

# Ageing and Degradation of Lithium-ion Battery

Presented by  
**Shilajit Das**  
Research Scholar

Department of Metallurgical and Materials Engineering

National Institute of Technology, Karnataka

Surathkal, Mangalore – 575025

(11<sup>th</sup> March 2026)

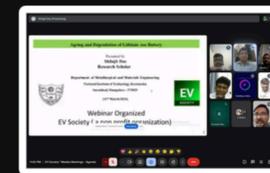


Webinar Organized  
EV Society (a non profit organization)

meet.google.com is sharing your screen. [Stop sharing](#) [Hide](#)

Participant grid showing:

- Purushothama ...
- Dr. Shiva Murth...
- Ritesh ...
- Shilajit Das
- Fireflies.ai Note...
- BV MA...
- Krutarth Kar...
- 2 others
- EV Soci...



Amarnath K...

Shilajit Das

P

Purushothama Padma...

K A

8 others

EV SOCIETY

EV Society

People

Add people

Search for people

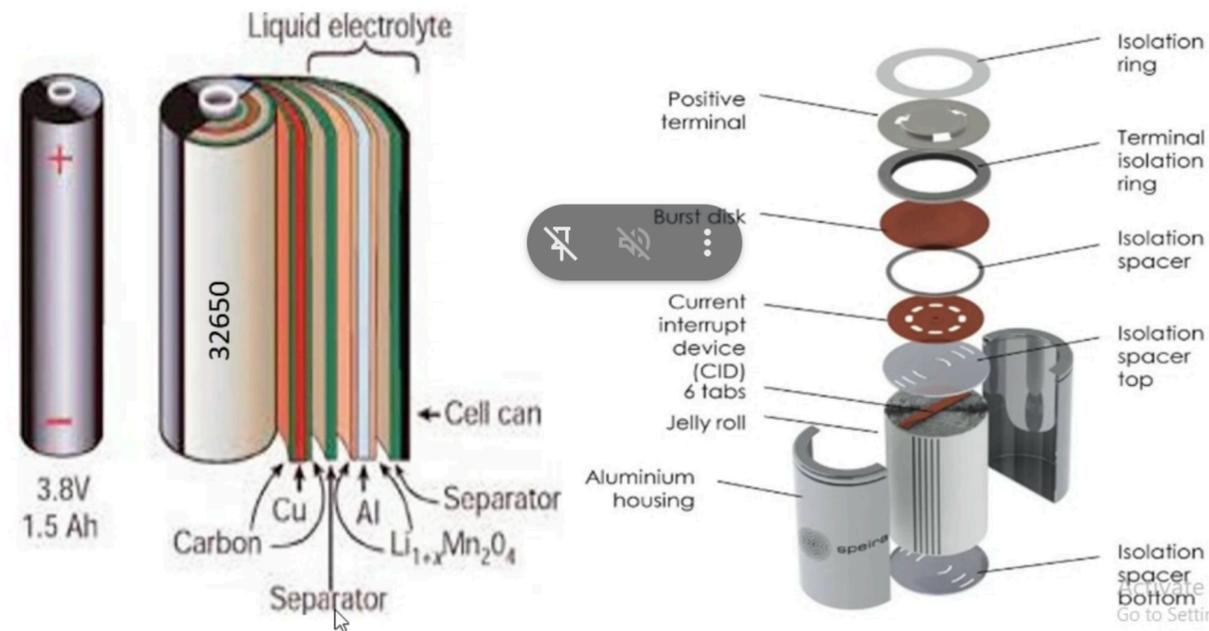
IN THE MEETING

Contributors 14

- EV SOCIETY EV Society (You) Meeting host
- Amarnath Kosgi
- Anirudh Kosgi
- Asha S
- Ashwini Sudarshana
- BV MANJUNATH
- Dr. Shiva Murthy G
- Fireflies.ai Notetaker Na...

# Lithium Ion Battery

Lithium-ion battery is a type of rechargeable battery that uses lithium ions as the main charge carriers. They have a high energy density, meaning they can store a lot of energy in a small space.



