9 March 2023

# Gelion plc

("Gelion" or the "Company")

## Strategic acquisition of Johnson Matthey's battery materials IP portfolio

## Significantly strengthens Gelion's position in the LiSiS market to create a sustainable future through nextgeneration energy storage solutions

Gelion (AIM: GELN), the Anglo-Australian battery innovator, is pleased to announce the acquisition of the Lithium Sulfur and Silicon Anode ("LiSiS") patent portfolio (the "IP") (including solid and liquid electrolytes, disordered rock salt, electrode formulation and battery materials recycling) from Johnson Matthey for a consideration of £4.25 million payable in cash and will be funded from the Company's available resources.

### Highlights

- This highly valuable next generation Battery Materials LiSiS patent portfolio from Johnson Matthey, following their decision to exit this business segment, has been developed, cumulatively over a decade, by leading scientists in the field. This acquisition is of significant strategic importance to Gelion and has the potential to significantly advance our effort to achieve higher gravimetric energy density while reducing cost and increasing safety.
- The IP portfolio includes over 450 patents across 82 patent families as well as development programs, technology transfer packages, market and portfolio analyses, manufacturing design and cost models for our LiSiS technology.
- The combination of Gelion's existing IP portfolio and the new IP portfolio has the potential to:
  - resolve the issue of sulfur management which is a critical issue for Lithium Sulfur batteries;
  - eliminate the reliance on the maturity of Lithium Metal anodes as the Lithium Sulfur cathodes developed by Gelion are compatible with graphitic, silicon, and lithium metal anodes; and
  - allow for the Lithium Sulfur technology to be commercialized rapidly.
- Gelion is in advanced discussions to sell a subset of patents (73 patents across 17 patent families) relating to silicon anodes which are not essential to the Company's activities with a third party for c. £1.25 million. This is in line with Gelion's focus on sulfur cathodes and associated electrolyte technology. Should this sale be successful, the net cash outlay of the acquisition of the remaining IP to Gelion would be reduced to c.£3 million.
- With this intellectual property acquisition, the board is confident that it will significantly strengthen Gelion's position to meet the growing demand for sustainable and efficient energy solutions.

**Commenting on the IP acquisition, John Wood, CEQ**said: "The acquisition of this highly valuable IP portfolio strengthens our own Lithium Silicon Sulfur technology and gives us a broad horizon to be able to mature the technology toward scaled production at a faster rate. It also positions Gelion at the forefront of the global battery technology effort for the next generation of safe, high energy density Lithium batteries.

"We are very enthusiastic about the unique path, we are developing towards high performance Lithium Sulfur technologies. This IP portfolio will help in our objectives toward achieving a protective moat for Gelion's technology.

Lithium Sulfur is widely anticipated as the next stage of the Lithium energy storage industry and through combining the leading IP portfolio, in the most promising Lithium battery technology segment, with our breakthrough technology development, we believe we have established a very exciting opportunity."

#### Acquisition of highly valuable IP portfolio acquisition from Johnson Matthey

Gelion has acquired Johnson Matthey's entire Lithium Sulfur and Silicon Anode patent portfolio which includes over 450 patents across 82 patent families, as well as silicon alloy development program, technology transfer packages, market and portfolio analysis, and manufacturing design and cost models. With the Group's focus on Sulfur cathodes, Gelion is in advanced discussions to the sale of the 73 patents and applications relating to silicon anode to a third party. Should the sale be successful, this would result in a net cash outflow of c. £3m which will be settled from the Company's existing resources.

The IP acquired is a very valuable portfolio that covers various essential aspects of Lithium Sulfur technologies. However, we recognize that one significant challenge in this field is sulfur management, which if left unaddressed, can lead to batteries with limited cycle life and reduced commercial feasibility. We are confident that our existing IP portfolio, which offers a cutting-edge solution for this issue, will complement, and enhance the newly acquired portfolio. By combining the strengths of both portfolios, we can offer a clear pathway to a commercially viable product, providing us with a crucial strategic advantage in a highly competitive market.

This combined portfolio will allow Gelion to establish a strong and resilient IP portfolio, which will provide effective protection to retain a strategic advantage over competitors in the same space. The consolidation of both portfolios in conjunction with Gelion's unique development strategy, will facilitate the rapid acceleration in technology development and provides a strategic path to commercialisation that eliminates any reliance on advancements required to develop mature lithium metal anodes. Gelion will develop Lithium-Sulfur cathodes that are compatible with a range of anode technologies, including graphitic and silicon, which will be expediated by this acquisition.

