

## Fluid Dynamics Aspects of Environmentally Advantageous Hybrid Rockets

Content: Hybrid rocket propulsion is promising for future manned space transportation because of its intrinsic safety and its environmentally advantageous nature. In this session, the technical topics will cover, but not be limited to, its fluid dynamics aspects including combustion phenomena, oxidizer injection, fuel regression and its rate, scaling, fuel material, ablation, throttling, shut-down and restart, and system optimization.