The components that make up a Lithium-ion battery

(Xiao et al. 2021)

Meeting controls: Mute, Video off, Screen share, Reaction, Chat, Hand raise, More options, End call

Meeting status: Info, Chat, App grid, Lock



Amarnath K...



Shilajit Das

P

Purushothama Padma...

K A

11 others



EV SOCIETY

People

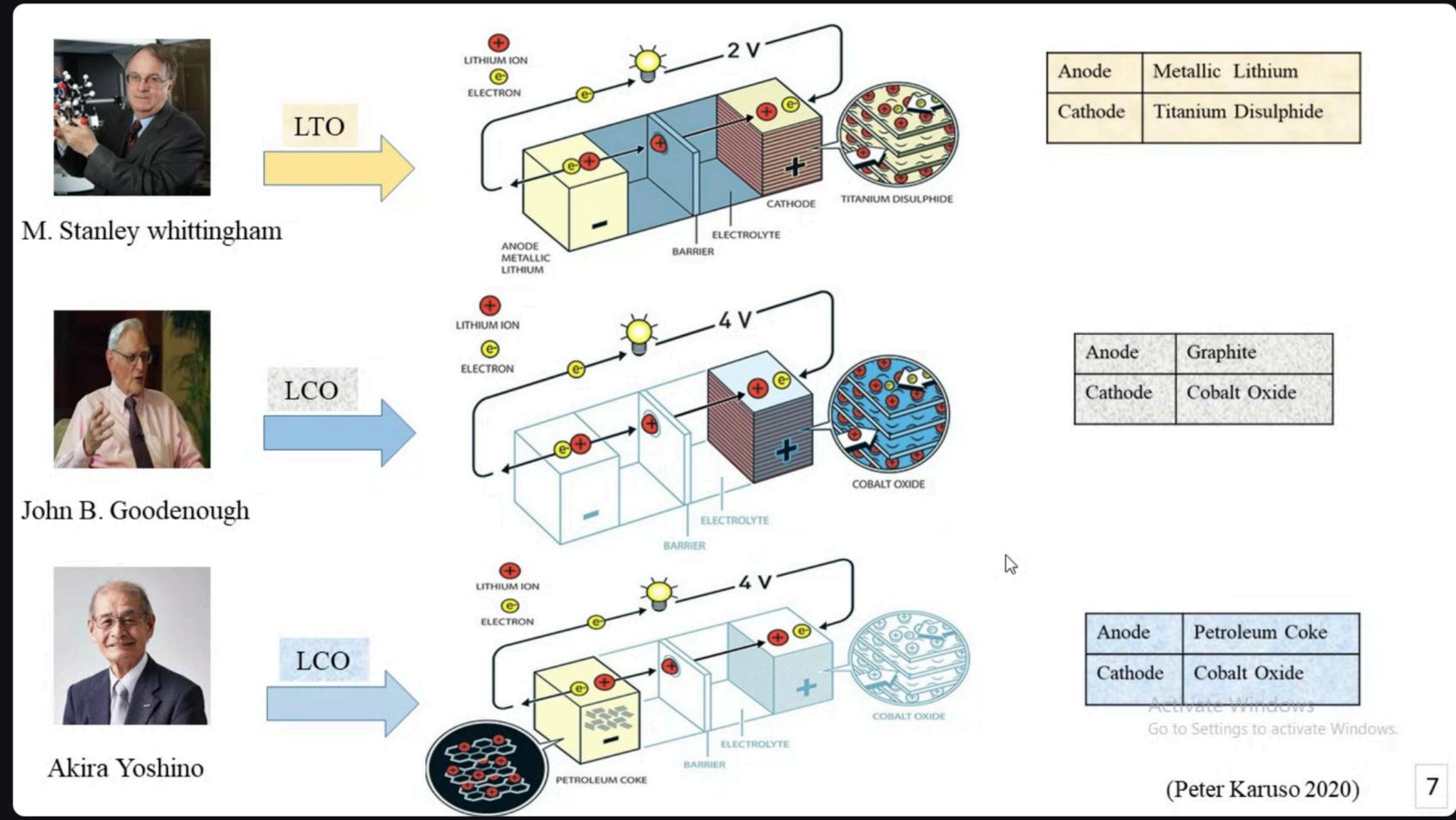
+ Add people

Search for people

IN THE MEETING

Contributors 17

- EV SOCIETY EV Society (You) Meeting host
- Amarnath Kosgi
- Anirudh Kosgi
- Asha S
- Ashwini Sudarshana
- BV MANJUNATH
- Dr. Shiva Murthy G
- Fireflies.ai Notetaker Na...



