

# PHOTON SCIENCES SAFETY NOTICE

## Safe Transport of Hazardous Materials

APS users are reminded that hazardous materials, including samples, cannot be packed in personal luggage and brought on public transport. *APS Policy & Procedure 3.1.34 Hazardous Material Transportation* provides the APS requirements related to the packaging and transportation of hazardous materials. According to this all hazardous material must be

- Packaged in accordance with Department of Transportation (DOT) requirements and
- Shipped to Argonne from, or shipped from Argonne to, the home institute.
- Specific exceptions have been obtained for movement of small quantities in personal vehicles for non-Argonne users, dry shipping cryogenic samples, and shipping cryo-preserved biological samples by air transport.



See AP&P 3.1.14 for details.

The following incident illustrates one repercussion associated with non-compliance.

Recently, an APS user was detained at Chicago's O'Hare International Airport by officials with the Transportation Security Administration (TSA). The user had completed an experiment at APS and was returning home. He missed his flight and was told to take his personal luggage with him to the gate for the next flight. He had a sample preparation kit with him in his personal luggage. He was detained after the TSA agents opened the kit and found two vials containing unknown white powders, glue in the form of mounting putty, sewing needles, a small capacitor, and a diamond anvil cell. One vial contained a non-hazardous chemical sample, but the other contained 5 grams of potassium chlorate, a rapid oxidizer regulated by the Department of Transportation as hazardous material requiring special packaging and labeling.

### **Hazardous material samples cannot be carried in personal luggage on a commercial airliner.**

The chemical samples were confiscated and the user was interviewed extensively and held until independent verification was obtained as to who he was, what he had been doing, and why he was traveling with the items he had.

This incident resulted in an investigation, a report being submitted to the Department of Energy Occurrence Reporting and Processing of Operating Information database, and corrective action being requested of the user's home institution.

If you have any questions as to whether or not a particular sample or chemical is designated as a hazardous material by DOT, please contact your home institute's ESH or shipping department staff. A list of hazardous materials also is available on <http://phmsa.dot.gov/hazmat/library>. Look for the entry titled "Hazardous Materials Table – Title 49 CFR 172.101 Table."