

| Time | MONDAY July 21st | | | |
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| 8.30 | Registration | | | |
| 9.30 | Opening | | | |
| 9.40 | Chair: Gavin Walker Plenary 1: Quays Theatre Hydrogen as the basis for a sustainable energy economy Andreas Züttel | | | |
| 10.20 | Break | | | |
| | Quays Theatre Chair: Radovan Cerny | Hexagon Chair: Bjorgvin Hjorvarsson | Deck 1 Chair: Astrid Pundt | Compass Chair: Daniel Fruchart |
| 11.00 | MoOQ-001 Invited F2 Reversible Hydrogen Activation in Molecular Complexes: Approaches to Catalysis and Energy Storage Using Amine Boranes Tom Autrey | MoOH-013 Invited M2 Novel Complex Hydrides for Hydrogen Storage and Related Structural Studies Hui Wu | MoOD-025 Invited A5 The Use of Hydrogen to Separate and Recycle NdFeB Magnets from Electronic Waste Allan Walton | MoOC-037 Invited M1 Improvement of Activation and Rehydrogenation Behaviors of TiFe Etsuo Akiba |
| 11.30 | MoOQ-002 Contributed F5 Femtosecond Spectroscopy on Complex Hydrides Andreas Borgschulte | MoOH-014 Contributed F5 Tuning Thermodynamics by Finite Size Maximilian Wolff | MoOD-026 Contributed F1 Where is the critical point of the Pd-D ₂ system? Evan Gray | MoOC-038 Contributed A1 Hydrogen Storage in Metal Hydrides and Complex Hydrides: Differences, Challenges and Advantages Inga Bürger |
| 11.50 | MoOQ-003 Contributed M2 Investigating and Understanding Ionic Ammine Materials Martin Jones | MoOH-015 Contributed F4 Origin of the Huge Asymmetry in Ab- and Desorption Kinetics of Hydrogen in Capped Films Ronald Griessen | MoOD-027 Contributed F1 In-situ studies of hydrogen loading and unloading in single palladium nanocrystals Andrea Baldi | MoOC-039 Contributed F6 Size Reduction in Mg and Mg rich Intermetallics for Hydrogen Storage Tayfur Ozturk |
| 12.10 | MoOQ-004 Contributed M2 Complex Transition Metal Hydrides Incorporating Covalent and Ionic Hydrogen Terry D. Humphries | MoOH-016 Contributed M1 Probing the cerium / cerium hydride interface using nanoindentation Martin Brierley | MoOD-028 Contributed F5 Lattice Expansion of Palladium-Hydrogen (Pd-H) : a Critical Review of Dimensional Measurements Nicolas Armanet | MoOC-040 Contributed M1 Searching out the hydrogen absorption / desorption limiting reaction factors: strategies allowing to increase kinetics Ali Zeaiter |
| 12.30 | Lunch and Exhibition | | | |
| | Quays Theatre Chair: Bjorn Hauback | Hexagon Chair: Petra de Jongh | Deck 1 Chair: David Book | Compass Chair: E.Akiba |
| 14.00 | MoOQ-005 Invited A4 High throughput computational characterization of hydrogen solubility and diffusion in intermetallics and complex metal hydrides David Sholl | MoOH-017 Invited F4 Functionalized Mesoporous Carbon Supports for Hydrogen Storage: A First-principles Study of Surface Interactions with Complex Hydrides Eric Majzoub | MoOD-029 Invited A4 Hydrogen Purification for Cost-effective Fuel Cell Power Zheng Xiao Guo | MoOC-041 Invited A6 Development of Thermal Batteries Based on Metal Hydrides: Opportunities and Challenges Zak Fang |

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| 14.30 | MoQ-006 Contributed M2 Theoretical Exploration and Syntheses of Complex Transition Metal Hydrides with High Gravimetric Hydrogen Density Shigeyuki Takagi | MoOH-018 Contributed A5 Mesoscale Microstructural Computational Simulation of Hydrogen Permeation Test to Calculate Grain Boundary Diffusivity Sathiskumar Jothi | MoOD-030 Contributed A4 Pd-Cu-M: Alloys for Hydrogen Separation Membrane Shahrouz Nayeboossadri | MoOC-042 Contributed A1 Lightweight aluminium based storage tank system with Ti-doped Na ₃ AlH ₆ for hydrogen and heat storage Michael Felderhoff |
