

Microstructural characterization of long term thermally aged reactor pressure vessel steels

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The local electrode atom probe has been used to characterize the microstructure of reactor pressure vessel steels that have been thermally aged at 288C for extended periods to ascertain whether any fine scale precipitates are present and to characterize their composition, size and number density. The large volume of analysis and high data acquisition rate of the LEAP enables a distribution of ultrafine precipitates with a low number density to be detected.

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