The Institute for Technical Chemistry (ITC) was established on September 1, 1994 at what was then the Nuclear Research Center Karlsruhe (today KIT Campus Nord). It consisted of 3 areas that represented physical-chemical and procedural environmental research at the future research center in Karlsruhe. Today's ITC emerged from the “Thermal Waste Treatment” area (ITC-TAB), which resulted from the merger of the former laboratory for isotope technology under the direction of Prof. Hubert Vogg and essential parts of the two laboratories for aerosol physics and filter technology.

According to Prof. Vogg, Prof. Helmut Seifert (1997-2014) and, since 2014, Prof. Dieter Stapf have been institute directors of the ITC-TAB (ITC since 2011). The core topic of the research at ITC-TAB was the modern thermal waste treatment with the basics of pollutant generation and detection and the technologies of removal or separation such as dioxins and furans or mercury, which are state of the art today. The TAMARA waste incineration plant was the main research infrastructure for examining real, complex waste and for transferring it to technical application.