



# Mechanical Power Engineering Department

## Fluid Mechanics Research Labs (FMRL)

(Fluid mechanics lab - Gas dynamics lab - Hydraulic machines lab)



### OUR MISSION

- To graduate students who can understand and keep up with the continuous development in the fluid mechanics fields and be able to efficiently compete at the local and regional levels, equipped with the foundations of basic, research and applied sciences.
- To enhance human knowledge in the fields of fluid mechanics, gas dynamics & hydraulic machines. We aim to revolutionize this field through intricately designed experiments to address scientific, industrial and society problems.

### Our Beneficiaries

#### Our Beneficiaries

- Under-graduate students from Mechanical Power engineering, mechatronics and civil engineering departments.
- Post-graduate students who are interested in pursuing a higher degree in fluid mechanics fundamentals and applications.
- Private and public entities that are looking for effective solutions for fluid and hydraulic machinery and circuits problems.

### Our Research

- Experimental modeling of fluid flow.
- Micro fluidics research.
- Hydraulic control systems R&D.
- Water Hammer phenomenon.
- Multi phase flow.
- Fluid structure interactions.
- Wind turbines aero foil design.

