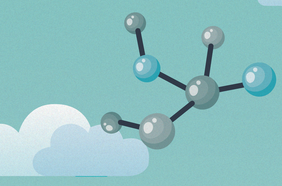
MAST3RBoost

MATURING THE PRODUCTION STANDARDS OF ULTRA-POROUS STRUCTURES FOR HIGH DENSITY HYDROGEN STORAGE BANK OPERATING ON SWINGING TEMPERATURES AND LOW COMPRESSION







MAST3RBOOST AIMS TO PROVIDE A SOLID BENCHMARK FOR COLD-ADSORBED HYDROGEN STORAGE AT LOW COMPRESSION (100BAR OR BELOW)

THE MACHINE LEARNING-IMPROVED, ULTRA-POROUS MATERIALS WE'VE DEVELOPED CAN INCREASE THE HYDROGEN STORAGE CAPACITY OF ON-BOARD FUEL CELL AND HYDROGEN (FCH) BATTERIES

BY DEVELOPING THE FIRST WORLDWIDE ADSORPTION-BASED DEMONSTRATOR AT THE KG-SCALE, WE ARE OPENING A DISRUPTIVE PATH TO MEET INDUSTRY GOALS AND CONTRIBUTE TO A CARBON-NEUTRAL EUROPE BY 2050

OUR SOLUTIONS

MACHINE LEARNING-IMPROVED ULTRA-POROUS MATERIALS – SUCH AS ACTIVATED CARBONS (ACs) AND HIGH-DENSITY METAL-ORGANIC FRAMEWORKS (MOFs)

LIGHTWEIGHT VESSELS EMBEDDING THE ULTRA-POROUS MANUFACTURED WITH RECYCLED RAW MATERIALS FROM WASTE AGROFORESTRY BIOMASS AND FROM SOLID. URBAN WASTE TO REACH AT LEAST 33 $GH2/L^{SYS}$ TO HELP PROVIDING THE MARKET WITH AN ACTUAL FCEV ALTERNATIVE TO THE CURRENT INTERNAL COMBUSTION ENGINES

LIFE CYCLE THINKING STRATEGIES TO MINIMISE OVERALL ENVIRONMENTAL IMPACTS AND IMPROVE ECONOMIC PERFORMANCE OF THE HYDROGEN STORAGE SYSTEM FROM THE DESIGN PHASE

NEW BENCHMARK FOR HYDROGEN STORAGE SHOWCASING EU'S CUTTING EDGE TECHNOLOGY

OUR PARTNERS

enviro hemp© High-Tech green applications

EDAG

University of Nottingham UK | CHINA | MALAYSIA

AIT AUSTRIAN INSTITUTE OF TECHNOLOGY

contactica innovation

nanolayers

CSIC Consejo Superior de Investigaciones Científicas

TWI

CSIR Touching lives through innovation

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