

# Open Access and Data Management

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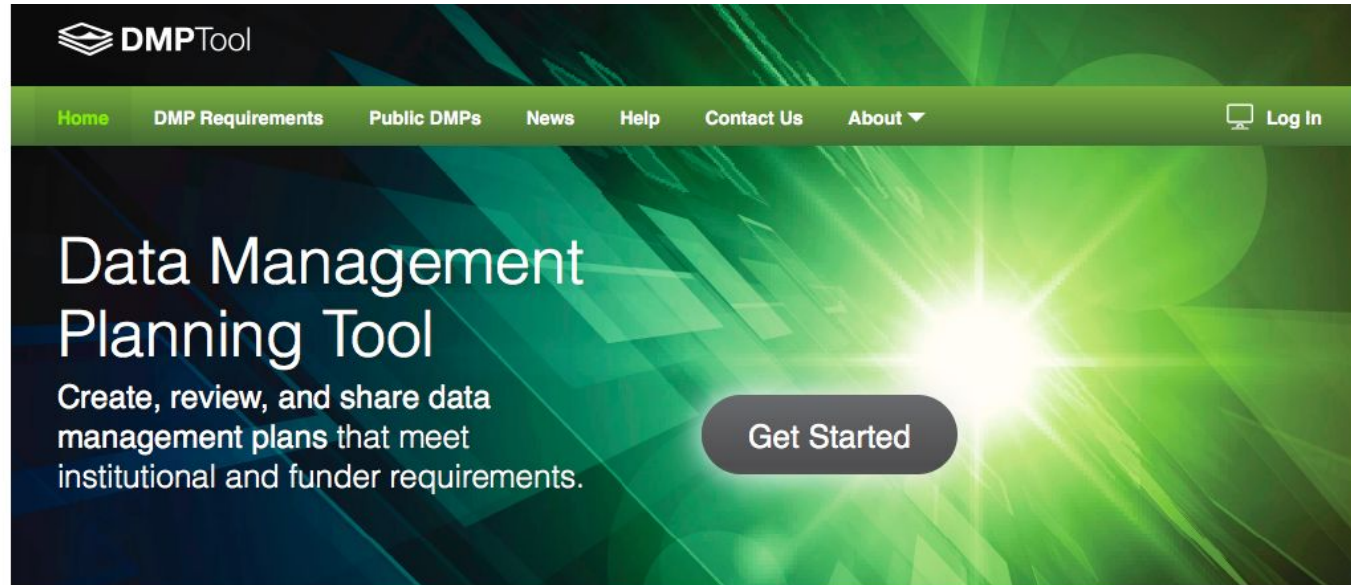
# Virginia Tech Libraries, Research and Informatics

- Offering critical new digital services in support of the creation, management, sharing, and preservation of digital data and scholarship
  - Data Management and Sharing
  - Data Education
  - Digital Library Development
  - Technology Development
  - Open Access Publishing
  - Open Education
  - Digital Imaging
  - Digital Scholarship Projects
  - Digital Preservation

# Data Management & Sharing

- Data Services (9 FTE) and Digital Library Development (6 FTE) Teams
- Preparing a data management plan
- Archiving and publishing datasets in VTechData
- Developing data infrastructure
- Offering data education opportunities
- Supporting discipline-focused data and informatics projects
  - Sustainable software development
  - Data modeling, manipulation, visualization, and analytics
  - Preparing data for repository deposit
  - Transforming data for reuse

# Preparing a Data Management Plan



**DMPTool**

Home DMP Requirements Public DMPs News Help Contact Us About Log In

## Data Management Planning Tool

Create, review, and share data management plans that meet institutional and funder requirements.

[Get Started](#)



PUBLIC DMPs

List of sample data management plans provided by DMPTool users.

» [UNDERSTANDING THE ROLE OF PHYSICIAN](#)



DMPTOOL NEWS

Latest information about data management and the DMPTool.

» [Roadmap retrospective: 2016](#)



DMPTOOL HELP

Overview of how to use the tool, plus resources and guidance on data management.

