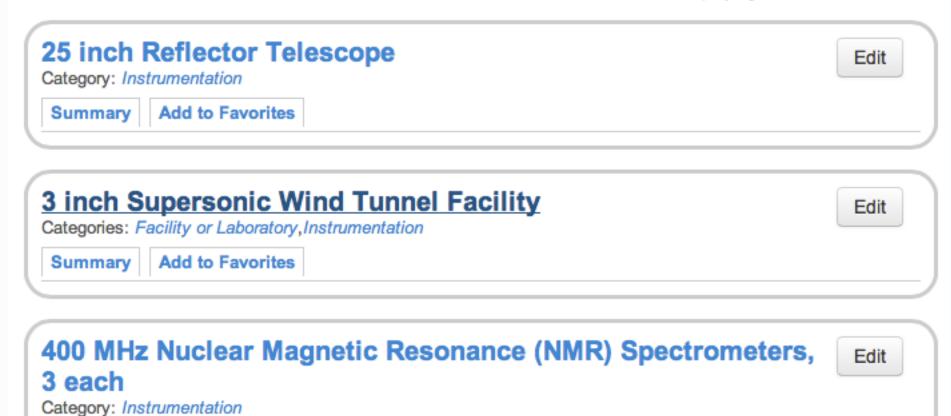
View Directory User Originated Resources



View Directory User Originated Resources

Only resource entries that have been created by R2D1 users will be listed (not SAP-originated entries.)

Displaying 1-10 of 492 results.



Summarv

Remove from Favorites

Search Directory for Resources: Exercise

Search for yourself in the directory.

- Click Home to view all entries.
- Type your last name in the search field.
- Click Go.

Did you find yourself? If so, edit your entry.

If not, add a Resource Entry for yourself with the Category

Expert

Add a New Resource

Select "Add Resource"

UM Resource Directory Home Manage Add Resource

Resources Application Category

If you don't see an "Add Resource" link near the "Home" link, contact your ORSP Research Advocate and request to have your Webld/account authorized as an R2D1 Administrators.

Creating Resource

Fields with * are required.

Save

Resource Name *

Enter a short, descriptive name, general a noun phrase.

Description

Description should not just be a repeat of the name, but should provide additional details, including any key words that you want to be able to search on.

Url

Type the Web address of the "web page of record" for this resource. For instance, a departme

Institution *

University of Mississippi



Add/Edit a Resource: Entering attributes

Search Organizations Organization	Select the department, school, center, or office that is in charge of this resource.	
Select Organization	*	
Contacts	Contacts are the people who should be contacted to inquire about or request access to the resource.	
	They will also have <i>edit privilege</i> s for this resource in R2D1.	
Search for Primary		
Primary Contact		
Select Primary	Primary will often be the faculty member or administrator most directly responsible for the resource.	
Search for Secondary		
Secondary Contact	Secondary will often be a staff member or administrative support person who has been <i>authorized and designated to edit resources</i> behalf of an entire department, center, or school.	
Select Secondary		

Contacts are listed alphabetically by last name. If the contact you are looking for is not there, contact your ORSP Research Advocate and request that they be added.

Add/Edit a Resource: Entering attributes

Location Details

Search Buildings

Building

If applicable, select the building where this resource, or the person/unit responsible for it, resides.

Select Building



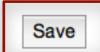
Location within Building

Enter the floor or room number where this resource can be found, if applicable/appropriate.

Acknowledgements

resource was paid for in part by a grant, donation, etc

For example, "This instrument was made possible by a donation from John and Jane Smith"



Remember to click Save.

Add a New Resource: Selecting categories

□ Training & Professional Development

An extracurricular (not-for-university-credit) training or professional development opportulity

Training on Demand; HR's STEPS Seminars; and the Library's Plagiarism Video.

□ Undergraduate Research Opportunity

A program, lab, or opportunity for undergraduate students to conduct research under the Physical Chemistry Research Program.

□ Visiting Scholar

Remember to click Save.

Add/Edit a Resource: Editing applications

Acknowledgements

Edit Applications

Applications

Advanced Manufacturing

Novel materials characterization for use in extreme work environments

Energy Exploration and Development

Novel thermoelectric materials with the ability to turn a temperature gradient into electrical power with no moving parts.

Materials

Novel materials characterization for use in extreme work environments.