| 14.50 | MoQ-007 Contributed M2 Optimized Complex Hydride Powder from High-Throughput Screening Jean-Philippe Soulie | MoOH-019 Contributed A6 Pressure and Temperature influence in a MgH ₂ Numerical Model Alistair Stuart | MoOD-031 Contributed A4 High Hydrogen Flux through Bare Vanadium Membrane without Pd Overlayer Hiroshi Yukawa | MoOC-043 Contributed A1 Comparative Analysis of the Efficiencies of Hydrogen Storage Systems Utilising Solid State H Storage Materials Michael Lototsky |
| 15.10 | MoQ-008 Contributed M2 The Destabilization of Complex Hydrides with Metal Sulfides Drew Sheppard | MoH-020 Contributed M2 Tuning the Stability of Ca(BH ₄) ₂ by the Inclusion of Additives: A Computational Study Elisa Albanese | MoOD-032 Contributed M1 Alloys Based on 5 Group Metals for Hydrogen Purification Membranes Serik Kozhakhmetov | MoOC-044 Contributed M1 Can new Mg-rich phases in RE-TM-Mg (RE = Rare-Earth, T = Transition metal) systems be good candidates for hydrogen storage? Jean-Louis Bobet |
| 15.30 | Break | | | |
| | Quays Theatre Chair: Craig Jensen | Hexagon Chair: David Sholl | Deck 1 Chair: Xiao Guo | Compass Chair: Jose Bellosta von Colbe |
| 16.00 | MoOQ-009 Invited M2 Enthalpy-Entropy Compensation Effect in the Alkali Silanides Series: MSiH ₃ (M = K, Rb, Cs) Raphael Janot | MoOH-021 Invited F1 Thermodynamic Modelling of Metal-Hydrogen Systems Using the Calphad Method Jean-Marc Joubert | MoOD-033 Invited A4 Ni-Nb-Zr Amorphous Alloy Membranes for Separation of Hydrogen from CO ₂ and Other Gases Danesh Chandra | MoOC-045 Invited A1 Solid State Hydrogen Tank Coupled with High Temperature PEM: From Materials to APU Application Marcello Barrico |
| 16.30 | MoOQ-010 Contributed M2 Thermodynamics and Crystal Structures of the Alkali Silanides MSiH ₃ (M=K, Rb, Cs) Jean-Noël Chotard | MoOH-022 Contributed F1 Thermodynamics of Borohydrides-based Materials Coupling ab-initio and Calphad Methods Eugenio R. Pinatel | MoOD-034 Contributed M1 Engineering Hydrogen Separation Membrane Alloys: An Optical Approach Ruud Westerwaal | MoOC-046 Contributed A1 Integrated System Of Fuel Cell And Hydride Tank Paola Rizzi |
| 16.50 | MoOQ-011 Contributed M2 Reversibility of Complex Hydrides Under High Pressure Conditions Anna-Lisa Chaudhary | MoOH-023 Contributed F1 Self-amplified Site Occupancy Transition of Hydrogen in V studied from Density Functional Calculations Robert Johansson | MoOD-035 Contributed F2 Mechano-chemical coupling effects during hydriding of nanocrystalline metallic thin films Joris Proost | MoOC-047 Contributed A1 Modelling the Thermal Management of a Solid State Hydrogen Store Based on Magnesium Hydride Christopher Bennett |
| 17.10 | MoOQ-012 Contributed M1 Lithium Hydride Stabilised Nanoparticles and its Hydrogen Storage Properties Lei Wang | MoOH-024 Contributed F1 First Principles Calculations on (La-Mg)-Ni Hydrides Jean-Claude Crivello | MoOD-036 Contributed M1 Influence of Microstructure and Mechanical Stress on Behavior of Hydrogen in Thin Pd Films Marián Vlček | MoOC-048 Contributed A1 An Improved Model for Metal-Hydrogen Storage Tanks Shahzad Mohammadshahi |