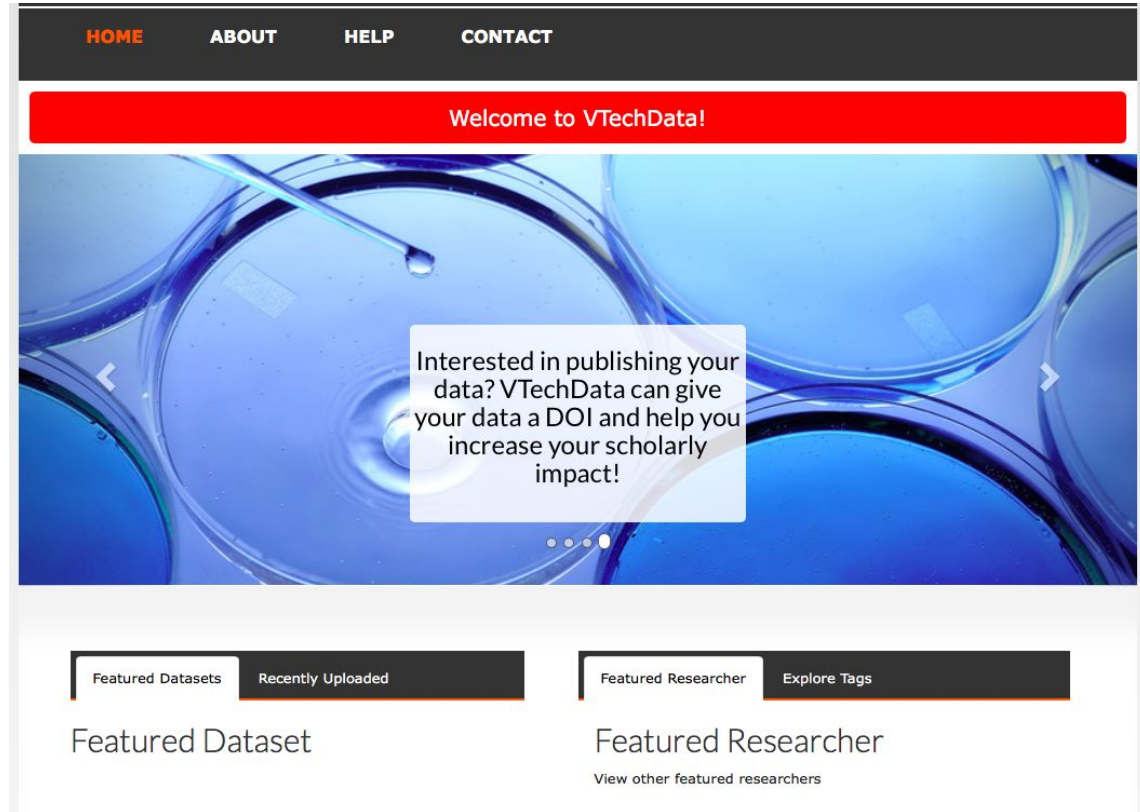
» [Frequently Asked Questions](#)

<https://dmptool.org>

# Archiving, Sharing, and Citing Data

- Practicing data sharing
  - re3data.org
  - VTechData
  - Publishing data papers
- Understanding the benefits of sharing
- Guidance on data citation

<https://data.lib.vt.edu>



The screenshot shows the homepage of the VTechData website. At the top, there is a dark navigation bar with the links 'HOME', 'ABOUT', 'HELP', and 'CONTACT'. Below this is a red banner with the text 'Welcome to VTechData!'. The main content area features a large blue-tinted image of petri dishes with a pipette tip. A white text box is overlaid on the image, containing the text: 'Interested in publishing your data? VTechData can give your data a DOI and help you increase your scholarly impact!'. Below the image, there are two sections: 'Featured Datasets' and 'Recently Uploaded' on the left, and 'Featured Researcher' and 'Explore Tags' on the right. The 'Featured Dataset' section is partially visible, and the 'Featured Researcher' section includes a link to 'View other featured researchers'.

# Developing Data Infrastructure

- Advanced Research Computing's archival storage environment
- Library Cyberinfrastructure project (PI: Zhiwu Xie)
  - \$308, National Leadership Grant, IMLS LG-71-16-0037
  - Virginia Tech (Libraries, Computer Science, Mechanical Engineering)
  - Goals: developing a data infrastructure strategy that supports big data sharing and reuse
    - ARL/AAU/APLU SHARE open dataset of research release events
    - Digital Library Research Laboratory's Event Digital Library and Archive
    - Smart Infrastructure Laboratory's Goodwin Hall project
- VT Github project
- Geoblacklight implementation
- Open Science Framework

# Programs & Community Development - Data

- Big data and data management workshops
- Course-embedded data skills instructional sessions
- Credit-bearing data courses
- Curriculum design and planning



Thursday, January 12, 2017 from 9 a.m. - 4:30 p.m.

Newman Library Multipurpose Room

RSVP: [goo.gl/rNwpum](http://goo.gl/rNwpum)

Tags: Big Data, Reproducible Research

Categories

In an era of Big Data, reproducible research and efficient workflows become vitally important to the research process. How do researchers handle large datasets? What skills do graduate students need to become big data analysts? Join the [University Libraries](#) and [Advanced Research Computing](#) at Virginia Tech, and the [Center for Open Science](#) on January 12, 2017 for a workshop and discussion on Big Data and Data Science.

- [Data Curation Projects](#)
- [Data Services](#)
- [Scholarly Communication](#)
- [Technology Development](#)

# Open Access (OA) & Publishing

- Scholarly Communication (7 FTE) and Publishing (3 FTE) Teams
- Supporting collaborative writing and OA publishing
- Archiving and publishing works of scholarship in VTechWorks
- Offering scholarly publishing programs
- Supporting publishing and digital humanities projects
  - Developing new Open Educational Resources
  - Developing new digital collections
  - Preparing materials for repository deposit
  - Preserving web archives



# Supporting Collaborative Writing & OA Publishing

- Overleaf trial
  - Journal and OA repository templates
  - Exploring custom ETD template
- OA Journals, Proceedings, Books
- Open Access Subvention Fund
  - \$86,000 awarded FY 2015/16
  - 63 articles supported
  - 172 unique VT authors
- ARL/AAU/AAUP Open Access Monograph Publishing Initiative
- Open Educational Resources Faculty Grant Program

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## Thermodynamics



[About](#)   [Chapter 1](#)   [Chapter 2](#)   [Chapter 3](#)   [Chapter 4](#)   [Chapter 5](#)   [Chapter 6](#)   [Steam Property Tables](#)

### About

*This online textbook was developed during the summer of 2014 and is no longer being actively developed.*

My Dear Students,

It is my pleasure to introduce you to this new web-based, open educational resource for the AME 2213 Thermodynamics course. I hope our summer project will be helpful to you as it will enable you to have free access at any time and place to the course materials and improve your learning environments by offering you global experience. To create this resource I was supported by **The University of Oklahoma Library's Open Educational Resources initiative**, specifically Ms. Stacy Zemke who funded the project, educated us on the variety of licenses for open educational resources, and help us identify some of the materials. While I worked for the second part of this project remotely from my parents' house in Bulgaria, my two students – Brian Wanezeck and Gene Ilichev helped me tremendously to finish the project before the beginning of the semester. Cody Taylor too helped create and organize the webspace. Finally, I would like to express my appreciation to **Professor Urieli** who four years ago created one of the **first web-based educational resources for Thermodynamics**. With his permission we used extensively his material here. I deeply value his expertise, pedagogical approaches, and teaching philosophy and I will continue to follow his advice and his presentations in the field and the community. Your input is very important and welcome as I believe it will improve the quality of this educational resource.

<http://opentext.lib.vt.edu/thermodynamics/>

# Archiving and Publishing in VTechWorks

- Practicing Green OA Publishing in VTechWorks
  - Nearly 60,000 items
  - 5 million record views FY1516
  - 9 million file downloads FY1516
  - Integration with Elements-based Faculty Activity Reporting System
    - +1000 deposits since fall 2016
- Guidance on OA publishing and related issues
- Understanding the benefits of sharing

<https://vtechworks.lib.vt.edu>



## VTechWorks

VTechWorks publicizes and preserves the scholarly work of Virginia Tech faculty, students, and staff: journal articles, books, theses, dissertations, conference papers, slide presentations, technical reports, working papers, administrative documents, videos, images, and more. Write [vtechworks@vt.edu](mailto:vtechworks@vt.edu) to get help adding your content to VTechWorks or visit the [Open@VT blog](#) to learn about current VTechWorks activities.

Want to publish a standalone dataset? Visit [VTechData](#).

NEWS: Faculty can now deposit items to VTechWorks from the Electronic Faculty Activity Reporting System (EFARS). Visit the Provost's [EFARS page](#) to learn more and to log in to EFARS.

Want to see historical data on VTechWorks usage and content? See our spreadsheet of [VTechWorks Stats](#).

## Communities in VTechWorks

[Biocomplexity Institute of Virginia Tech](#) [186]

[College of Agriculture and Life Sciences \(CALS\)](#) [4408]

[College of Architecture and Urban Studies \(CAUS\)](#) [282]

[College of Engineering \(COE\)](#) [2469]

[College of Liberal Arts and Human Sciences \(CLAHS\)](#) [210]

# Programs & Community Development - Scholarship

- Workshops on Open Access, copyrights, fair use, open education, publishing, altmetrics, researcher identifiers, and researcher profile systems
- Course-embedded scholarly communication skills instructional sessions

<http://www.lib.vt.edu/openaccess/>

## Open Access Week 2016

October 24th - 30th

Click on the titles below to learn more about each scheduled event.

