

# CRD PhD Student and Team Place Among the Top 15 Finalists at the Climate Launch Pad 2016 Competition in Talin, Estonia

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**Hripsime Teryan, Hermine Gharagulyan, and Hripsime Mkrтчhyan proudly displaying their Climate Launchpad finalist Award**

**Yerevan** – A newly developed battery, the Simple Liquids Battery (SLB) offers an ecofriendly, safe and easily chargeable device for emergency power generation.

Simple Liquid Batteries (SLBs) offer safe, non-toxic, eco-friendly electric power banks, which can be stored and activated when needed for emergency situations. They are energized by adding any of a number of commonly available liquids into the device. The batteries are light, flexible, easy to use, and safe; they can be conveniently taken on trips - even on airplanes.

The battery is activated by adding any of a number of liquids including saltwater, buttermilk, vinegar, tea, coffee, beer, rainwater, and even urine to the device. A hazardless chemical reaction then produces electricity, which may then be used to operate a cell phone, a light, or other electrical devices.

Our project is now in pre-prototyping process. We have already completed the first phase of the model and now we are looking for investment to work on the prototype. The initial funding for the research phase of this project was made by Dr. Vahan Chakarian, the Founder and CEO of Technology and Science Dynamics (TSD) Company in Yerevan. Our team consists of 5 specialists: two engineers, two physicists and an electrochemist. We are working at TSD Company, which supports our project and provides laboratory space for additional development and testing. The business idea of the battery was developed during the special courses organized by New Technology Education Fund (NTEF), a charitable organization with a sister foundation in Santa Clara, CA. NTEF's Armenian office promotes technology education and development in Armenia and Artsakh.

The SLB has the following technical parameters: 1 USB port, 5V output, 2600 mAh capacity, 250g weight. It will work with 7 liquids including salt water, urine, beer etc. The SLB will provide the users with power and weather independence, i.e. users will not need an external power source to charge the battery, which can operate down to -10° C (14° F).

This year we participated in *Climate Launch Pad 2016* competition in Estonia, a “Green Business Idea Competition” as described by their web site. Our project was selected as one of the top 15 projects from a field of 88 semi-finalists. There were initially about 1,000 startups from Europe.

We are seeking investment for our next steps, after which we will be ready for the manufacturing process. We intend to apply for a patent for our battery design. We are receptive to any kind of cooperation and investment. Anyone interested in our project should contact Levon Galstyan (levong@tsd.am), the Vice President of Technology & Science Dynamics.

For more information on Climate Launch Pad please visit:

<http://climatelaunchpad.org/clp2016-semifinalists/>

<http://climatelaunchpad.org/finalists/simple-liquid-batteries-slb/>