**LTO**

M. Stanley Whittingham

Anode	Metallic Lithium
Cathode	Titanium Disulphide

**LCO**

John B. Goodenough

Anode	Graphite
Cathode	Cobalt Oxide

**LCO**

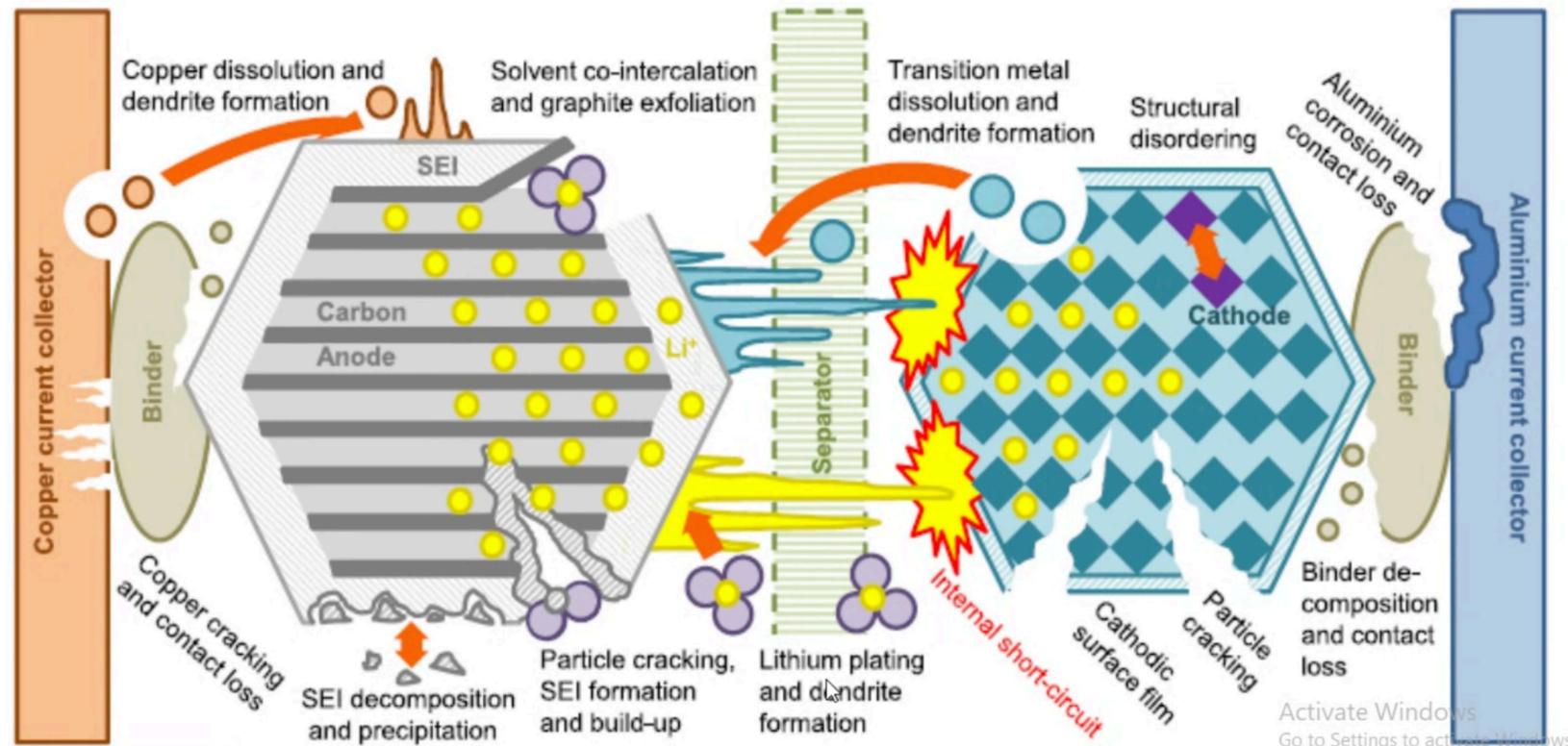
Akira Yoshino

Anode	Petroleum Coke
Cathode	Cobalt Oxide

(Peter Karuso 2020)



