Subject: Chamber testing manual version 3
Posted by Rainer Schicker on Mon, 31 Jan 2005 19:13:14 GMT
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Version 3 of the chamber testing manual is available at
www.physi.uni-heidelberg.de/~schicker/trdtest/chamb_v3.pdf.
This version contains a history chapter listing the main
changes to the previous version.

Subject: Re: Chamber testing manual version 3
Posted by Chilo Garabatos on Fri, 11 Feb 2005 16:08:45 GMT
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Dear Rainer and all,
we started preparing our applications to write the data in the format that is proposed in the chamber test manual, and therefore looked with some detail at the proposed information and format.
The information is very complete, and I would like give you some comments and suggestions aimed at making life somewhat easier:
General comment: In every site about 10**2 chambers will be tested. To make things as automatic as possible is then desirable; in particular, the information that is gathered for the data base -and for our own files- should be written by the computer, not typed by the users (tedious and dangerous).
Suggestions:
Headers: Do not write the Ar and CO2 flows separately (the composition is yet another entry), and do not write the set and actual values at the beginning and the end of the measurement (3 lines with 2 reals each) but
Write the total 'high' flow and total 'low' flow (2 lines with 1 real each). This is the information that is needed for the leak rate values, which can be calculated automatically by pressing a button in the application when the O2 plateaus (the user then only types the flows and clicks).
Leak rate data: the relevant information are the leak rates at both flows and the data themselves, so write this at least (time and O2, not the other way around, as is proposed) and leave the testers the freedom to write a zero or -1 for the fit stuff and the reference O2 levels (extra work not needed according to our experience).
Gain: write at the end of the file the data in x-yyy format:
voltage, current, rate, gain (one line per point).
In this way, the number of points doesn't matter, the data base can deal with that.
It is also easier for the tester to copy-paste the data into his/her own spreadsheet and make plots for meetings.
This strategy -the data points at the end- should be applied to all files (O2, scans, ...).
Best regards,
Chilo

Subject: Re: Chamber testing manual version 3
Posted by Rainer Schicker on Thu, 03 Mar 2005 10:05:16 GMT
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dear Chilo

I did not explicitely formulate however I implicitely assumed that the LabVIEW application is designed such that LabVIEW puts together the data text file in a format which does not need to be edited again by the tester. In that respect I fully agree with your statement.
The reasoning of putting the flow values for Ar and CO2 in the header and reading it at beginning and end of measurement separately is the possibility of a gas bottle running empty. (we don't have alarms for this situation).
Hope it never happens. Suppose it does: With the information as proposed now you can always retrieve in which measurement it happened.
Your suggestions to change the format x-yyy is well taken. I will change that in the next version.

regards

Rainer
