# Article information:

Inhibition Effect of Thermally-Induced Fire in 21,700 Lithium-Ion Battery With Low-Pressure Twin-Fluid Water Mist | J. Electrochem. En. Conv. Stor | ASME Digital Collection
<https://asmedigitalcollection.asme.org/electrochemical/article/18/2/020912/1094102/Inhibition-Effect-of-Thermally-Induced-Fire-in-21>

# Article summary:

1. This study investigates the efficiency of low-pressure twin-fluid water mist (TFWM) on suppressing lithium-ion battery fires.

2. Experiments were conducted to research the effect of working pressures and release stages on extinguishing the fire.

3. The results indicate that TFWM is more effective than aqueous vermiculite dispersion (AVD) in controlling type 21,700 LIB fires, with an optimal working pressure of 1.2 MPa.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article provides a detailed overview of the efficacy of low-pressure twin-fluid water mist (TFWM) in suppressing lithium-ion battery fires, and compares it to aqueous vermiculite dispersion (AVD). The authors present their findings in a clear and concise manner, providing evidence for their claims through experiments conducted under various conditions. The article does not appear to be biased or one-sided, as both TFWM and AVD are discussed equally throughout the text. Furthermore, potential risks associated with using either method are noted in the discussion section.

However, there are some points that could be further explored in order to strengthen the reliability of this article. For example, while the authors provide evidence for their claims regarding TFWM's effectiveness at suppressing LIB fires, they do not discuss any potential drawbacks or limitations associated with its use. Additionally, while they compare TFWM to AVD in terms of fire suppression performance, they do not explore any other possible alternatives or methods that could be used instead. Finally, while the authors provide evidence for their claims regarding TFWM's effectiveness at suppressing LIB fires, they do not discuss any potential long-term effects or implications associated with its use.

In conclusion, this article provides a comprehensive overview of the efficacy of low-pressure twin-fluid water mist (TFWM) in suppressing lithium-ion battery fires and compares it to aqueous vermiculite dispersion (AVD). While it is generally reliable and unbiased in its presentation of information and evidence for its claims, there are some points that could be further explored in order to strengthen its trustworthiness and reliability even further.

# Topics for further research:

* Advantages and disadvantages of TFWM
* Alternative methods for suppressing LIB fires
* Long-term effects of TFWM on LIBs
* Comparative analysis of TFWM and AVD
* Safety considerations for TFWM
* Cost-effectiveness of TFWM

# Report location:

<https://www.fullpicture.app/item/c7ee5f3bd60bedb04611ee249a799bfa>