| 18.30 | Welcome Reception at Manchester Museum of Science and Industry | | | |
| 20.30 | Free time in Manchester for dinner | | | |

| Time | TUESDAY July 22nd | | | |
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| | Registration | | | |
| 09.00 | Chair: Andreas Zuettel Plenary 2: Quays Theatre UK Hydrogen and Fuel Cell Research - an overview Nigel Brandon | | | |
| 09.40 | Plenary 3: Quays Theatre Cool Hydrides! Shin-ichi Orimo | | | |
| 10.20 | Break | | | |
| | Quays Theatre Chair: Shin-ichi Orimo | Hexagon Chair: Dag Noreus | Deck 1 Chair: Bill David | Compass Chair: Ronald Griessen |
| 11.00 | TuOQ-049 Invited M1 Structure-Properties Relationship in Nanostructured Mg-Based Hydrides for Energy Storage Volodymyr Yartys | TuOH-061 Invited A3 Role of RE composition on the performance of working metal-hydride electrodes in Ni-MH alkaline batteries Michel Latroche | TuOD-073 Invited F4 On the role of size, shape and composition in metal nanoparticle - Hydrogen interactions Ferry Nugroho | TuOC-085 Invited A6 The use of metal hydrides in hydrogen sensors and detectors Bernard Dam |
| 11.30 | TuOQ-050 Contributed M1 SPD processed Mg-based materials to build up reactive microstructures enabling fast hydrogen sorption kinetics Daniel Fruchart | TuOH-062 Contributed A3 Past, Present, and Future of Metal Hydride Alloys in Nickel-Metal Hydride Batteries Kwo Young | TuOD-074 Contributed M1 Synthesis, Characterization and Hydrogen Sorption Properties of Mg-Ti based Nanoparticles and Nanocomposites Marco Calizzi | TuOC-086 Contributed A6 Metal Hydride Based Eye-readable and Color Tunable Detectors for Chemical and Biomedical Hydrogen Sensing Applications Peter Ngene |
| 11.50 | TuOQ-051 Contributed M1 Kinetics Enhancement, Thermodynamics Tailor and Thermal Conductivity Study in Mg-based Hydrogen Storage Materials Huaiyu Shao | TuOH-063 Contributed A3 Influence of Kinetics of Hydrogen Transport in a Metal Hydride Anode on the Discharge Properties of the Electrodes of the Ni-MH Batteries Igor Gabis | TuOD-075 Contributed M2 Low Temperature Hydrogen Cycling and Modified Thermodynamics of Spark Discharge Generated Fluorite Cubic Mg-Ti Hydride Nanoparticles Stephan W.H. Eijt | TuOC-087 Contributed A6 Large Pressure Range Optical Hydrogen Sensing Materials Christiaan Boelsma |
| 12.10 | TuOQ-052 Contributed M1 Stability of Magnesium for Elevated Temperature Cycling as a Thermal Storage Medium for Concentrated Solar Power Applications Andrew Patman | TuOH-064 Contributed A3 Influence of alloy stoichiometry, surface- and heat treatment on NiMH cells made by atomised as well as reused alloys from spent batteries. Dag Noréus | TuOD-076 Contributed F6 Destabilization of Mg hydride in the Mg-Ti system Kohta Asano | TuOC-088 Contributed A6 Hydrogen gas collection System Using Mg Catalyzed with Niobium Oxide Satoshi Hino |
| 12.30 | Lunch and Exhibition | | | |
| | Quays Theatre Chair: Sabrina Sartori | Hexagon Chair: Paul Anderson | Deck 1 Chair: Vlad Antonov | Compass Chair: Richard Chahine |
| 14.00 | TuOQ-053 Invited F2 The Size Dependence of Reactivity and Hydrogen Mobility for Carbon-Supported MgH ₂ Particles Petra de Jongh | TuOH-065 Invited A3 Borohydrides continue to surprise: A different outlook on their properties Rana Mohtadi | TuOD-077 Invited F8 The Synthesis and Characterisation of Novel Metal Hydrides Eugene Gregoryanz | TuOC-089 Invited F2 Spontaneous Dehydrogenation Reactions Elsa Callini |

