

ONLINE SEMINAR

Helium and Hydrogen: The Past and the Future of Transport?

DATE & TIME: 11TH JULY 2023: 18:00 – 19:30 GULF STANDARD TIME

ABOUT THE EVENT

This seminar is a story of two elemental gasses Hydrogen and Helium. Both are well known for their use as lifting gasses in airships particularly during the early part of the 20th Century. Today both gasses form a part of the discussion of the sustainable future of transport industry, and both gasses have a planned use in aviation and both are likely to have a future use for road transport vehicles (Hydrogen directly, and helium within the manufacturing process). This seminar will discuss the role of both gasses in the history and future of the transport industry, and will aim to predict how the transport industry will change moving towards 2050 and the fossil fuel transition.

Helium is an elemental gas which is currently completely dependent on the natural gas industry for its production. Even if oil and gas production were to continue at current rates the production of helium is expected to decline due to dwindling reserves. With decreasing demand for oil and gas, helium will become even less available. Helium is critically important in many industries. For example, it is the basis for superconducting magnets which are used in MRI machines in hospitals. Within the transport industry, it is still used as a lifting gas in airships, it is used in welding for vehicle manufacture and critically it is used in chip manufacturing. Post covid due to supply chain issues chips for cars were in short supply, producing challenges for the car industries supply chain. As helium supply declines cross-sector manufacturing challenges are likely to be experienced. The solutions to this require technological changes which will be discussed during the seminar.

Hydrogen is also an elemental gas. To date the vast majority of hydrogen used on earth has been created from the fossil fuel industry including coal. More recently the use of electrolysis to split hydrogen from water generates a future sustainable fuel with great potential. Hydrogen is however feared by consumers due to its historic use in airships, particularly the Hindenburg disaster. Early trials with light vehicles have not attracted many users. However, for heavier vehicles hydrogen is seen as a strong contender for the sustainable future.

ABOUT THE SPEAKER

The Seminar will be presented by **Dr Stephen Wilkinson FCIHT, FGS, FRMS, DIC**, he is the Director of Research at the University of Wollongong in Dubai. He has worked as an applied sustainability researcher for the last 15 years.

FURTHER INFORMATION AND REGISTRATION

THIS IS A ONLINE EVENT. Attendance at this Seminar is free, but registration is mandatory. Sign- up at [Helium and Hydrogen](#). Registered attendees will be sent joining details shortly before the event.

For further information, e-mail us at ciht.dubaigroup@gmail.com.

