

Standards for Engineering Materials Data

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Business sector demands for greater productivity and efficiency, government legislation on data access, increased public accountability, publishing house policy on data retention, and funding agency stipulations for well-formulated data plans, all place greater pressures on the scientific and technical community to manage data more responsibly. Coupled with the emergence of new publishing paradigms such as enhanced publications and data citation, real incentives exist for embedding data management into the mainstream research process. For this to become a reality, underlying technologies for preserving and exchanging data are needed. In the engineering materials sector, the absence of any widely accepted means to record and exchange data has led to recent initiatives that aim to deliver Standard messaging formats for materials data. Building on work that has demonstrated the feasibility of using materials testing Standards as specifications for corresponding data formats, efforts are now focused on defining simple descriptions of materials and corresponding data formats as a means to realize the full potential of materials data.

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