ASHRAE Technical FAQ

ID	46

Question	What research is ASHRAE conducting regarding new, natural, or alternative refrigerants?

	New refrigerants are not typically developed through ASHRAE research. Manufacturers may submit new refrigerant formulations to SSPC 34, Designation and Safety Classification of Refrigerants, to obtain an ASHRAE number designation based on criteria in the standard. In the United States, most approved refrigerants are non-flammable blends with HFCs as the major components.

Each year ASHRAE devotes the October issue of the ASHRAE Journal to that year's Research Report. The following active projects regarding air filtration are listed in the October 2018 issue:

1507-RP Binary Refrigerant Flame Boundary Concentrations

1569-RP CFD Study of Hydraulic Shock in Two-Phase Anhydrous Ammonia

1721-RP Oil Return and Retention in Unitary Split System Gas Lines with HFC and HFO Refrigerants

Answer   1774-RP Effects of System Chemicals on Breakdown of Lubricants and Lower GWP Refrigerants

1790-TRP Distribution of Water between Vapor and Liquid Phases for Low GWP Refrigerants

1794-RP White Paper Investigation Relating to the Use of Odorants in Flammable Refrigerants

1800-RP Spray Evaporation on Enhanced Tube Bundles with Low GWP Pure Refrigerants and Refrigerant/Miscible Oil Mixture

1806-RP Flammable Refrigerants Post-Ignition Simulation and Risk Assessment

1807-RP Guidelines for Flammable Refrigerant Handling, Transporting, Storing and Equipment Servicing and Installation

1808-RP Servicing and Installing Equipment using Flammable Refrigerants: Assessment of Field-made Mechanical Joint

Final reports to completed ASHRAE research projects related to air filtration, and all other topics, are available (for free to ASHRAE members) at the Research page of www.ashrae.org.

ASHRAE Pubs

The October issue of the ASHRAE Journal each year summarizes ASHRAE's current research efforts.

Topic References   Air filtration, research

	Cognizant ASHRAE Committees	Refer to Organization
1	TC 3.1	
2	RAC	
3		
4		
5		