



ASX Release | ClearVue Technologies Limited (ASX: CPV)

## ClearVue signs Research Agreement with School of Photovoltaic and Renewable Energy Engineering at UNSW to explore Quantum Dots

### Highlights

- ClearVue signs 12 month Research Agreement with the School of Photovoltaic and Renewable Energy Engineering at UNSW Sydney
- Research Agreement to look at development of a new transparent luminescent solar concentrator using quantum dots
- If successful, ClearVue would seek to further scale the prototype with a view to integrating the developed quantum dot technology with its existing technology and products.

**20 December 2018:** Smart building materials company ClearVue Technologies Limited (ASX: CPV) ("**ClearVue**" or "**the Company**") is pleased to announce that it has signed a new Research Agreement with UNSW Sydney.

Under the terms of the binding Research Agreement, UNSW's School of Photovoltaic and Renewable Energy Engineering will carry out contracted research on behalf of ClearVue. The research team will be led by Dr Shujuan Huang and supported by Assoc. Prof. Alison Lennon, Dr Yang Li and Dr Robert Patterson.

The research project will explore the development of a transparent luminescent solar concentrator employing quantum dots demonstrating high quantum yield photoluminescence. The project includes as a milestone development of custom quantum dot materials and a small-scale prototype. The research project is anticipated to take approximately 12 months from the date of signing.

If the research project is successful, ClearVue would seek to further scale the prototype in conjunction with UNSW with a view to integrating the developed quantum dot technology with its existing technology and products. It may also seek to offer it as a stand-alone solution for certain applications and use cases.

Commenting on the Research Agreement, ClearVue Executive Chairman Victor Rosenberg said:

*"We are very excited about working with Dr Huang and the world leading team that are working with her at UNSW's School of Photovoltaic and Renewable Energy Engineering. This new research project will explore a slightly different approach to clear solar glass – the new research will explore implementation of a different kind of nanoparticle material than the type that we currently use in our products in the form of specially developed quantum dots. Our hope with this new research is that we may be able to combine quantum dot technology with our existing technologies - but also with the technologies being developed under our other research programs - to improve overall power output from our innovative glass products but also to explore*

*other application opportunities. We look forward to being able to report to shareholders on progress under this project over the next 12 months.”*

Commenting on the Research Agreement, Dr Shujuan Huang has said:

*“Colloidal quantum dots have emerged as promising low cost and high performing materials in optoelectronics. My team at UNSW has demonstrated rapid progress in quantum dot based solar cells and light emitting diodes (LEDs). Colloidal quantum dots offer high level tunability of their optical properties and high light emission yields across the visible and NIR region. Within this exciting contracted research project, we will expand our expertise to develop colloidal quantum dot materials with these unique optical properties for high transparency and high light to power conversion efficiency solar concentrator devices via material, structure and optical design.”*

**For further information, please contact:**

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**About ClearVue Technologies Limited**

ClearVue Technologies Limited (ASX: CPV) is an Australian technology company that operates in the Building Integrated Photovoltaic (BPIV) sector which involves the integration of solar technology into building and agricultural industries, specifically glass and building surfaces, to provide renewable energy. ClearVue has developed advanced glass technology that aims to preserve glass transparency to maintain building aesthetics whilst generating electricity.

Solar PV cells are incorporated around the edges of an Insulated Glass Unit (IGU) used in windows and the lamination interlayer between the glass in the IGU incorporates ClearVue’s patented proprietary nano and micro particles, as well as its spectral selective coating on the rear external surface of the IGU.

ClearVue’s window technology has application for use in the building and construction and agricultural industries (amongst others).

ClearVue has worked closely with leading experts from the Electron Science Research Institute, Edith Cowan University (ECU) in Perth, Western Australia to develop the technology.

To learn more please visit: [www.clearvuepv.com](http://www.clearvuepv.com)

### **About the UNSW School of Photovoltaic and Renewable Energy Engineering**

The School of Photovoltaic and Renewable Energy Engineering at UNSW is internationally recognised for its research in the area of photovoltaics. It was also the first organisation internationally to offer undergraduate training in the area of Photovoltaics and Solar Energy, later followed by Renewable Energy, and since then has extended the educational programs offered to include postgraduate and research training opportunities.

### **About Dr Shujuan Huang**

Dr Shujuan Huang is a Senior Lecturer in the School of Photovoltaic and Renewable Energy Engineering at UNSW. Her research is focused on developing nanomaterials for future generation low-cost and high-efficiency photovoltaics with particular emphasis on solution-processed solar cell technologies including hot carrier solar cells, perovskite solar cells, colloidal quantum dot and their tandem cells. She also applies these nanomaterials to other optoelectronics such as LEDs and luminescent solar concentrators.

Dr Huang has extensive peer reviewed publications across these interest areas (for information on her publications see: <https://research.unsw.edu.au/people/dr-shujuan-huang/publications>).

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