



# MobilityScience™

**CHI-HAO CHANG AND RYAN SMITH**

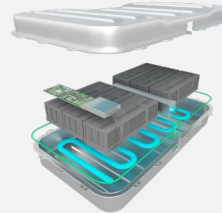
*NAATBatt 2025  
EXTENDING RANGE*

*February 17-20, 2025  
Orlando, Florida*

|   |
|---|
| Adhesives & Sealants                          |
| Conformal Coatings & Encapsulants             |
| Acoustic Solutions (PU, Acrylic, POE)         |
| Electrically & Thermally Conductive Materials |
| Foam Technology (PU, Si, POE)                 |
| Elastomer (POE, EPDM, Si)                     |
| Polymer Modifiers & Compatibilizers           |
| Composites                                    |
| Moldable Optics                               |
| Tire Solutions                                |
| Synthetic Leather & Haptic Materials          |



Interior & Seating



Battery Systems



Safety  
(airbag, tires, lighting)



E-Mobility (power electronics, sensors)



Powertrain



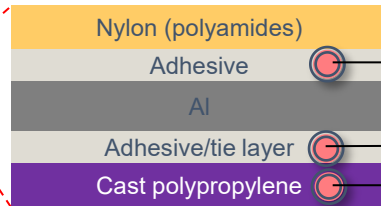
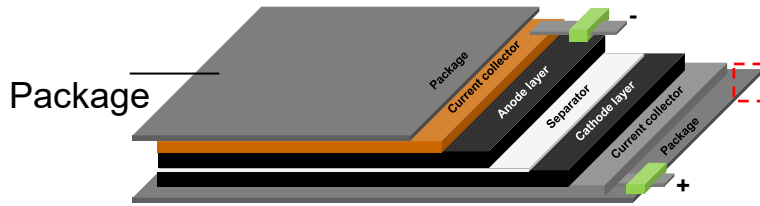
Exterior



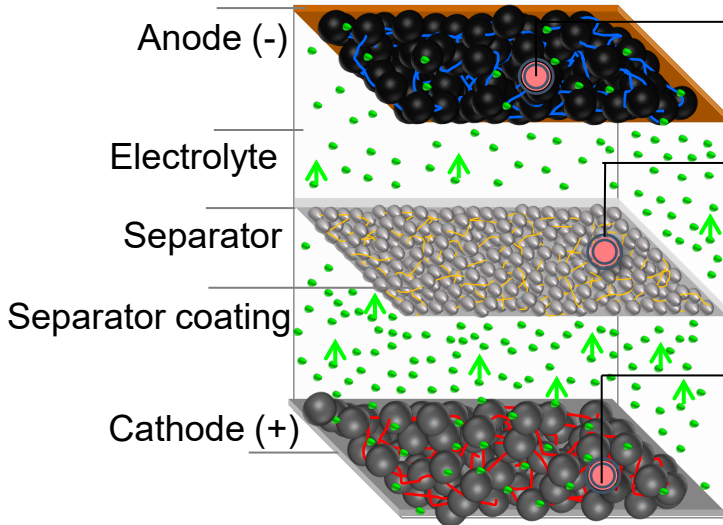
Engineered to help improve **long-lasting performance** in acoustics, lightweighting, safety, comfort



**Sustainability** and **connectivity** for the transition to electric and autonomous vehicles



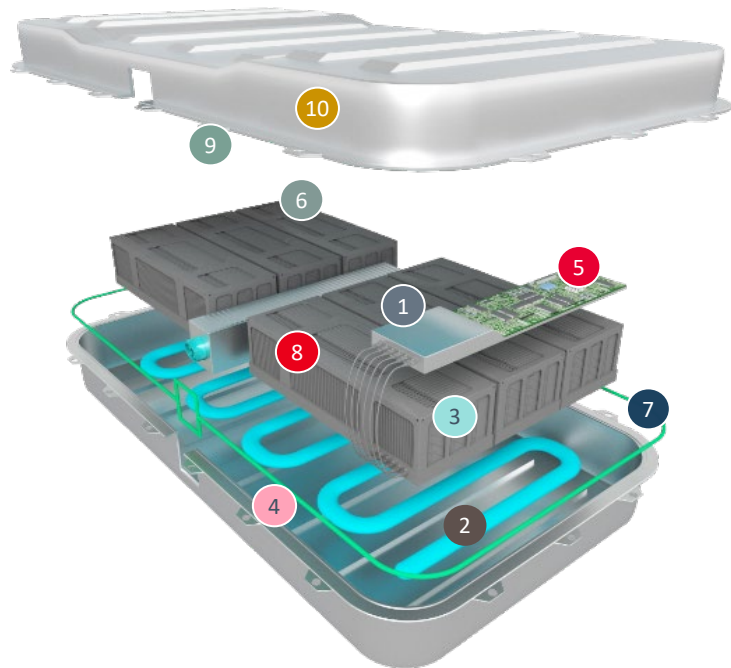
- BYNEL™ Adhesive** for aluminum laminated film, having excellent adhesion and electrolyte/heat resistance
- INTUNE™ Polypropylene (PP) Modifier** for aluminum laminated film, delivering excellent mechanical strength and electrolyte resistance



