



**Safe and Lightweight
Lithium Metal Batteries
for Electric Flight**

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INTRODUCTION TO CUBERG



Richard Wang, PhD

Stanford

TESLA

Caltech

TEAM

- 14 full-time employees
- Alums of Oxford, Stanford, Harvard, Cal, Waterloo, Oxis, Enovix, Natron

INVESTORS



PARTNERS

cyclotronroad

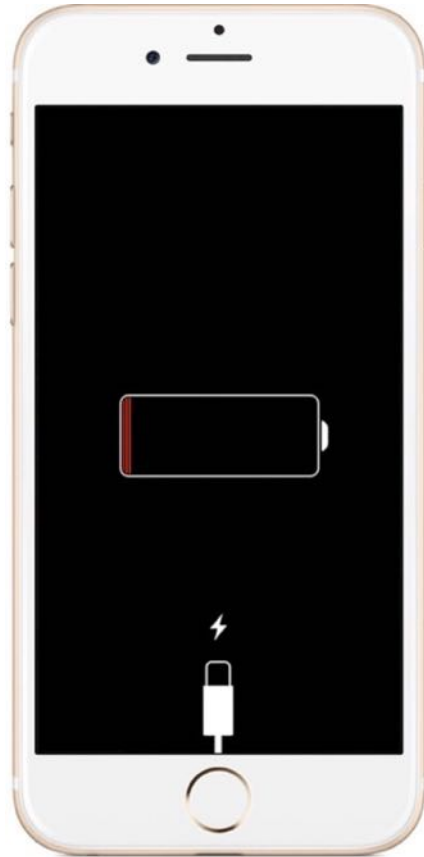


CalSEED



WORLD MATERIALS FORUM

Energy



Safety



Lithium-ion is simply not good enough for electric flight.

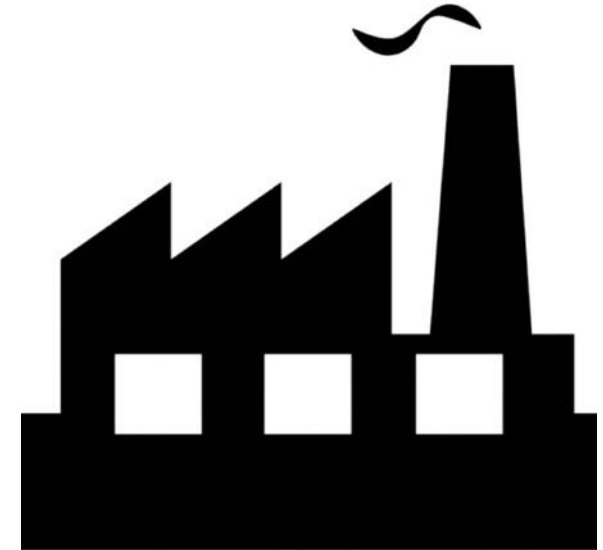
WHAT DO WE NEED?



More energy

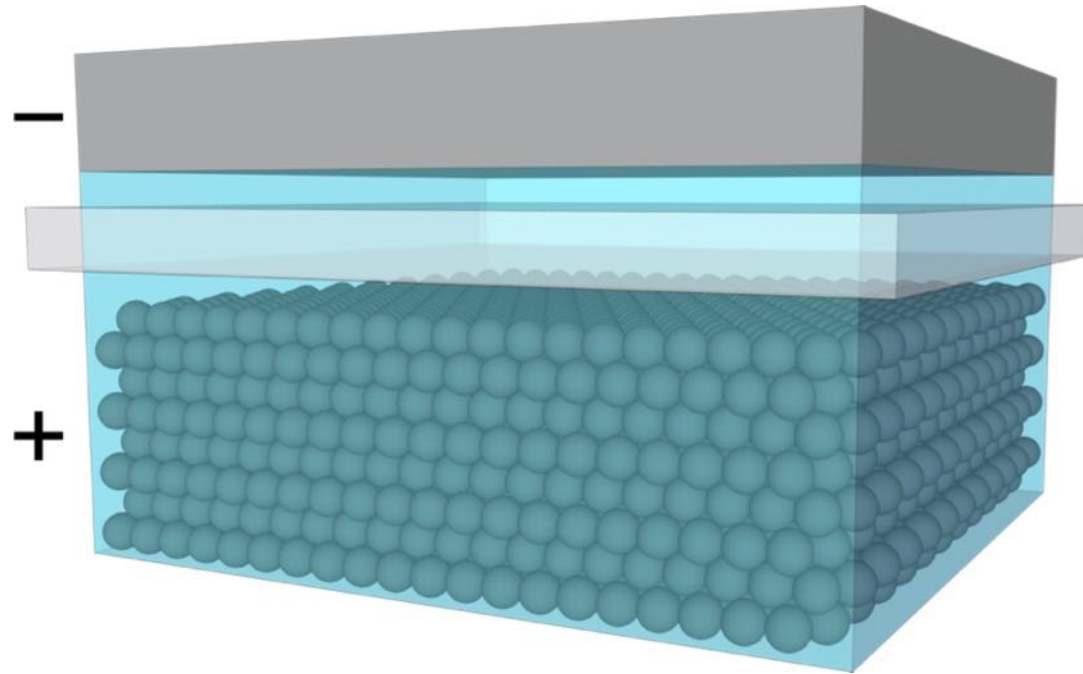


Improved safety



Leverage lithium-ion ecosystem

NEW MATERIALS AND DESIGNS



Lithium metal anode

Porous separator

Non-flammable electrolyte

High-capacity cathode



More
energy

Much
safer

Drop-in solution with
Li-ion manufacturing

Cuberg lithium metal cell



Commercial lithium-ion cell



Li-ion Battery



Flight time: 15:56

Cuberg Li Metal Battery



**70% longer
flight time**

Flight time: 27:06

MATURATION OF THE UAV MARKET



Aerial photography



Package delivery



Communications and surveillance



Freight delivery

THE FUTURE OF ELECTRIC FLIGHT



2030: urban air mobility with eVTOL passenger air taxis

THE FUTURE OF ELECTRIC FLIGHT



2035 and beyond: hybrid-electric and full electric passenger planes