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| 14.30 | TuOQ-054 Invited M1 Recent progress in enhanced hydrogen storage of MgH ₂ Min Zhu | TuOH-066 Invited A3 Fast Ionic Conduction in Complex Hydrides Motoaki Matsuo | TuOD-078 Invited F8 High pressure and temperature formation of graphene hydride Dean Smith | TuOC-090 Invited A1 Practical Hybrid High-Pressure / Sorbent Hydrogen Storage Systems Incorporating Nanoporous Material Tim Mays |
| 15.00 | TuOQ-055 Contributed F4 Anti-Oxidized Mg for a Variety of Applications Shigehito Isobe | TuOH-067 Contributed A3 Metal hydride electrode for Metal Hydride-Air Secondary Battery Tomoya Matsunaga | TuOD-079 Contributed F8 Pressure Effect on Hydrogen Tunneling and Vibrational Spectrum in alpha-Mn Alexander Kolesnikov | TuOC-091 Contributed A5 Stress Generation of Hydride Graphite Composites Associated with Cyclic Hydrogenation Felix Heubner |
| 15.20 | TuOQ-056 Contributed M1 Synthesis and Hydrogen Storage Properties of Nanostructured Mg-based Alloys Xingguo Li | TuOH-068 Contributed A3 Mg catalysed with TiF ₃ as anode in a Ni-MH battery Fokko Mulder | TuOD-080 Contributed F8 In Situ Neutron Diffraction Measurement on Deuterization Process of Iron at High Pressure and High Temperature Akihiko Machida | TuOC-092 Contributed M2 Initial Step of Hydride Formation in Single Crystalline Gadolinium Thin Films and Islands Studied on the nm-Scale Sara Wanjelik |
| 15.40 | Coffee Break | | | |
| | Quays Theatre Chair: Bernard Dam | Hexagon Chair: Rana Mohtadi | Deck 1 Chair: Vlad Yartys | Compass |
| 16.00 | TuOQ-057 Invited F1 The Interpretation of Experimental Polycrystalline Coherent Inelastic Neutron Scattering (poly-CINS) from Magnesium Deuteride Daniel Roach | TuOH-069 Invited A3 Metal hydride as anode material for all-solid-state Li-ion batteries Takayuki Ichikawa | TuOD-081 Invited F8 Aluminum-based Interstitial Hydride, Al ₂ CuH _x Hiroyuki Saitoh | |
| 16.30 | TuOQ-058 Contributed M1 Correlation between microstructural and mechanical behavior of nanostructured MgH ₂ upon hydrogen cycling Patricia de Rango | TuOH-070 Contributed A3 Hydrides as negative electrode for lithium-ion batteries: A review of this challenge for hydrogen storage and Li-ion technologies Liwu Huang | TuOD-082 Contributed F2 A kinetics investigation of MgH ₂ formation/decomposition in Mg-Ti layers and MgO-Mg thin films José Francisco Fernandez | |
| 16.50 | TuOQ-059 Contributed M1 Coating of Magnesium Spheres for Thermal Energy Storage Applications Priyen Mistry | TuOH-071 Contributed A3 Nanoconfined hydrides as anode material for Li-ion batteries Yassine Oumellal | TuOD-083 Contributed F8 A family of high pressure synthesized MgTM ₂ H ₆ (TM=Zr,Nb) hydrides Dag Noréus | |
| 17.10 | TuOQ-060 Contributed M1 The effect and optimization of microstructure on the hydrogenation of Mg/Fe thin film multilayers Lennard Mooij | TuOH-072 Contributed A3 H ₂ thermal desorption and hydride conversion reactions in Li cells of TiH ₂ /C nanocomposites Francesco Maria Vitucci | TuOD-084 Contributed M1 Effect of the rare earth on the structural and hydrogen storage properties of A ₂ Ni ₇ (A = Y or Gd) Veronique Charbonnier | |
| 18.00 | Poster and Exhibition: Compass Room | | | |
| 20.00 | Free evening | | | |

| WEDNESDAY July 23rd | | | | |
