

# ENERGETICS

## INRiM - Metrology for hydrogen vehicles- Study of novel methodologies and standards for the development and investigation of hydrogen quality sensors

<b>Funded By</b>	I.N.R.I.M. - ISTITUTO NAZIONALE DI RICERCA METROLOGICA [Piva/CF:09261710017]
<b>Supervisor</b>	SANTARELLI MASSIMO - massimo.santarelli@polito.it
<b>Contact</b>	
<b>Context of the research activity</b>	The PhD proposal is related to the development of a metrology infrastructure to support the measurement of hydrogen quality at hydrogen refuelling stations with a focus on sensors and analysers for the most common contaminants in hydrogen fuel (e.g., N <sub>2</sub> , H <sub>2</sub> O and O <sub>2</sub> ) tested under field conditions, in order to develop new guidance on sensor validation in the field. Specific objectives of the research will be related to the study of novel methodologies and suitable standards for the development and investigation of hydrogen quality sensors.
<b>Objectives</b>	The PhD proposal is related to the development of a metrology infrastructure to support the measurement of hydrogen quality at hydrogen refuelling stations with a focus on sensors and analysers for the most common contaminants in hydrogen fuel (e.g., N <sub>2</sub> , H <sub>2</sub> O and O <sub>2</sub> ) tested under field conditions, in order to develop new guidance on sensor validation in the field. Specific objectives of the research will be related to the study of novel methodologies and suitable standards for the development and investigation of hydrogen quality sensors.
<b>Skills and competencies for the development of the activity</b>	Hydrogen systems Metrology competencies