Gelion's Performance Additives division is developing sulfur cathodes which, when paired with existing silicon anode technologies, improves overall Lithium-ion battery safety, energy density and cost, which are key drivers in establishing the competitive differentiation for many upstream products. This presents a compelling commercial proposition for a range of markets including electric vehicles, e-aviation and drones. The combination of this substantial IP portfolio with Gelion's Lithium Sulfur and LiSiS development program supports Gelion's progress and gives the Company freedom to operate with a protective moat around the solutions it intends to develop. In particular, this acquisition gives the Company the

opportunity to significantly advance its efforts to achieve this higher gravimetric energy density while reducing cost without using rare and expensive metals and increasing safety.

Lithium Sulfur is expected to be the next generation battery technology due to its significantly high energy densities than Lithium-ion technology, and the absence of transition metals [1]. This IP portfolio provides a unique opportunity for Gelion to position its research effort at the forefront of the battery market. Gelion will progress through the Technical Readiness Level (TRL) stages to establish paths to scaled production.

The acquired portfolio is complementary to Gelion's own IP providing Sulfur management solutions. It will give Gelion a strategic advantage in this competitive space. The acquisition of one of the largest portfolios in the Lithium Sulfur space significantly strengthens Gelion's overall offering in the LiSiS market, enhances the Group's existing IP portfolio and assists in achieving the Group's aim of creating a sustainable future through next-generation energy storage solutions.

## CONTACTS

**Gelion plc** John Wood, CEO Amit Gupta, CFO Thomas Maschmeyer, Founder and Principal Technology Advisor

finnCap Ltd (Nominated Adviser and Sole Broker) Corporate Finance Christopher Raggett Seamus Fricker Fergus Sullivan

**ECM** Barney Hayward

Alma PR (Financial PR Adviser) Justine James Hannah Campbell Will Ellis Hancock via Alma PR

+44 207 220 0500

+44 20 3405 0205 gelion@almapr.co.uk

#### About Gelion plc

Gelion ("gel: ion") is a global renewable-energy storage innovator who supports the transition to a sustainable economy while delivering value for its customers and investors by designing and manufacturing the outstanding zinc-bromide batteries for stationary energy storage and additives for mobile battery applications.

**Performance Additives** - Tomorrow's transport systems will rely on mobile renewable energy. Gelion is developing performance additives with the aim of improving the safety, longevity and energy density of lithium-based batteries for mobile applications. Using nanotechnology, Gelion's Lithium-Silicon-Sulfur additives will help power the EV and e-aviation markets.

**Stationary storage** - Gelion Zinc Bromide battery: the sustainable energy storage solution. Gelion has developed patented technology for a breakthrough zinc-bromide battery to support the transition to a carbon neutral economy by 2050. The technology is being developed with the goal of establishing Gelion Zinc Bromide as a logical participant in the ecosystem of suppliers, manufacturers and customers surrounding lead acid technology.

Gelion's zinc-bromide gel battery uses non-flow technology, which is scalable, can deliver 100% depth of discharge and has potential for higher temperature tolerance and longer duration discharge than lead-acid batteries.

Gelion was spun-out from the University of Sydney in 2015 by Professor Thomas Maschmeyer, Fellow of the Australian Academy of Science and recipient of the Australian Prime Minister's Prize for Innovation 2020, that country's highest honour for scientific entrepreneurship.

The Company's ESG credentials are strongly aligned to six of the UN's 17 Sustainable Development Goals.

Gelion's shares are listed on the AIM market of the London Stock Exchange and it received the Green Economy Mark at IPO in November 2021 recognising its commitment to energy transition.

[1] https://www.sciencedirect.com/topics/engineering/lithium-sulfur-batteries

This information is provided by RNS, the news service of the London Stock Exchange. RNS is approved by the Financial Conduct Authority to act as a Primary Information Provider in the United Kingdom. Terms and conditions relating to the use and distribution of this information may apply. For further information, please contact ms@lseg.com or visit www.ms.com.

RNS may use your IP address to confirm compliance with the terms and conditions, to analyse how you engage with the information contained in this communication, and to share such analysis on an anonymised basis with others as part of our commercial services. For further information about how RNS and the London Stock Exchange use the personal data you provide us, please see our <u>Privacy Policy</u>.

END