Corrosion

Environmental Degradation of Additively Manufactured Alloys

Over the past ten years, Additive Manufacturing (AM) has grown and expanded throughout different areas of application. A lot of effort has been focused on the processing parameters and powder quality to improve the mechanical properties of additive manufactured materials. These materials often possess significant differences in microstructure as compared with more traditionally produced materials. Given these microstructural differences, evaluation of environmental degradation of additively-produced materials is essential for the prediction of performance and life in harsh environments. Additively processed structural materials could potentially be used in aviation, space, marine, and industrial applications.

This symposium welcomes contributions that will foster discussion of how additively produced materials degrade in:
- Corrosive environments
- High-temperature, oxidizing environments
- Harsh environments while under mechanical stress
- High-radiation environments

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