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| Time | Registration | | | |
| | Quays Theatre Chair: Michael Hirscher | Hexagon Chair: Dan Bull | Deck 1 Chair: Evan Gray | Compass Chair: Steve Bennington |
| 09.00 | WeOQ-093 Invited A1 State of the Art and Needs of Hydrogen Adsorption Storage Systems Richard Chahine | WeOH-101 Invited M3 Nitrogen Based Materials for Hydrogen Storage Ping Chen | WeOD-109 Invited F1 On site occupation and diffusion of H in transition metals Björgvin Hjörvarsson | WeOC-117 Invited A1 Engineering technologies for fluid chemical hydrogen storage systems Bart van Hassel |
| 09.30 | WeOQ-094 Contributed M4 Hydrogen interaction with nanoconfined materials Claudia Zlotea | WeOH-102 Contributed M2 Probing Reversibility in the Li-N-H Hydrogen Store by in situ X-Ray Powder Diffraction Josh Makepeace | WeOD-110 Contributed M1 Degradation in the reversible hydrogen storage capacity of V-based bcc alloys: what is the origin and how to improve it? Hyunjeong Kim | WeOC-118 Contributed M3 Reverse Engineering the Chemistry for High Capacity Chemical Hydrogen Storage Solutions Tom Autrey |
| 09.50 | WeOQ-095 Contributed M4 Quantum Dynamics of Hydrogen Molecules trapped inside Nanocavities in different solid Water Structures Lorenzo Ulivi | WeOH-103 Contributed M2 Structure Solution of New Imide and Mixed Imide-Amide Compounds for Hydrogen Storage Materials Emilio Napolitano | WeOD-111 Contributed M1 Total Scattering Investigations of the Local Structure in Fe-containing hydrides of bcc-alloys Magnus H. Sørby | WeOC-119 Contributed M3 Ionic Liquid Borohydride - A Liquid Phase Chemical Hydrogen Storage Material Theo Friedrich |
| 10.10 | WeOQ-096 Contributed M4 Synthesis of Cr-MOF Derived Porous Carbon for Hydrogen Storage Applications Henrietta Langmi | WeOH-104 Contributed M2 Phase space investigation of lithium amide halides Rosalind Davies | WeOD-112 Contributed M1 Defect studies of H ⁺ implanted Niobium Ivan Prochazka | WeOC-120 Contributed M2 Hydrogen Rich Nickel Boride as Catalyst for the Recycling of Spent Ammonia Borane Florian Mertens |
| 10.30 | Coffee Break | | | |
| | Quays Chair: Takayuki Ichikawa | Hexagon Chair: Ping Chen | Deck 1 Chair: Jean-Marc Joubert | Compass Chair: Ralph Janot |
| 11.00 | WeOQ-097 Invited M4 Recent Progress in Hydrogen Storage on MOFs Michael Hirscher | WeOH-105 Invited F1 Hydrogen storage: imides, amides and ammonia Bill David | WeOD-113 Invited F1 Proving the Contact Rules for Phase Regions: Implications to Phase Diagrams of Metal-Hydrogen Systems Vladimir E. Antonov | WeOC-121 Invited M2 Control of Dehydrogenation / Rehydrogenation Reaction of Metal Borohydride-based Composites Young Whan Cho |
| 11.30 | WeOQ-098 Contributed M4 Direct observation of Pd(H ₂) at ambient temperature on single atoms of Pd supported on a metal-organic framework Petra Szilagyí | WeOH-106 Contributed M2 Effect of Lithium Ion Conduction on Hydrogen Desorption of LiNH ₂ -LiH Solid Composite Tengfei Zhang | WeOD-114 Contributed M1 Structure and properties of hydrides of gamma-U alloys Ladislav Havela | WeOC-122 Contributed M2 New method of synthesis of dead-mass free mixed-cation borohydride materials for hydrogen storage applications Tomasz Jaroń |
