



AHRN Newsletter August 2022

Mission The Australian Hydrogen Research Network (AHRN) is the community of researchers and interested stakeholders supporting the emerging hydrogen industry. We foster excellence in hydrogen-related research through an ongoing program of seminars and knowledge-sharing activities. By providing thought leadership, advocacy, and research tools, the AHRN offers its members domestic networking opportunities as well as access to international collaborations.

A flyer with more information on the AHRN can be downloaded <u>here</u>. *Please share this with your colleagues to encourage them to join our network*.

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Online AHRN Seminar - Launch of the CSIRO Hydrogen Knowledge Centre Monday 22nd August 1.00 pm - 2.00 pm AEST

The <u>Hydrogen Knowledge Centre</u>, part of CSIRO's Hydrogen Industry Mission, has been designed to foster collaboration between the growing Australian hydrogen industry,

government and research and development (R&D) ecosystems, by providing regularly updated information on policies, projects, research and resources. It brings together the previously established HyResource and HyResearch modules with a new HyLearning module.

Now with over 200 projects listed on the HyResearch module, this seminar will provide an update on HyResearch and explore how the features of the Hydrogen Knowledge Centre can help the research community in Australia.

Speakers include:

- Dr Vicky Au, Engagement & Strategy Lead for the CSIRO Hydrogen Mission
- Mr Peter Grubnic, Strategy advisor for the Future Fuels CRC & project lead for HyResource

Please let your colleagues in the hydrogen research community know about this event. If they would like to attend and/or to receive AHRN newsletters and notifications of future events, please email AHRN admin at hydrogen.nission@csiro.au.

Call for presentations for our Brisbane Seminar – 6th September, Griffith University

We are encouraging researchers in Queensland to give a short presentation of their work at the forthcoming in-person seminar at Griffith University on 6th September. So far we have contributions from research leaders and post-docs from the University of Queensland, Griffith University and QUT. If you are carrying out hydrogen-related research within other organisations please get in touch so that you can be included in the program.

The Brisbane workshop is being held in collaboration with the Hydrogen Connect Summit https://hydrogenconnect.com.au/ Any researchers attending the AHRN workshop will be entitled to an academic discount to register for the Hydrogen Connect Summit. If you would like to present your work, please contact Dr Andrew Dicks (adicks@ah2rn.org.au). And registrations will be open shortly on Eventbrite

Call for Abstracts now open for the Australian Hydrogen Research Conference 2023

Abstracts can now be submitted for presenting at the AHRN Hydrogen Research Conference in Canberra, on 8th to 10th February 2023. Submissions for oral or poster presentations can be made online at https://ahrc2023.com.au/abstracts/. Abstract submissions close on 12th September so please encourage your colleagues to submit as soon as possible. The conference is also open for sponsorship and a prospectus will be available via the conference website shortly. If you know of any companies or individuals that would like to offer support, please contact the conference chair Kenneth Baldwin Kenneth.baldwin@anu.edu.au deputy chair Andrew Dicks adicks@ah2rn.org.au.

Clean Hydrogen Mission RI Workshop - Opportunities, Challenges and Way Ahead Thursday 4th August 9-10.30 pm AEST

This workshop is organised by the Clean Hydrogen Mission, and will provide an insight into the international hydrogen landscape. In particular, the focus will be on areas where research and innovation can assist to lower the cost of clean hydrogen. Presentations include:

Cost reduction potential for clean hydrogen – an overview, Herib Blanco, IRENA Analysis of main challenges for rapid H2 deployment, Paul Lucchese, IEA, Hydrogen TCP Global overview of Hydrogen RD&D, Dan O'Sullivan and Vicky Au, CSIRO Global industry perspective, Daria Nochevnick, Hydrogen Council Hydrogen Testing and Production Blueprint: Gap Analysis and Next Steps, Robert Sorrel, Henry Royce Institute, UK.

To join the meeting, please click on the Webex link below.

Join meeting

or via the meeting link:

https://ecconf.webex.com/ecconf/j.php?MTID=mdb3befeee17f7c58f9b5c509d61bc41a

Previous Seminar

Presentations from the seminar on Hydrogen in South Australia on 30th June are available for download here:

• Prof Christian Doonan, Scaling green hydrogen, CRC bid update

- Quentin Roberts, South Australia Hub
- Richard Day, South Australia's clean energy transformation and hydrogen industry development

Other Australian News

The Tasmanian Government has revealed that its three green hydrogen feasibility studies have concluded that green hydrogen production and use is technically feasible on the Australian island state.