- ELECPURE™ Dispersant** for improving dispersion of conductive carbons in aqueous system
- ELECPURE™ Wetting Agent** for improving dispersion of conductive carbons in aqueous system
- MAINCOTE™ Polyacrylic Acid Binder** for anode
- OROTAN™ and ELECPURE™ Dispersant** for separator ceramic coating
- ELECPURE™ Dispersant** for separator PVdF coating
- ELECPURE™ and ACUSOL™ Rheology Modifier** for separator ceramic coating
- ELECPURE™ and DOWSIL™ Wetting Agent** for separator ceramic coating
- MAINCOTE™ Polyacrylic Acid Binder** for separator coating
- ELECPURE™ Thermo-responsive Polymer Emulsion Coating** to improve battery safety
- ELECPURE™ LFP Carbon Coating Precursor** for particle size control and improving conductivity
- ELECPURE™ Active Material Milling Agent** for improving production time and better control sizes
- ELECPURE™ Active Material Precursor Dispersant** for reducing viscosity of LFP precursor slurry
- ELECPURE™ Cathode Slurry Dispersant** for reducing viscosity and improving rheology of slurry
- High-purity Caustic Soda/DEC** for pCAM manufacturing and recycling

**Dow also has more materials under development for collaboration**





## Dow e-mobility portfolio

- 1 Encapsulants**  
Lightweighting, cable protection, dielectric encapsulation, vibration absorption
- 2 Gap fillers**  
Thermal conductivity, low density, thermal resistance, enhanced elongation
- 3 Adhesives**  
Thermal conductivity, heat cure acceleration, high elongation, vibration inhibition
- 4 Coolant fluid**  
Improved battery pack heat dissipation
- 5 Conformal coatings**  
Protection against moisture, dust, static
- 6 Potting foam; encapsulation and structural**  
Cell fire protection, vibration absorption, thermal insulation, structure
- 7 Foam gaskets, sealants**  
Efficient sealing and EMI shielding
- 8 Cell cushion/thermal barrier**  
Offers proper compression set between cells; helps prevent thermal propagation
- 9 Fire protection coating**  
Coating to protect aluminum and steel from hot particle flame
- 10 Fiber-reinforced and foam polymer composite housing**  
Lightweighting, durability, fast processing

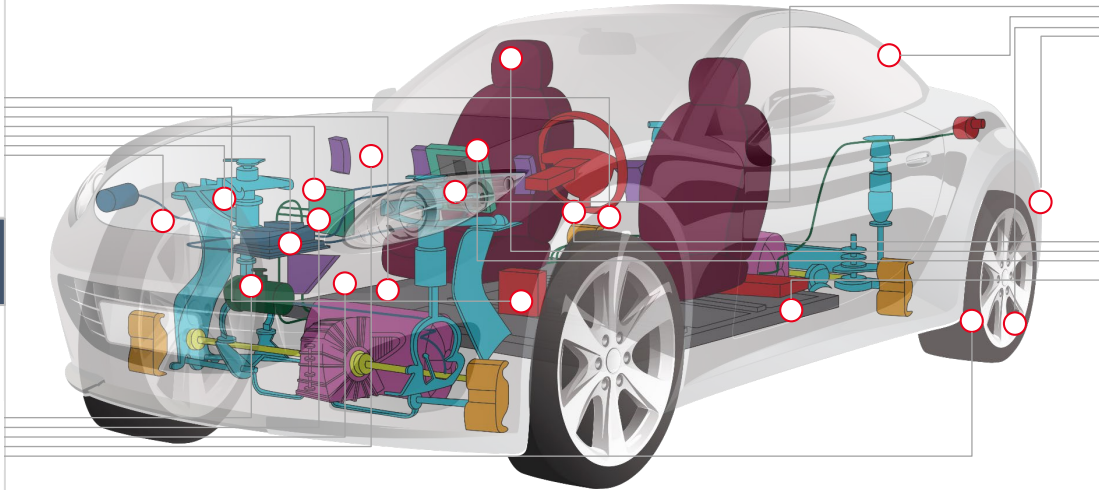
For a full 3D interactive experience, [click here](#)

### E-Mobility

- ● Battery Systems
- ● Power Electronics
- Advance Driver-Assistance Systems
- Displays & Communications
- ● Cables & Connectors

### Powertrain & Performance

- ● Engine & Under-The-Hood
- ● Electronic Components
- ● Automotive Lubricants
- ● Brake & Steering Systems



### Exterior

- Bumper Fascia, Panels, & Trim
- Weatherseals
- Lighting Systems
- ● Tires

### Interior & Safety

- ● Seating
- ● Roof, Panels, & Consoles
- ● Headliner & Trim
- ● Skins
- ● Noise, Vibration & Harshness
- ● Airbag Systems

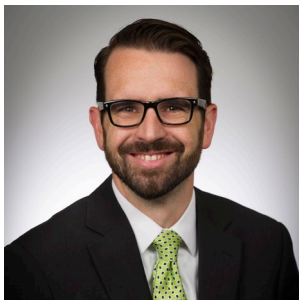
- Polyolefins, EPDM, & Specialty Plastics
- Polyurethanes
- Silicones



**Contact us - Dow will be your material partners for battery material solutions and battery assembly solutions**



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[Dow.com/emobility](https://www.dow.com/emobility)



Seek

Together™