| 11.50 | WeOQ-099 Contributed M4 Ultradense Hydrogen Physisorption in the Porous Magnesium Borohydride Nikolay Tumanov | WeOH-107 Contributed M2 New insights upon desorption process of the Mg/K amide system Sebastiano Garroni | WeOD-115 Contributed F4 Hydride Initiation Experiments using Spherical Uranium Powders George Powell | WeOC-123 Contributed M2 Quantitative spectra-structure relation for borohydrides Vincenza D'Anna |

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| 12.10 | <p>WeOQ-100 Contributed M4 Ceramic on Metal Type Hydrogen Storage Composites and Their Applications Nobuyuki Nishimiya</p> | <p>WeOH-108 Contributed M2 Effects of Doping the Li-Mg-N-H System with CaCl₂ and CaBr₂ Rachel Bill</p> | <p>WeOD-116 Contributed F4 The influence of vacuum annealing on the uranium-hydrogen reaction and the progression from nucleation to growth mechanisms John Knowles</p> | <p>WeOC-124 Contributed M2 Spectroscopic and Structural Characterization of gamma-Mg(BH₄)₂ Thermal Decomposition: Vacuum vs. Hydrogen Atmosphere Jenny G. Vitillo</p> |
| 12.30 | Packed Lunch and Excursion | | | |
| 19.30 | Conference Dinner | | | |

| Time | THURSDAY July 24th | | | |
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| | Registration | | | |
| 09.00 | Chair: Tim Mays Plenary 4: Quays Theatre Hydrogen storage research and development efforts supported by the U.S. Department of Energy Ned Stetson | | | |
| 09.40 | Plenary 5: Quays Theatre Planck Sorption Cryocoolers - A Very Successful Metal Hydride Technology for Space Exploration Robert C Bowman Jr | | | |
| 10.20 | Coffee Break | | | |
| | Quays Theatre Chair: Claudia Weidenthaler | Hexagon Chair: Marcello Baricco | Deck 1 Chair: Robert Bowman | Compass Chair: John Knowles |
| 11.00 | ThOQ-125 Invited M2 Rare-earth borohydrides – structures and thermal properties Bjørn C. Hauback | ThOH-137 Invited A1 Tank design challenges and optimization for metal hydride based hydrogen storage Jose Bellosta van Colbe | ThOD-149 Invited F3 NMR in NaH: The Effects of Added NaOH Mark Conradi | ThOC-161 Invited F7 Hydrogen Isotope Separation for Fusion Power Applications Robert Smith |
| 11.30 | ThOQ-126 Contributed M2 Borohydrides: Stabilizing Light Metal Frameworks Radovan Cerny | ThOH-138 Contributed A1 Modelling Around the Design of a Hydride Hydrogen Tank for Heavy Applications Olivier Guilla | ThOD-150 Contributed F4 In-situ TEM Observation on Hydrogenation of Mg-Ni Films Deposited by Magnetron Sputtering Junko Matsuda | ThOC-162 Contributed F7 Computational study of helium bubble release from titanium tritide surface under different temperatures Li Liang |
| 11.50 | ThOQ-127 Contributed M2 Crystal Structures and Decomposition Properties of Hydrogen-Rich Al(BH ₄) ₃ ·NH ₃ BH ₃ Complex Iurii Dovgaliuk | ThOH-139 Contributed A5 Measure of the hydride breathing while cyclically absorbing and desorbing hydrogen Vasile Iosub | ThOD-151 Contributed F4 In-situ STM and XRD studies on the Coherency state of Hydride Precipitation and Growth in Nb Thin Films Vladimir Burlaka | ThOC-163 Contributed F7 Helium 3 Retention In Tritium Storage Materials Sylvain Challet |
| 12.10 | ThOQ-128 Contributed M2 Towards Hydridic Nanoporous Frameworks: the First Imidazolate – Borohydride Compound Li ₂ ImBH ₄ (Im=[C ₃ H ₃ N ₂]) Fabrice Morelle | ThOH-140 Contributed A5 High-Resolution In-Operando Neutron Radiography and Tomography of Hydride-Graphite Composites Kai Herbrig | ThOD-152 Contributed M1 Closing the Pressure Gap in X-Ray Photoemission Spectrometry for the Study of Hydride-Forming Compounds Renaud Delmelle | ThOC-164 Contributed F7 Quasi-elastic neutron scattering studies of the hydrogen / deuterium diffusion process in palladium Simon Steel |
