

Application technology of renewable energy



Name	MOTOHASHI Hajime	E-mail	motohashi@tsuruoka-nct.ac.jp
Status	Professor		
Affiliations	Japan Society of Mechanical Engineers Japan Wind Energy Association		
Keywords	Small wind turbine, Micro hydraulic turbine		
Technical Support Skills	<ul style="list-style-type: none"> • Small wind turbine with low noise for residential regions • Hydraulic power generation for low head drop • Application of the photovoltaic cell 		

Research Contents

- Development and application of small wind turbine with low noise for residential regions (Fig.1,2)
- Hydraulic power generation including power system interconnection using an open type micro hydraulic turbine developed for low head drop (Fig.3)
- Application of the photovoltaic cell as the independent power supply with storage batteries



Fig.1 Ribbon type wind turbine



Fig.2 Small wind turbines suppressing visibility hindrance caused by drifting snow



Fig.3 Micro hydraulic turbine installed at drop & power system interconnection equipment

Available Facilities and Equipment

Wind tunnel (handmade)	
Water tank for hydraulic turbine test (handmade)	
Torque meter (Ono Sokki Co., Ltd.)	