The three studies (by ABEL Energy, Origin Energy and Grance Resources) focused primarily to outline options to achieve short-term goals stated in the Tasmanian Renewable Hydrogen Action Plan (TRHAP) which includes targets of local production, consumption and export of green hydrogen in Tasmania.

Read more here: <u>Tasmanian Government pushes forward with a hydrogen-fuelled future</u>

Hydrogen Jobs Plan, SA

The South Australian Government has received 60 proposals from organisations across the globe for its A\$593m (\$411.8m) Hydrogen Jobs Plan. Under the plan, the Malinauskas Labour Government hopes to create 300 jobs during the construction of the power plant, with an additional 10,000 jobs in the pipeline of renewable energy projects, and 900 jobs through the hydrogen export industry.

Unveiled in March 2021, the plan would see a 200MW hydrogen power station, 250Mwe capacity of hydrogen electrolysers and a hydrogen storage facility developed.

Read more here: SA Labor unveils \$590m hydrogen plan to power new jobs and industry

Workforce development, Queensland

Queensland Minister for Training and Skills Development, Di Farmer, visited Townsville, Queensland to witness the signing between TAFE Queensland and the Ark Energy Corporation, which will see TAFE Queensland upskill and reskill Ark Energy's workforce along with its affiliated companies, including Sun Metals and Townsville Logistics.

Charles Darwin University to develop hydrogen plant.

Charles Darwin University (CDU) will develop a pilot hydrogen generator, storage, and fuel-cell system located in Darwin, the first of its kind in the Northern Territory.

Professor Suresh Thennadil, director of CDU's <u>Energy and Resources Institute</u> (ERI) has said the Hydrogen Energy Storage System (ESS) will be built and operated for industry partners,

students, and researchers to further develop and commercialise hydrogen as an energy source.

ERI Director, Professor Suresh Thennadil, said a green hydrogen future for the Northern Territory would need comprehensive research and evaluation as well as the ability to train a workforce with appropriate skills required for sustaining a hydrogen industry.

Hybrid Systems Australia (WA) will provide the electrolyser, hydrogen storage and fuel-cell system to be housed at the Renewable Energy Grid Testing Facility in East Arm Wharf, Darwin. The plant is supported by the Northern Territory Renewable Hydrogen Strategy.

Grant applications open for \$20 million Hydrogen Highway

Applications are now open for \$20 million in grant funding to support the design and delivery of the Hume Hydrogen Highway. Co-funded by the Victorian and NSW Governments, the grant is available for a consortium to develop infrastructure comprising at least four refuelling stations along the Hume Highway and support at least 25 hydrogen powered trucks. The ambitious program envisages completion by June 2025 as a key enabler of low-carbon transportation. Grant applications close 21 October 2022. The successful applicant must enter into a joint funding agreement with both Governments. For more, visit: energy.vic.gov.au/grants/hume-hydrogen-highway

International News

Fuel Cell Industry Review 2021 now available.

This is a must-have document produced annually by international hydrogen consultants E4tech. Although arriving late this year, is now available for download at https://fuelcellindustryreview.com/index.php

Nuclear hydrogen Initiative

The Nuclear Hydrogen Initiative (NHI), a coalition working to advance nuclear hydrogen as a critical climate solution, has been launched by more than 40 global participants. With plans of engaging policymakers, businesses, investors and other key stakeholders, the NHI sets out to raise awareness of the role nuclear hydrogen can play in delivery carbon-free, secure and affordable energy. As efforts to produce hydrogen at scale ramp up, the NHI believes that the nuclear generated hydrogen pathway offers benefits including that it is space-efficient, dense, and firm, with the ability to provide clean energy at scale constantly.

Read more here: <u>Nuclear energy plants could help accelerate hydrogen adoption with</u> reduced costs

Australian Hydrogen Events 2022/23

- 8-9 September, H2Q Hydrogen Connect Summit, Brisbane Convention and Exhibition Centre
- 14 September, Smart Energy Queensland, Royal International Convention Centre, Brisbane
- 26-27 October, All Energy Australia 2022, Melbourne Conference and Exhibition Centre
- 30 Oct-4 November, 17th International Symposium on Metal-Hydrogen Systems, Pan Pacific Hotel, Perth WA
- 4-9 December, World Renewable Energy Conference, Murdoch University, Perth
- 6-7 December 2022, Australian Hydrogen Conference (West). Crown Perth.
- 8-10 February 2023, The first Australian Hydrogen Research Conference, ANU, Canberra

If you have news items that you would like to share with the Australian Hydrogen Research Network, please send them to adicks@ah2rn.org.au