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Use of hydrogen in European Industry – A Summary of IFRF TOTeM 48

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Abstract

With the European Union targeting increased use of hydrogen across the EU economy as part of its greenhouse gas emissions reduction goals, researchers and developers within Europe are exploring the use of hydrogen for industrial combustion. At the International Flame Research Foundation's 48 Topic Oriented Technical Meeting (TOTeM) in Paris in November 2022, a range of presenters shared their work on the use of hydrogen in industry within Europe. This work covered combustion characteristics, NO_x formation, safety, CFD modelling, and industry specific work in glassmaking, iron ore refining, steelmaking, and aluminium production. A summary of this work is the subject of this presentation, including what conclusions can be made to date and a look at the work that remains to be done as hydrogen becomes integrated into industrial use.

Note: This document will be opened to the participants on IERE website before the Workshop and opened to the public afterward.