Transportation

Edit Categories

Categories

Expert

A faculty, staff member, or even a student, who has demonstrable competence or expertise in an area of potential interest or benefit to a larger

Applications

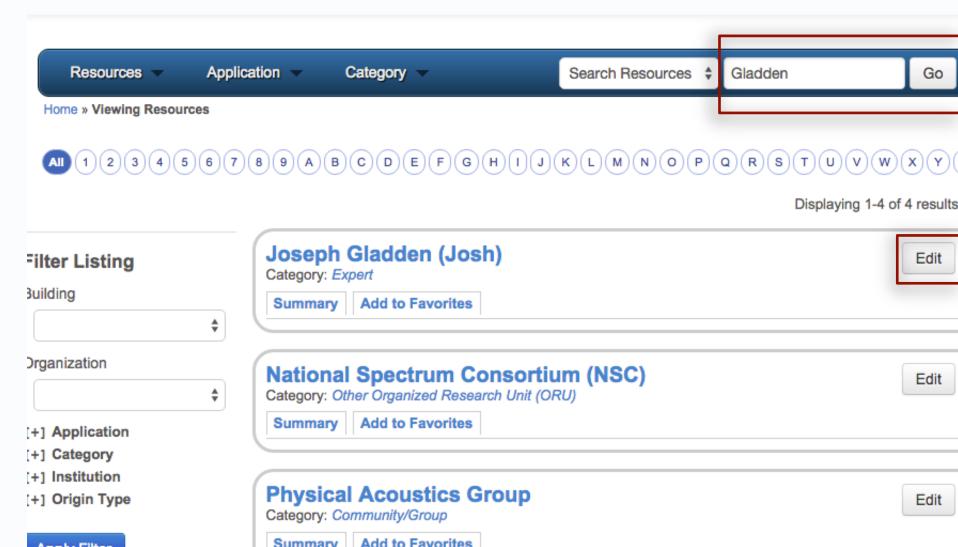
Applications are a way of associating resources with a variety of societal problems, challenges, or broad (interdisciplinary) interest areas they might contribute to.

Applications may be used to:

- Institutional respond to external requests about capabilities:
 Ex. "Please tell us all of UM's capabilities related to Oil Spill research and remediation".
- Organize institutional responses to proactive approaches to crosscutting issues:
 - Ex. Putting together a team and/or proposal to investigative innovative approaches to treating depression, cancer, obesity, etc.

Edit an Existing Resource

Search to find the resource in the listing and click "Edit"



Edit a Resource

Attributes

Application

Category

History

Search Hits

Change Status

Joseph Gladden (Josh)

Fields with * are required.

Save

Resource Name *

Joseph Gladden (Josh)

Description

Associate Professor of Physics, Director of the National Center for Physical Acoustics, Interim Associate Vice Chancellor for Research and Sponsored Programs, & Materials Physics Group Leader at NCPA. Dr. Gladden is an expert in acoustic methods to answer fundamental materials physics questions. His research projects have focused on mechanical properties in extreme environments such has high temperatures and pressures using resonant ultrasound spectroscopy. Recent project include verification of a theoretical prediction for metallic hydride systems and critical phenomena in novel thermoelectric such as silicon germanium, lanthanum telluride, and strontium titanante, as well as development of

Edit a Resource: Selecting applications

Attributes

Application

Category

Anechoic Jet Laboratory at NCPA

APPLICATIONS

Advanced

Manufacturing

Cancer

Creative Economy

Defense and Security

Diabetes

Disaster and

Emergency

Drug Discovery

Economic or

Community

Development

Energy Development

Advanced Manufacturing [back to top] [Save All Changes]

Assign to Resource

UNKNOWN

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Cancer [back to top] [Save All Changes]

Assign to Resource

UNKNOWN

Edit a Resource: Selecting applications

Defense and Security [back to top] [Save All Changes]

Assign to Resource



Application Suggested Description

The anechoic jet laboratory at NCPA can be used to evaluate of temperature effects on supersonic jets including military jets, and for designing and machining better nozzles for jet engines. Can also be sued for characterizing jet noise and thereby informing the design of military jets that are less noisy. This laboratory can also be used to measure the aerodynamic properties of tiny model projectiles in order to inform the modeling and design of more aerodynamic military missiles.

Edit a Resources: Selecting applications: saving

Renewable Energy [back to top] [Save All Changes]

Assign to Resource



Application Suggested Description

The anechoic jet laboratory at NCPA can be used to inform the creation of more aerodynamic and there for more energy-efficient jets and missiles that.

Applications

Applications should be chosen thoughtfully and descriptions composed using language that will be understandable by the target audience/community.

