

## **Turbulence and Experimental Fluid Dynamics in Gases and Liquids (Ramot)**

**code:** 12-2011-226

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### **Technology and services**

Our field is experimental fluid dynamics in gases and liquids.

Our systems are:

1. Electro-optical techniques (visual and infrared), high speed imaging, image processing and object tracking algorithms and data mining
2. Tracking, velocity/forces and surface mapping

### **Potential services**

1. Identification of contaminant sources (chemical) in air/water environment
2. Flight and flows of birds and insects (odor navigation)
3. Wakes of bluff bodies in turbulent flows (i.e. flow signature)
4. Flow analysis in twin fluid atomizers (fuel spray)
5. Microfluidics in MEMS
6. Temperature signature of flow on surfaces (infrared imaging)
7. Flows of polymer and surfactant solutions (mixing, coating)
8. Underwater flow measurements (sea/oceanic turbulence)
9. Electronic device cooling by pulsating flows
10. Pressure measurement in the flow calculated from velocity

### **Potential industries**

1. Research defense companies
2. Energy, clean energy
3. Water treatment/distillation
4. Environmental flows
5. Microelectronics
6. Biomedical industry

### **Contact Person:**

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