

FROM RESEARCH TO INDUSTRY

cea tech



> **CEA Tech**  
Creating startups  
and accelerating innovation

**200** CEA  
startups

including  
→ **100** CEA Tech  
startups

**50** CEA  
startups  
since 2012

including  
→ **30** CEA Tech startups  
since 2012

# CEA TECH STARTUPS AT CES 2018:

CEA Tech—a creator of startups and technologies spanning all industries—will show off the latest prototypes and demonstrators developed by CEA Tech institutes **Leti, Liten** and **List** and technologies by CEA Tech startups that demonstrate CEA Tech's capacity to get new technologies for the digital, energy, and healthcare transitions to the market.

Booth 50653 - Eureka Park

## A few other CEA Tech and CEA Tech institutes startups

ANT'inne

Sylfen

steady sun

DiTA  
AUGMENTING INDUSTRIES

iskn

movea  
motion is life

Primo1D  
The E-Thread Company

isorg

wisebim

SUBLIMED

TRIDIMED

ISYBOT  
L'automatisation agile

avalun

Aledia  
The White Side

RB-3D  
we multiply your capacity



## MOOVLAB

INTERACTIVE ATHLETIC TRAINING CIRCUITS FOR FITNESS 2.0

**Moovlab's fun, interactive training circuits can be adapted to each user's personal fitness goals, making them a key weapon in any gym's customer-retention arsenal.**

Europe's health and fitness market is booming, with 56 million club members across the continent. However, the average member stops working out after just three months—a trend Moovlab intends to reverse with its interactive training circuit platform. The platform is made up of sensors equipped with algorithms that recognize movements and measure physical activity and a "hub" that manages the training circuits. The technology is protected by fourteen patents and proprietary Leti know-how.

Users configure their fitness goals—lose weight, train for a marathon, or just feel better—and the platform recommends training circuits that can be completed at the gym. During the workout, the user's physical activity level is assessed in real time. Progress can be measured from one workout to the next, and more difficult circuits can then be completed.

Moovlab is also developing multi-player active games with storylines that include sports like boxing, cycling, and rowing. The company's first game, "Escape to Mars," was co-developed with game designer UrbanExpé and is offered by Keep Cool, France's third-largest chain of fitness clubs.

www.moovlab.fr  
olivier.thomas@moovlab.fr



## POWERUP

LI-ION BATTERY MANAGEMENT AND MAINTENANCE

**PowerUp's smart chargers can help double the lifespans of Li-ion batteries and make predictive maintenance easier.**

Charging Li-ion batteries so that they last as long as possible is a challenge for the operators of fleets of battery-powered equipment like electric bicycles, drones, and signage. PowerUp, a startup founded in 2017, has come up with a response. The company's smart chargers determine for each charge the optimal voltage and power according to battery temperature, charge status, and level of degradation.

PowerUp leverages seven patents obtained over several years of research on battery degradation mechanisms at Liten. Tests have shown that efficient management can lengthen a battery's lifespan by anywhere from 50% to 150%—that's double on average!

Equipment fleet managers can also benefit from PowerUp's supervision module, which centralizes the data from all chargers, facilitating predictive battery maintenance, a more efficient and less expensive alternative to the systematic periodic replacement of batteries.

PowerUp won the 2017 Orange Fab France award and is currently working on a project to sell Li-ion-battery-powered emergency lights to Enedis, which operates France's national electricity grid.

www.powerup-technology.com  
benjamin.delaille@powerup-technology.com



## SPORT QUANTUM

INTERACTIVE, CONNECTED ELECTRONIC SHOOTING TARGETS

**Sport Quantum's electronic shooting targets give shooters their results in real time. Results can also be analyzed, archived, and shared.**

Shooting sports rank third among all individual sports in terms of the number of participants. Shooters have traditionally used paper targets and a cable-based target retrieval system to find out how they did after each round. Sport Quantum offers shooters of all levels an interactive, connected electronic target system. The score for each round is instantly displayed on a smartphone or tablet.

The electronic system is made up of a screen that displays different targets and a transparent plate to protect it. The plate is equipped with piezoelectric sensors that measure the shock wave generated by each impact. Impacts are located to within 100 µm—accurate enough to be used in official competitions. The innovation is protected by five patents.

And, because the system is electronic, scores can be analyzed (average number of points, barycenter, standard deviations, etc.), saved to the cloud, and shared. The system can also generate fun interactive targets.

Sport Quantum plans to develop a range of sports-related products through a joint lab with List.

www.sportquantum.com  
jean-marc.alexandre@sportquantum.com

Plus...

## ARYBALLE TECH

BIOCHEMICAL SENSORS FOR ODOR DETECTION

Sands, Hall G #51303 (Hardware Club)

## DIABELOOP

ARTIFICIAL PANCREAS FOR TYPE-1 DIABETICS

Sands, Hall G #50722 (La Poste)

## eLICHENS

AIR QUALITY MONITORING SENSORS AND SERVICES

Sands, Hall G #52134

## KALRAY

SUPERCOMPUTING ON A CHIP

LVCC, North Hall #9528

# CEA TECH AND ITS INSTITUTES

CEA Tech is the technology research division of the French Alternative Energies and Atomic Energy Commission (CEA), ranked by Thomson Reuters/Clarivate as **the most innovative government-funded research organization in Europe and the second most innovative in the world.**

CEA Tech creates **technological innovations** with the power to make French **companies more competitive** by boosting their performance and helping them differentiate their products.

## Three R&D institutes developing advanced technologies:

- **Leti**: micro- and nanotechnologies and their integration.
- **Liten**: new energy technologies and nanomaterials.
- **List**: smart digital systems.

CEA Tech also provides a broad range of support services to get startups off the ground faster.

**Market-leading CEA Tech startups:** Soitec and Sofradir are currently ranked among the top ten European tech companies.

**A broad range of know-how:** the Internet of Things, telecommunications, smart cities, the Factory of the Future, renewable energy and new energy technologies, environment, safety, automotive and transportation, sports, medtech, wellness, and more.

## CEA Tech

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## CEA Tech key figures



**600** industrial partners

**€650** million annual operating budget



**4,500** researchers

**600** PhDs and postdocs



**600+** priority patent applications filed each year

**4,500** patent families



**50** technology and market platforms

**€120** million in annual investment in the technology platforms

