

Applications of XRD at Ford Motor Company

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Ford Motor Company routinely uses X-ray diffraction to solve complex materials challenges. In our laboratory, we use X-ray diffraction in ambient and non-ambient conditions to characterize exhaust catalysts, battery electrodes and electrolytes, prototype engine components, and polymeric structural components. X-ray diffraction has also served as a valuable tool for troubleshooting manufacturing challenges. Outside our laboratory, partnerships with universities and national laboratories allow for access to in-situ and operando data otherwise unattainable.

This talk will give insight on how scientists and engineers use X-ray diffraction techniques to solve real-world industrial problems. An overview of the scientific capabilities will be provided and multiple use-cases will be presented.