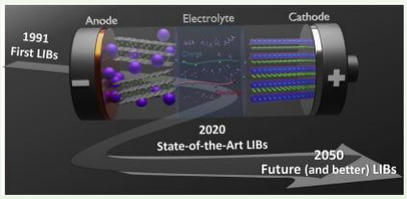
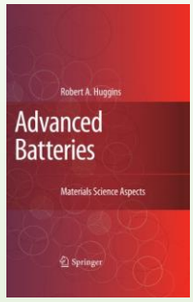
Electrochemical Society
- A UCSD Student Chapter -
"Fostering a community of Electrochemists and Electrochemical Engineers"

Sustainable Power and Energy Center

UC San Diego
JACOBS SCHOOL OF ENGINEERING



J. Power. Source, 2020, 479, 228708.



SPEC Battery Boot Camp

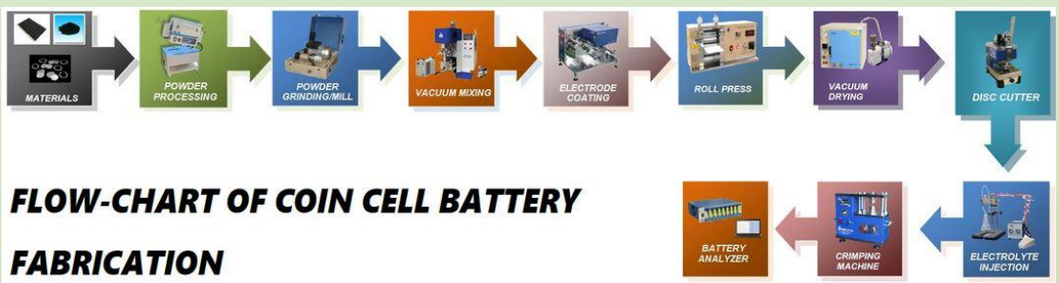
June 19, 2023-Aug 18, 2023

Application: https://forms.gle/nvfNo2WbkR8ghrGh7
Deadline: April 8, 2023

GOALS AND OBJECTIVES

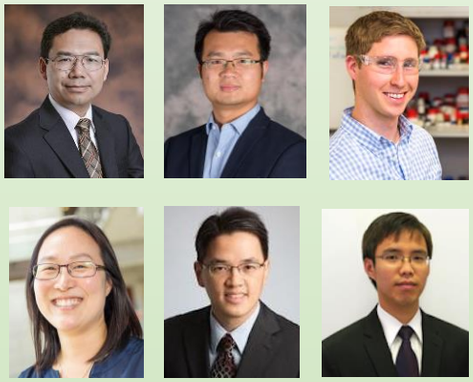
This summer camp will introduce the fundamental design principles and operation mechanisms of lithium-ion batteries, as well as techniques to fabricate and evaluate their performance. There are three key focus of this camp:

- Materials and chemistry of lithium-ion batteries
- Theory and modeling of cell operation
- Fabrication, testing and performance evaluation.



Battery fabrication process to be demonstrated and practiced.

INSTRUCTORS



PARTICIPANTS

- Undergraduates
- Junior graduate students
- Industry fellows
- Limited to 10-12 trainees

STRUCTURE AND SCHEDULE

- Open ceremony and introduction
- 2-hour lecture daily
- Lab training and experiments 6hr daily
- Synthesis and fabrication
- Half-cells and full cells
- Testing and data analysis
- Modeling and projection
- Weekly assignment/report
- Presentation and Award ceremony

BENEFITS

- ❖ Knowledge in lithium-ion batteries
- ❖ Hands on experience in fabrication and testing
- ❖ Internship and job opportunities
- ❖ Stipend for students: $4000/8 weeks
- ❖ Win a ride on Honda Race Car!

APPLICANT REQUIREMENT

- ✓ Solid background (nanoengineering, chemical engineering, chemistry, materials science, etc.);
- ✓ Strong interest in renewable energy;
- ✓ Passionate about science and research
- ✓ Research experience not required.
- ✓ GPA > 3.3

TA/COACH

- Participants grouped into 2-3 teams
- A coach assigned to each team
- Coaches interact with participants daily

FOR QUESTIONS

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Professor Zheng Chen: zhengchen@eng.ucsd.edu