OKHC – Refrigeration systems/heat pumps with flammable refrigerants

Schedule – CW xx/20xx

Training leadership:	**N.N.**

Day 1

09:00	**N.N.**	Welcome, general remarks Motivation for usage of hydrocarbons und A2L-refrigerants *F-Gas Regulation, effects of synthetical refrigerants to the environment* Applications and characteristics of different flammable refrigerants, safety-related basics *types of hydrocarbons and A2L-refrigerants, characteristics of the hydrocarbons and A2L-refrigerants, flammability, behaviour of hydrocarbons in air, comparison of hydrocarbons and A2L-refrigerants, installation instructions, comparison of capacity and efficiency with synthetical refrigerants, oil-solubility, foaming-behaviour of oils, optimized superheat, crankcase heater, applications*
10:00	*Coffee break*	
10:10	**N.N.**	Continuation Applications and characteristics of different flammable refrigerants, safety-related basics Hazard potential of refrigerants and refrigeration systems *pressures, frostbite, risk of explosion, flammability, toxicity, suffocation, EN 378 - safety-groups of refrigerants, critical gas concentrations, gas detectors, ventilation, toxic degradation/fission products, personal protective equipment, respiratory protection, first aid measures, handling and storage of refrigerant containers*
11:00	Coffee break	
11:10	**N.N.**	Continuation Hazard potential of refrigerants and refrigeration systems
12:00	*Lunch break*	
12:45	**N.N.**	Continuation Hazard potential of refrigerants and refrigeration systems Handling of flammable refrigerants *safety precaution, decommissioning of a system, procedure of refrigerant recovery, draining of refrigerant, flushing the system, opening the system and related safety measures, tightness test, evacuation, charging refrigerant, equipment for maintenance, special components and their features*
13:50	*Coffee break*	
14:00	**N.N.**	Continuation Handling of flammable refrigerants Legislation and standards *risk assessment, hazard assessment,* *ATEX, refrigerant charge and room size, EN 378 etc*.
15:10	Coffee break	
15:20	**N.N.**	Continuation Legislation and standards
16:15	**N.N.**	Open questions, farewell
16:30	End of training	