

## **Dive Into Science: One Man's Atlantic Ocean Odyssey**

Are you ready to uncover the secrets of chemistry, physics, and biomedical engineering through the adventure of a lifetime?

Join us for an exciting 3-day lecture series and interactive workshops led by top scientists from Kaunas University of Technology, University of Twente, and Universitat Autònoma de Barcelona:

- **Assoc. Prof. Dr. Agnė Šulčiūtė** (Chemistry, Kaunas University of Technology)
- **Assoc. Prof. Dr. Brigita Abakevičienė** (Physics, Kaunas University of Technology)
- **Assoc. Prof. Dr. Andrius Rapalis** (Biomedical Engineering, Kaunas University of Technology)
- **Prof. Dr. Daniel Campos** (Physics, Universitat Autònoma de Barcelona)
- **Assist. Prof. Dr. Arturo Susarrey Arce** (Chemistry, University of Twente)

### **Day 1: Adventure Begins (Brigita Abakevičienė, Agnė Šulčiūtė, Daniel Campos, Andrius Rapalis)**

- Introduction to KTU
- Who is Aurimas Valujavičius? Discover his incredible ocean journey.
- Explore water science: What is water, and how does water desalination work? Discover how Aurimas used solar panels during his journey.
- Test your knowledge and win prizes!
- The science behind endurance: Electrical activity of the heart (ECG) and preparation before the journey.

### **Day 2: Dive Deeper into Science (Agnė Šulčiūtė, Andrius Rapalis, and Brigita Abakevičienė)**

- Quick recap: Refresh your memory.
- Understand Ocean Acidification: Causes, impacts, and future actions.
- pH – What is it, why is it important during an ocean journey?
- Cardiac monitoring on the ocean: Electrocardiography explained.
- Advanced materials science: Discover carbon fiber technology in Aurimas's oars.

### **Day 3: Science in Action (Brigita Abakevičienė, Arturo Susarrey Arce, Agnė Šulčiūtė, and Andrius Rapalis)**

- Quick recap: Refresh your memory.
- Hydrogen as future fuel: Learn about hydrogen energy potential and innovations.
- The truth about sugar: Causes, effects, and monitoring through real-world experiments.
- Hands-on Workshop: Check pH and sugar levels in beverages – get practical experience and insights.

- Post-journey insights: Learn about the challenges Aurimas faced and the scientific outcomes achieved.

### **Why Participate?**

- Hands-on experiments: Practical application of scientific principles.
- Interactive learning: Engage through quizzes, discussions, and videos.
- Broaden your scientific horizons: From biomedical tech to environmental chemistry.
- Win exciting prizes and enhance your skills in a fun, dynamic environment!

**Join us at the University of Twente – Explore, Learn, Innovate.**