

## AIRBORNE PRECIPITATION AND CLOUD SAMPLING TECHNIQUES (Abstract)

by

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Techniques have been developed for the airborne bulk sampling of cloud and precipitation, including snow, for later chemical analysis. The techniques include the use of cyclones, meshes, riming rods, scoops and slotted collectors. The role of sampling location on the aircraft, flying attitude, collection efficiency, and sampling procedures for clean samples and mixed clouds with respect to the design and performance of the collectors will be discussed. The

polyethylene meshes, with thread diameters of 545 and 345 microns, and the riming rods, with diameter of 1.0 cm, collect supercooled droplets with different efficiencies and can be used to examine the dependence of chemistry on the droplet size. Airborne snow samples were collected for the first time, with the cyclone being the most effective collector.