For Expert entries, you might want to list a few recent publications/products relevant to the Application .

ORSP administrators will review and collaboratively edit the suggested language to ensure that:

- It is understandable to a non-technical audience
- It uses terms recognizable by those knowledgeable about the issues
- It is technically accurate

Includes 7 Target Industries of the Mississippi Development Authority (MDA)

- Advanced Manufacturing
- Aerospace
- Agribusiness
- Automotive
- Energy
- Healthcare
- Shipbuilding

Edit a Resource: Editing categories

Attributes Application Category

Save

Academic/Research Support

A service available to UM researchers, faculty, or students. For example, tutoring, grant reviews, or writing consultation.

Collection/Repository

A physical or virtual collection of specimens, artifacts, data, etc. . For example, the Blues Archive, or the Pullen Herbarium.

Community/Group

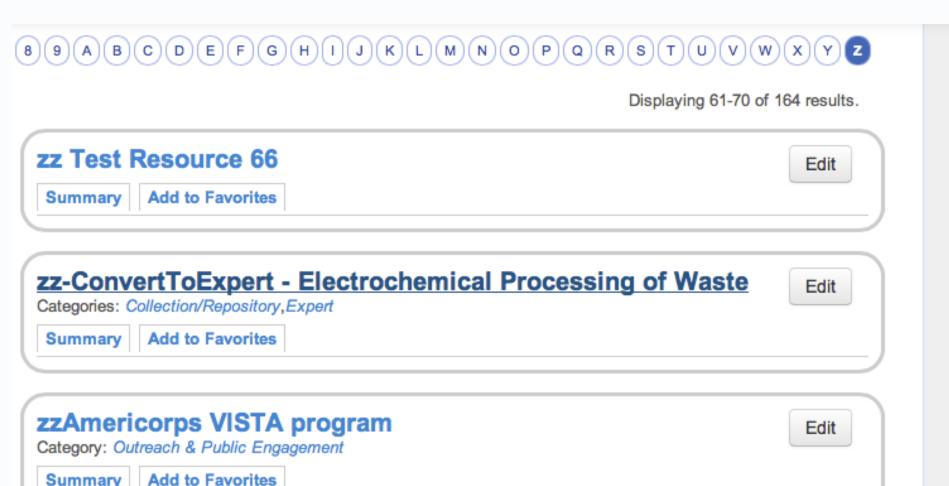
A formal or informal group of people organized for a common purpose. For example: the STEM Living Learning Community, the Research Group, or the UM Climate Change Study Group. [NOTE: Names of individuals should NOT appear in the resource redescription.)

Course

An academic course of interest beyond the offering department, such as a course offered for credit towards more than one pr

Z-Resources

Resources entries whose names begin with the letter "z" have names, descriptions, attributes, categories, or applications have been entered by an R2D1 novice and need to be "approved" by an R2D1 "expert"



Example

Reuters news article on 2/24 says GE plans to spend another \$10B on energy research by 2020 to advance waterless fracking and gas turbine efficiency.

Exclusive: GE to spend another \$10 billion on energy research by 2020

BY ERNEST SCHEYDER

Mon Feb 24, 2014 6:12am EST





General Electric employee Jim Jones assembles a GE90 engine at the GE Aviation Peebles Test Operations Facility in Peebles, Ohio, November 15, 2013.

CREDIT: REUTERS/MATT SULLIVAN

Example #2

US Hospitals Have Had 68 Ebola Scares, CDC Says

Aug 20, 2014, 10:23 AM ET
By SYDNEY LUPKIN via WORLD NEWS



Example of Using R2D1

WATERLESS FRACKING

GE wants to explore how to use economically use CO2 (or propane) instead of water for fracking

- collect CO2 at the wellhead, recycle it, frack again, and repeat
- A key challenge will be to help the CO2 carry proppant, a type of sand that holds open the cracks in rock so oil and natural gas can escape, much like water does in current methods.

GAS TURBINE EFFICIENCY

- GE also wants to boost the efficiency of its natural gas-powered turbines to 65 percent from today's 62 percent.
- The company believes its existing research into jet engine efficiency could help significantly reach this goal
- The company plans to study how to make wind turbine blades cheaper and more efficient through the use of different composite materials

Use

Look for resources from your area. If they are not there, create them (or contact your ORSP Research Advocate/ Program Development Specialist). If they are wrong/ incomplete, fix them, or contact your Research Advocate.

E-mail Jason Hale (jghale@olemiss.edu) to:

- Report bugs
- Request enhancements
- Ask questions