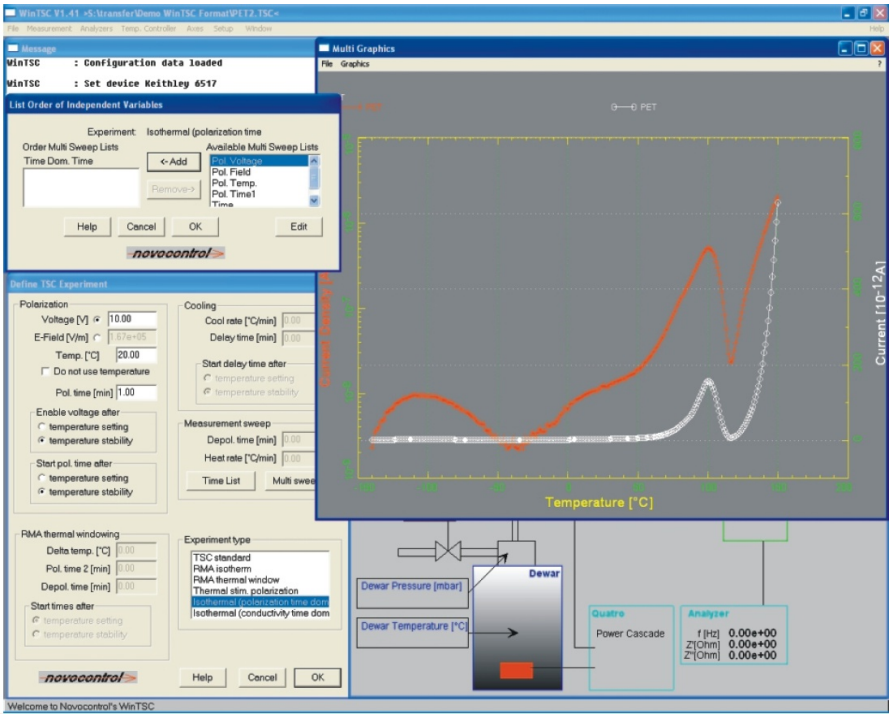

Novocontrol Technologies presents WinTSC

- Powerful control and evaluation software for thermally stimulated depolarization current (TSC) and conductivity measurements in the time and temperature domains
- The ultimate software solution to study the electrical and charge properties of functional materials such as polymers, ceramics, semiconductors, and many more
- Data acquisition via IEEE488 interface
- Fully automatic device and measurement control
- Sophisticated data visualisation (2D/3D)
- Extensive context-sensitive help function
- Optional: TSC turnkey system comprising TSC sample cell, high-quality Quatro temperature control system (-160 °C to 400 °C), high-voltage source and electrometer, WinTSC software with computer, printer, and monitor

WinTSC

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WinTSC Analysis and Control Software

WinTSC is Novocontrol's Windows™ software package for performing and evaluating all important types of TSC (Thermally Stimulated Depolarization Current) and conductivity measurements in the temp-erature and time domains.
WinTSC controls the polarization voltage source, the polarization/depolarization mode switches, the electrometer for sensing the depolarization current and several temperature control systems.
Nearly any kind of TSC and conductivity measurement may be selected in a hightly flexible experiment set-up procedure.
Base experiments are defined by a series of time intervals. During each time interval, the polarization voltage and temperature is either defined by a fixed value or by a continuous change in time (ramp). At the beginning of each time interval, the system may be switched into the polarization, depolarization current or conductivity measurement mode. Within multi-dimensional experiments, base experiments can be repeated as a function of various free variables like e.g., temperature, temperature ramp speed or polarisation voltage.

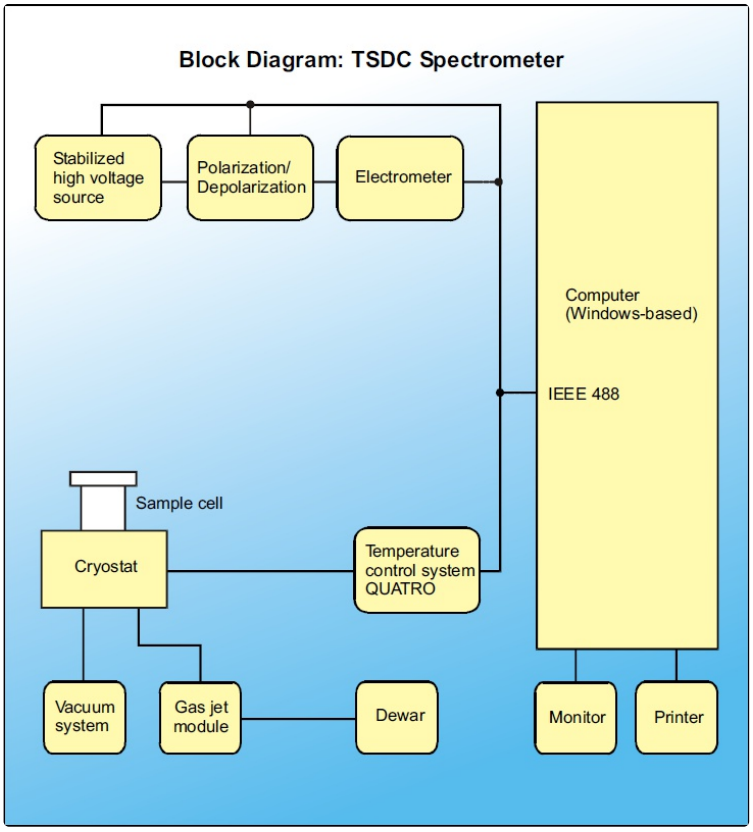
Features

Experiments for material measurements:
- thermally stimulated depolarization
- thermally stimulated polarization
- isothermal polarization time domain
- isothermal conductivity time domain
- relaxation map isotherm
- relaxation map thermal window

Supported free variables:
- temperature, polarization voltage, polarization time and others

Multidimensional experiments:
- up to four free variables arranged in arbitrary order of execution

Data evaluation, export, and graphics:
- evaluation of current, current density, Δ-charge, Δ-polarization, and Δ-permittivity
- export of multi-dimensional data sets in various flexible text formats
- online, 2D multi-curve, 3D plane, time log and status graphics windows



Available TSC Solutions

Novocontrol offers TSC solutions both as turnkey stand-alone systems and as extensions to broadband dielectric spectrometers. In the latter case, both methods are available in a single system.
A complete turnkey TSC set-up consists of a an electrometer, sample cell, temperature control system, and a Windows-based computer running WinTSC.

Applications

Many key aspects of materials properties, e.g., molecular relaxations, phase transitions, glass temperatures, rate of curing, etc., are investigated by TSC and related techniques supported by WinTSC.

System Requirements

- Microsoft Windows 2000, XP, Vista, Windows 7 or Windows 8
- Novocontrol GPIB PCI interface BDS 1500 or National Instruments GPIB interface
- Novocontrol temperature control system (Quatro Cryosystem, Novocool Cryosystem, Novotherm heating system, or Eurotherm-based temperature controller)
- Electrometer with high-voltage source (Keysight B2985A or Keithley 6517)
- Novocontrol sample cell for TSC and conductivity measurements