

Suggested topics for applications assignment

Wind engineering; Static wind loads; Dynamic wind loads; Wind loads on tall buildings; Wind loads on bridges; Pedestrian comfort; Wind loads on solar farms; Aero-elastic flutter; Facade design; Horizontal axis wind-turbines; Sustainable buildings; Vertical axis wind turbines; Vortex induced vibration; Off-shore platform design

Dispersion; Thermals; Urban heat islands; Air pollution hotspots; Air pollution dispersion models; Bushfires; Chemical leaks and explosions; Structural design for blasts/explosions

Natural ventilation; Thermal comfort; Indoor air quality; Outdoor air quality; Micro-climates; Air-quality in mines & road tunnels; Thermal boundary layers; Heat transfer enhancement; Solar thermal technologies in buildings

Pipe networks; Stormwater management; Desalination; Water supply and treatment; Wastewater treatment

Reservoir management; Mixing and transport in lakes and reservoirs; Lake and reservoir water quality modelling; Effluent release; Brine release in oceans

Tidal power; Wave energy; Coastal engineering; Algae blooms; Buoyancy driven flows; Radiation induced flows in lakes and reservoirs; Stability of radiation induced flows; Estuarine flows

Reaction turbines; Penstock design; Hydro-electric power; Siltation; Methane emissions from reservoirs

Erosion from hydraulic jump; Erosion of sediment bed; Saltation; Sedimentation; Sediment transport; Transport through porous media; Scouring around piers; Wave breakers; Aqueduct; Canals; Spillways; Parshall flume; Sharp-crested weirs; Broad-crested weirs; Underflow-gates