

Data Management Plan

Expected Data: The data also include the experimental setup and data analysis methods. These data are to be prepared and published promptly in the form of peer-reviewed journal articles, conference papers, thesis, and other print or electronic publishing formats.

Data Formats: Most data will be in Excel, MS word, and pdf format. The modeling and algorithms will be in Matlab. Computer source codes will be in FORTRAN or Matlab form. The system design drawings will be SolidWorks or Inventor format. The test data will be in comma separated values (.csv) format. The finite element simulation will be in COMSOL and/or ANSYS formats.

Period of Retention: Data will be retained for a minimum of three years after conclusion of the award or three years after public release (publication), whichever is later. Data related to a student's research work will be retained for at least three years after the degree is awarded. Data that support patents will be retained for the entire term of the patent.

Data Storage and Preservation: Published data will be available in print or electronically from publishers. All data will also be stored electronically in computers installed redundantly at the offices of the PIs and graduate students at the PIs' campus. The analyzed data will be stored in the servers of the PIs' campus and library.

Sharing and Access of Data: All data created during the course of this project will be made freely available, subject to the policies of UNT for the disclosure of patents. Data relating to patentable devices will be subject to review by the appropriate offices of technology transfer before being released to the public. Specific approaches for data sharing are through the following three activities:

- 1) *Publications:* The results of the research performed under this proposal will be disseminated promptly through publication in research journals and conference presentations. Published data such as articles, dissertations and book chapters are accessible from publishers or upon request to the senior and student researchers involved.
- 2) *Websites:* The PI also plans to create a website hosted on the server at UNT. The data and results from this study will be disseminated on this web-based infrastructure to ensure archiving and rapid transfer of data to interested people. We will also give access of the websites to public for comments and suggestions for the research notes. We will post the videos and webinars of this project on the website we create.