

**Principal Investigator:**

Doug Rumble (R-231, 202 478 8990)

Secondary Contacts:**Emergency Information:**

Staff Member: (614) 680-5905 (cell / home)

BBR (Gary Bors): 202-510-8577

All other emergencies: 91

Purpose:

Room 232 contains portions of several vacuum preparatory lines that are no longer operational. There is also one 30-watt CO₂ infrared laser and one 30-watt Excimer ultraviolet laser: neither are operational. Their purpose was to prepare O₂ and CO₂ for mass spectrometric analysis.

All laboratories and facilities on the Broad Branch Rd. campus are controlled areas. Specific training must be completed and documented before working in this laboratory / facility.

(Laboratory-specific information)

This section should be customized for each laboratory and should include the information listed below. Be specific and comprehensive. This document will serve as a record that you have provided sufficient information regarding the known hazards and safety policies of your laboratory.

- The vacuum line (1) on the rack nearest Rumble's office has the following hazardous chemicals: (A) Two nickel metal containers of K₃NiF₇, a solid source of fluorine gas. Powdered K₃NiF₇ is an inhalation hazard. The compound produces HF if exposed to H₂O. (L. B. Asprey, 1976, The preparation of very pure fluorine gas. Jour. Fluor. Chem. 7, 359-361.) (B) Three Kel-F containers of liquid BrF₅, visible as a pale-green liquid. (C) A brown lecture bottle with BrF₅ liquid. And, (D) An in-line mercury diffusion transfer pump.
- A second vacuum line (2) on the opposite side of (1) has a mercury manometer.
- A third vacuum line (3) is located on the rack farthest from Rumble's office. Vacuum line (3) has a low pressure metal tank of liquid BrF₅.
- A fourth vacuum line (4) was built on the rack farthest from Rumble's office by post-doc Jen Blank. It has a mercury ram for transferring non-condensable gases.
- The vacuum preparatory lines and lasers are inactive and should not be used.
- An emergency shower is located in R-232. A fire blanket and a fire extinguisher are in the hallway outside R-228.
- No one should use equipment in R-232 without consulting D. Rumble.

Laboratory User



I agree that I have thoroughly read and understood this laboratory safety document. I have access to this safety information at all times when I am working. I have been trained to be able to identify the hazards to which I may be exposed and to follow the work practices and procedures discussed in this document. I certify that I will conduct my research work safely and that I will be responsible for following stated safety policies.

User Name (Print)

User Signature

Date

Principal Investigator

I certify that the information presented in this safety document is accurate and complete. I agree to comply with all safety procedures and to fully train and supervise all researchers under my direction.

Douglas Rumble
PI Signature

24-April-2019
Date