## Degradation of Li-ion Cells



(Han et al. 2019)

11

Participant grid showing:

- Dr. Shiva Mu...
- Shilajit Das
- Amarnath K...
- Purushotha...
- Fireflies.ai N...
- Asha S
- Krutarth Kar...
- 10 others
- EV SOCIETY



Shilajit Das



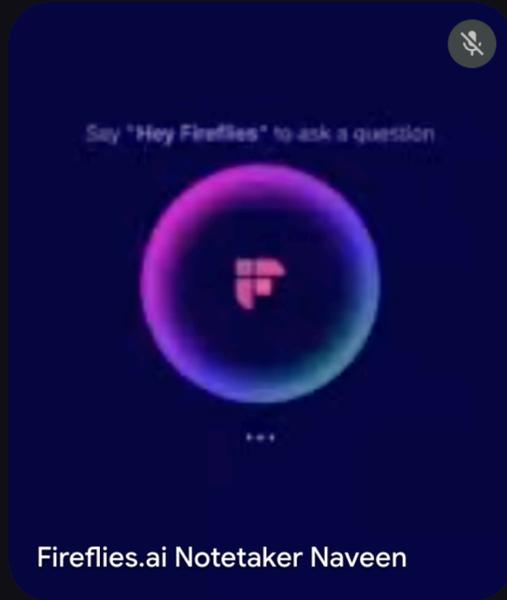
Ritesh R Shetty



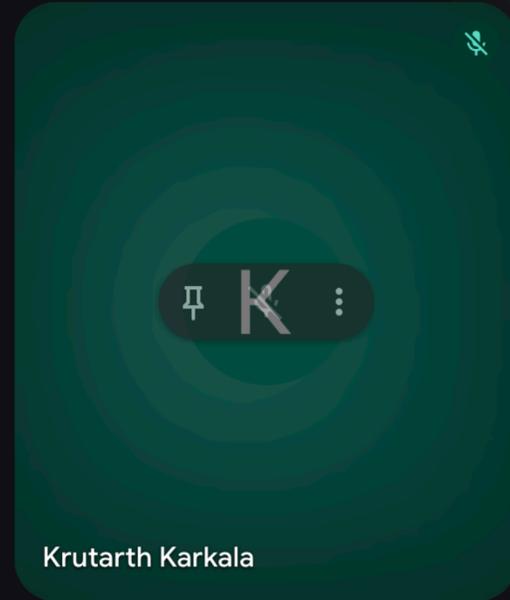
Purushothama Padmanabha



Dr. Shiva Murthy G



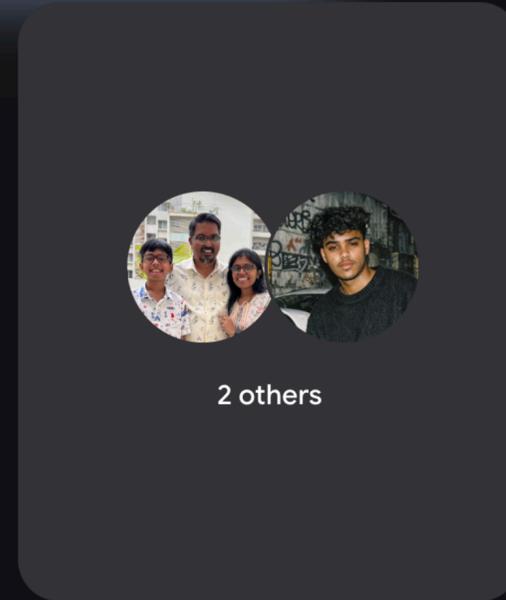
Fireflies.ai Notetaker Naveen



Krutarth Karkala



BV MANJUNATH



2 others



EV Society