| 12.30 | Lunch and Exhibition | | | |
| | Quays Theatre Chair: Tom Autry | Hexagon Chair: Alberto Albinati | Deck 1 Chair: Keith Ross | Compass Chair: Ian Morrison |
| 14.00 | ThOQ-129 Invited M2 Mechanistic Studies of the Reversible Hydrogenation of Boranes to Borohydrides under Moderate Conditions Craig Jensen | ThOH-141 Invited M4 Neutron studies of hydrogen adsorption in porous materials Craig Brown | ThOD-153 Invited F3 Nuclear Magnetic Resonance Studies of Atomic Motion in Borohydride-Based Materials Alexander Skripov | ThOC-165 Invited F7 Hydrogen Isotope Separation in Nanoporous Framework Materials Hyunchul Oh |

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| 14.30 | ThOQ-130 Invited M3 Octahydrotriborates ($B_3H_8^-$): Synthesis and Hydrogen Storage Zhenguo Huang | ThOH-142 Invited F1 High throughput Inelastic Neutron Scattering, from fiction to reality A. J. Timmy Ramirez-Cuesta | ThOD-154 Invited F3 Probing Hydroborate Polyanion Reorientations via Quasielastic Neutron Scattering Terrence J. Udovic | ThOC-166 Invited F7 Hydrogen isotope separation in metal-organic frameworks: Insights from theory Thomas Heine |
| 15.00 | ThOQ-131 Contributed M2 A series of novel metal borohydride ammoniates Lars H. Jepsen | ThOH-143 Contributed M2 Mechanochemical synthesis of hydrides followed in situ by X-ray diffraction Yaroslav Filinchuk | ThOD-155 Contributed F3 Quasielastic neutron scattering on $Mg(BH_4)_2$ Luca Silvi | ThOC-167 Contributed F7 Reversible Isotope Exchange Reactions in $Ca(BH_4)_2$ Manish Sharma |
| 15.20 | ThOQ-132 Contributed M2 Thermal decomposition of a $NaZn_2(BH_4)_5 + MgH_2$ composite Daniel Reed | ThOH-144 Contributed F1 Diffraction Profile Broadening Owing To Vacancies In $LaNi_5$: Simulations And In-Situ Neutron Diffraction Timothy Webb | ThOD-156 Contributed F3 Probing Molecular Dynamics of Metal Borohydrides on the Surface of Mesoporous Scaffolds by Multinuclear High Resolution Solid State NMR Son-Jong Hwang | ThOC-168 Contributed F7 Isotope effect on magnetic and structural properties of $Y_{1-y}Gd_yFe_2(H_2D_{1-z})_{4.2}$ compounds Valerie Paul-Boncour |
| 15.40 | Coffee Break | | | |
| | Quays Theatre Chair: Young Wan Cho | Hexagon Chair: Craig Buckley | Deck 1 Chair: Kuriyama Nobuhiro | Compass |
| 16.00 | ThOQ-133 Invited M2 Hydrogen storage in Ammine metal borohydrides Xuebin Yu | ThOH-145 Invited M1 Tailoring the Hydrogen De-sorption Thermodynamics of VH_2 by Various Alloying Additives Sanjay Kumar | ThOD-157 Invited A5 Hydrogen diffusion and interaction with microstructure of the duplex stainless steels Dilson Silva dos Santos | |
| 16.30 | ThOQ-134 Contributed M2 Reactivity of the different magnesium borohydride polymorphs Voraksmay Ban | ThOH-146 Contributed F1 Effect of Solid Solution Hardening by Interstitial Elements on Hydrogenation Properties of V Based BCC Alloys Kouji Sakaki | ThOD-158 Contributed A5 Effects of Hydrogen and Helium on Swelling in Electron-irradiated Pure FE Naoyuki Hashimoto | |