### **Ubiquity Press: A Platform for Open Publishing**

Monday, October 24, 10:00 A.M.-11:15 A.M., Newman 207A

### **For the Public Good: Research Impact and the Promise of Open Access (Forum)**

Monday, October 24, 6:30 P.M.-8:00 P.M., Torgersen 1100

### **Where Can I Post My Publications? VTechWorks, ResearchGate, and other options**

Tuesday, October 25, 12:30 P.M.-1:30 P.M., Torgersen 1100

### **Publishing Services at Virginia Tech**

Wednesday, October 26, 11:30 A.M.-12:30 P.M., Newman 426

### **Access to Research in South Africa**

Wednesday, October 26, 2:30 P.M.-3:30 P.M., Library Multipurpose Room

### **Scholarly Publishing Trends: A Conversation**

Thursday, October 27, 12:30 P.M.-1:30 P.M., Torgersen 3080

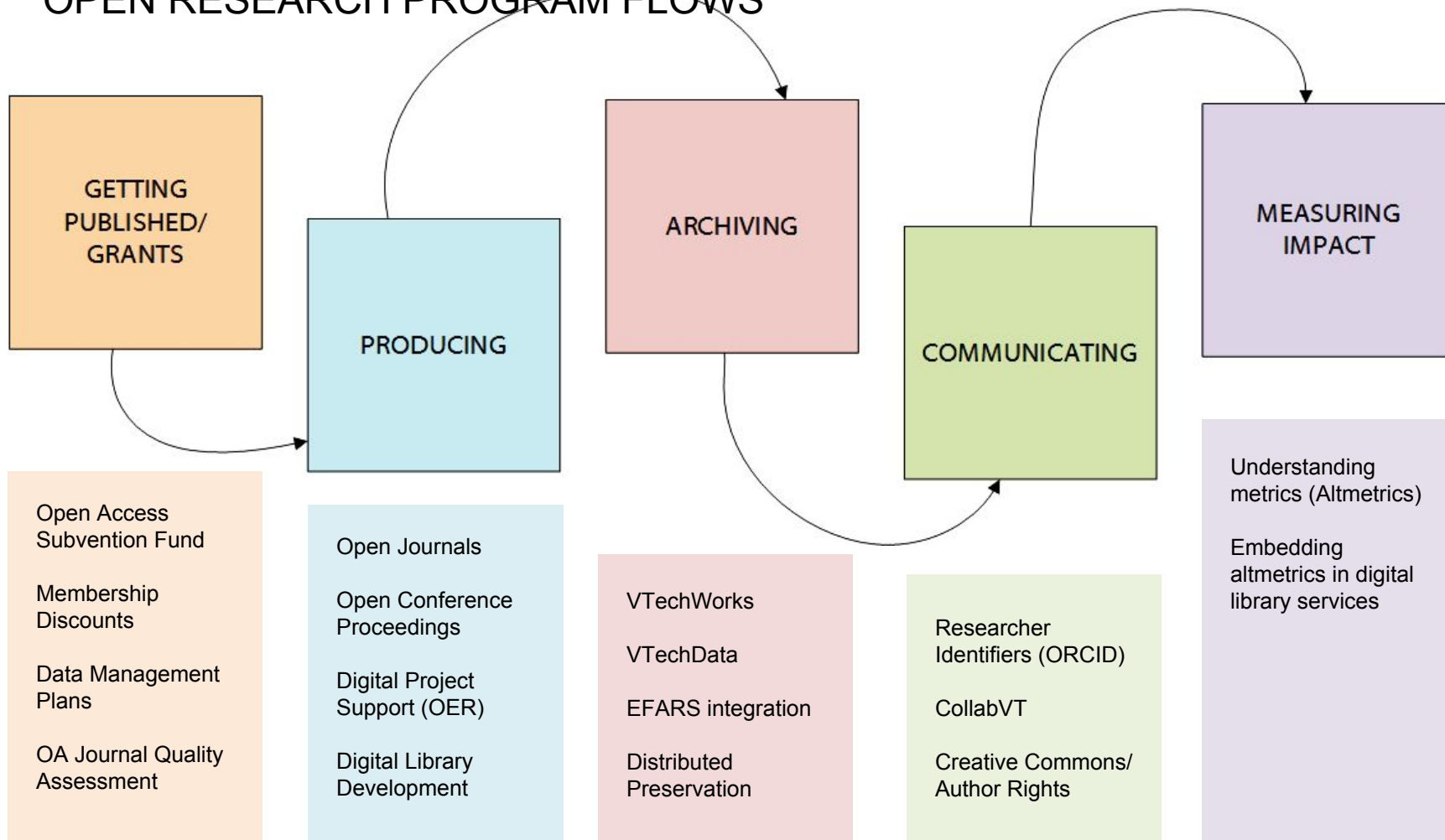
### **\$100,000 Available to Publish Journal Articles**

Friday, October 28, 2:30 P.M.-3:30 P.M., Newman 426

# Digital Preservation Services

- Web archiving - ArchiveIT
- Digital preservation communities
  - MetaArchive
  - Academic Preservation Trust
  - Digital Preservation Network

# OPEN RESEARCH PROGRAM FLOWS



jspeer@vt.edu