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Faculty: Engineering	Department: Mechanical and Mechatronic Engineering		

Division:

Design & Mechatronics / Mechanics / Thermo Fluids / Renewable Energy

Research field:

Industrial heat exchangers, air-cooled condensers, cooling towers, renewable energy systems, sustainable energy use.

General description of research field:

Industrial cooling systems are an important component in thermal energy cycles. These systems influence the cycle efficiency and contribute significantly to the water consumption related to thermal energy production. Research aimed at developing and improving dry and/or hybrid cooling systems therefore contributes significantly to the drive towards greater sustainability in the energy sector in general and in the Solar Thermal Energy sector in particular.

Research on dry and hybrid cooling systems typically involves a combination of experimental investigation and numerical analysis.

List of topics:	MEng (Structured)	MEng (Research)	PhD	Funding
Investigation of dry-out phenomena in a delugeable bare tube hybrid (dry/wet) heat exchanger bundle		х		1 x MEng (unconfirmed)
2. Numerical analysis of perimeter windscreen effects for a small air-cooled steam condenser		х		

Specific requirements: