INTERNATIONAL TECHNOLOGY PROJECTS

MONTHLY ISSUE

MAY, 2019

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International Technology Projects

Category: Food and Software

Project Name: Personalized Nutrition Partner

Overview:

Pairing a scientifically rigorous assessment with actionable insights and recommendations, users can tangibly improve their health with a plan that is personalized for them.

For Further Details

Category: Electronics and Software

Project Name: AR/VR Heads-In Display

Overview:

As AR/VR helmets become lighter, more efficient, and include advanced features such as eye tracking, Military and NASA are interested to see how the near-eye display would aid them during active duty.

"Heads-In" display technology is constrained by the environment of the spacesuit, which is not able to handle high-powered hardware on a crewmember's head in an oxygen-dominated atmosphere. Also, most standard HUD designs would not support the proximity of the helmet bubble to the crewmember's eyes in a spacesuit. The dynamic, loud, sometimes wet, and 100% oxygen environment of the helmet bubble is another challenge of any potential "heads-in" displays.

For Further Details

Project Name: State Of The Art Flexible Electronics Technologies

Overview:

Traditionally, electronics have been limited to rigid form factors that break when flexed. In the past decade, the military, industry, and academia have invested hundreds of millions of dollars in radical new design and manufacturing processes to reliably produce flexible electronics. In the last three years, the underlying technology has rapidly advanced, producing flexible substrates, sensors, and processors with impressive durability. The increasing technology readiness level presents an opportunity to apply the technology to human spaceflight but requires an in-depth understanding of the materials, reliability, test methods, and other concerns.

For Further Details

Category: Textile

Project Name: Technologies for Clothing Refresh

Overview:

Astronaut clothing must be thrown away when it gets dirty due to the complexity of laundry in micro-gravity exploration missions. However, this current method would not be feasible for long-duration missions due to mass and volume penalties. Any technology, method, or product that could lengthen the time clothing can be worn before becoming objectionable due to smell, feel, or look, would be of interest.

For Further Details

Category: Food

Project Name: Non-Caffeine Energy Products

Overview:

Novel products and ingredients that are able to increase user energy without the use of caffeine. Products that are available in a unique format or are based on natural ingredients are of particular interest.

For Further Details

Project Name: Immunity-Boosting Products

Overview:

The solution must be commercially available for the non-prescription, over-the-counter (OTC) market. In addition to ingredients that boost immunity, there is high interest in novel supplement formats. Products that tend towards natural ingredients, flavours, colours, etc. are strongly preferred.

For Further Details

Category: Food and Chemical

Project Name: Sustainable Packaging Processes

Overview:

In looking towards improving their overall sustainability, the organization recognizes that its current packaging process for consumer products should be optimized to reduce/eliminate waste produced as well as reduce their carbon footprint. They are open to a wide variety of solutions for any part of the packaging process and supply chain.

For Further Details

Project Name: Functional Sugars That Help Prevent Obesity or Rapidly Rising Blood Glucose

Overview:

In recent years, obesity due to the intake of sucrose, and the increase in the number of patients with diabetes caused by elevated blood glucose levels has become a major problem. We are looking for functional sugars that can act as alternative sweeteners and that will not cause obesity or trigger high blood glucose levels.

For Further Details


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