| 16.50 | ThOQ-135 Contributed M2 Additives in magnesium borohydride: local structure and effect on reversibility Olena Zavorotynska | ThOH-147 Contributed A6 Niche Applications of Metal Hydrides and Related Thermal Management Issues Mykhaylo Lototskyy | ThOD-159 Contributed A5 Multiscale multiphysics atomistic-meso-continuum critical dislocation method for hydrogen embrittlement Sathiskumar Jothi | |
| 17.10 | ThOQ-136 Contributed A1 Study on the effects of repeated hydriding and dehydriding reactions on compacted ball milled Mg-based powders Amelia Montone | ThOH-148 Contributed A6 Numerical Study on a Two-Stage Metal Hydride Hydrogen Compression System Evangelos Gkanas | ThOD-160 Contributed M1 Hydrogen-induced defects and multiplication of dislocations in Palladium Jakub Cizek | |
| 18.00 | Poster and Exhibition: Compass Room | | | |
| 20.00 | Free evening | | | |

| FRIDAY July 25th | | | | |
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| Time | Quays Theatre Chair: Craig Brown | Hexagon Chair: Martin-Owen Jones | Deck 1 Chair: Keith Ross | Compass |
| 09.00 | FrOQ-169 Invited M2 Core-shell hydride nanoarchitectures: Design and hydrogen behaviour Francois Aguey-Zinsou | FrOH-177 Invited M1 In Pursue of Light Intermetallic Hydrides Isaac Jacob | Extra Contributed M1 Decaying Behavior of $V_{40}(TiCr)_{51}Fe_8Mn$ Hydrogen Storage Alloy with Different Particle Sizes Chaoling Wu | |
| 09.30 | FrOQ-170 Invited F3 Hydrogen Pipe Diffusion in Palladium: First Principles, Kinetic Monte Carlo, and Experiments Dallas Trinkle | FrOH-178 Invited M2 Expanding Complex Aluminum Hydrides Towards Heavier Group I and II Family Members Claudia Weidenthaler | | |
| 10.00 | FrOQ-171 Contributed F5 Hydrogen Absorption Properties of $Pd_{0.75}M_{0.25}$ Solid Solution Alloy Tomoe Yayama | FrOH-179 Contributed F3 Experimental and numerical modelling studies of the kinetics of hydrogen evolution from zirconium hydride Mingwang Ma | | |
| 10.20 | FrOQ-172 Contributed M1 Superior effect of Ni-substitution on the hydrogenation kinetics of $Mg_6Pd_{1-x}TM_x$ (TM = Ag, Cu, Ni) pseudo- binary compounds José Francisco Fernandez | FrOH-180 Contributed F3 Hydrogen Accumulates in and UH_3 Precipitates at Carbides in Uranium Supersaturated in H and C Wigbert Siekhaus | | |
| 10.40 | Coffee Break | | | |
| | Quays Theatre Chair: Dhanesh Chandra | Hexagon Chair: Terence Udovic | Deck 1 | Compass |
| 11.00 | FrOQ-173 Invited A1 Hydrogen Storage: From Academia to Market Stephen Bennington | FrOH-181 Invited M2 Interactions of C_{60} with Metal Hydride Systems Ragaiy Zidan | | |
| 11.30 | FrOQ-174 Invited A6 Metal Hydride Heat Storage Prototype for Concentrating Solar Thermal Power Mark Paskevicius | FrOH-182 Invited F4 Structure Determination of Metal- C_{60} Nano-composites Sabrina Sartori | | |
| 12.00 | FrOQ-175 Contributed A6 Material Development for Metal Hydride Thermal Energy Storage Systems for Future Concentrating Solar Power Plants Claudio Corgnale | FrOH-183 Contributed M1 Investigation of the hydrogen distribution inside a storage tank by in situ Neutron Radiography of a hydrogen storage tank Stefan Börries | | |

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| 12.20 | FrOQ-176 Contributed A1 Metal Hydride Hydrogen and Heat Storage Systems as Enabling Technology for Spacecraft Applications Ronald Pawelke | FrOH-184 Contributed M1 Cycle Stability of Gas Atomised Alloy Electrodes Mariana Spodaryk | | |
| 12.40 | Closing Session, Prizes and Handover: Quays Theatre | | | |
| 13.30 | Lunch and Departure | | | |