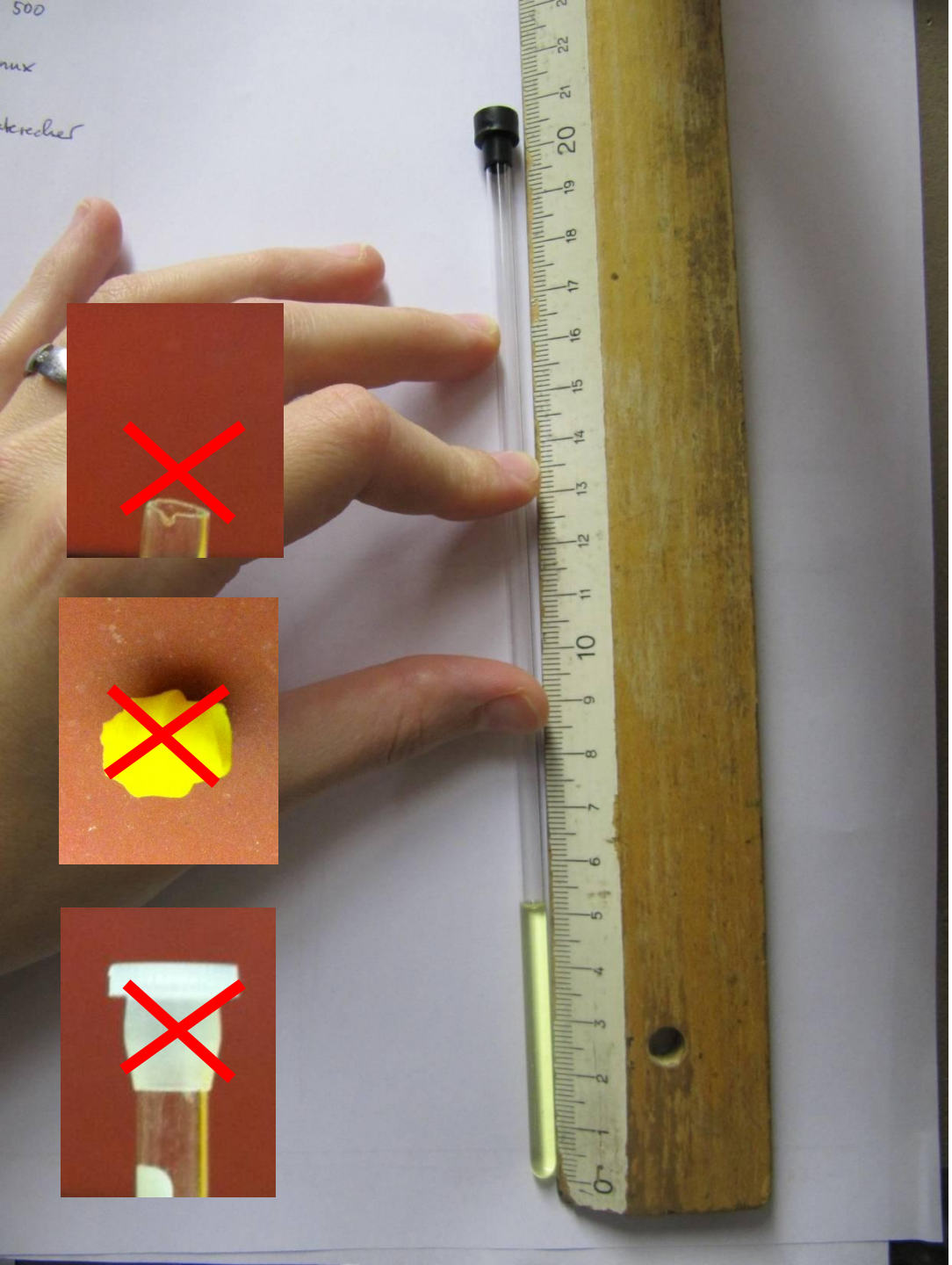
The 300 MHz

Spectrometer

“NMR-Praktikum“

M. John

February 2012



Sample

Standard NMR tubes only

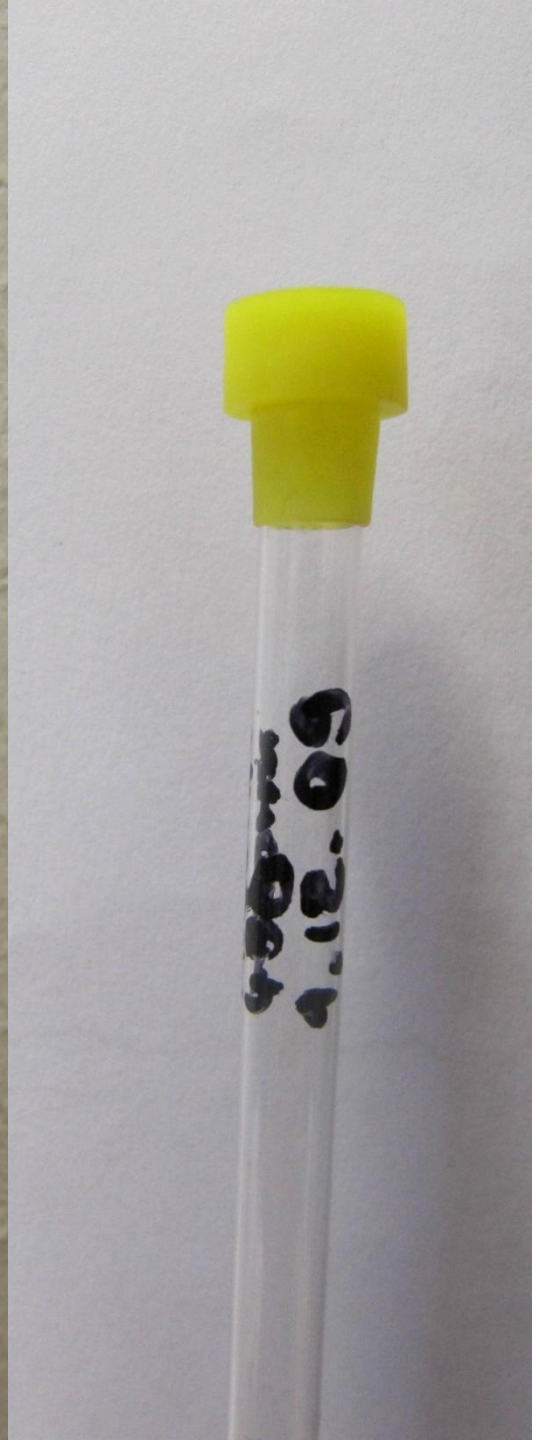
Diameter: 5 mm
Length: 18 - 24 cm
(7 - 9 inch)

No broken tubes and caps
Cap must sit firmly on tube

Minimum
Filling height: 4 cm

Deuterated solvents only

Homogenous solutions only
(no solids, no bubbles,
no two-phase mixtures)



Label

Colour code

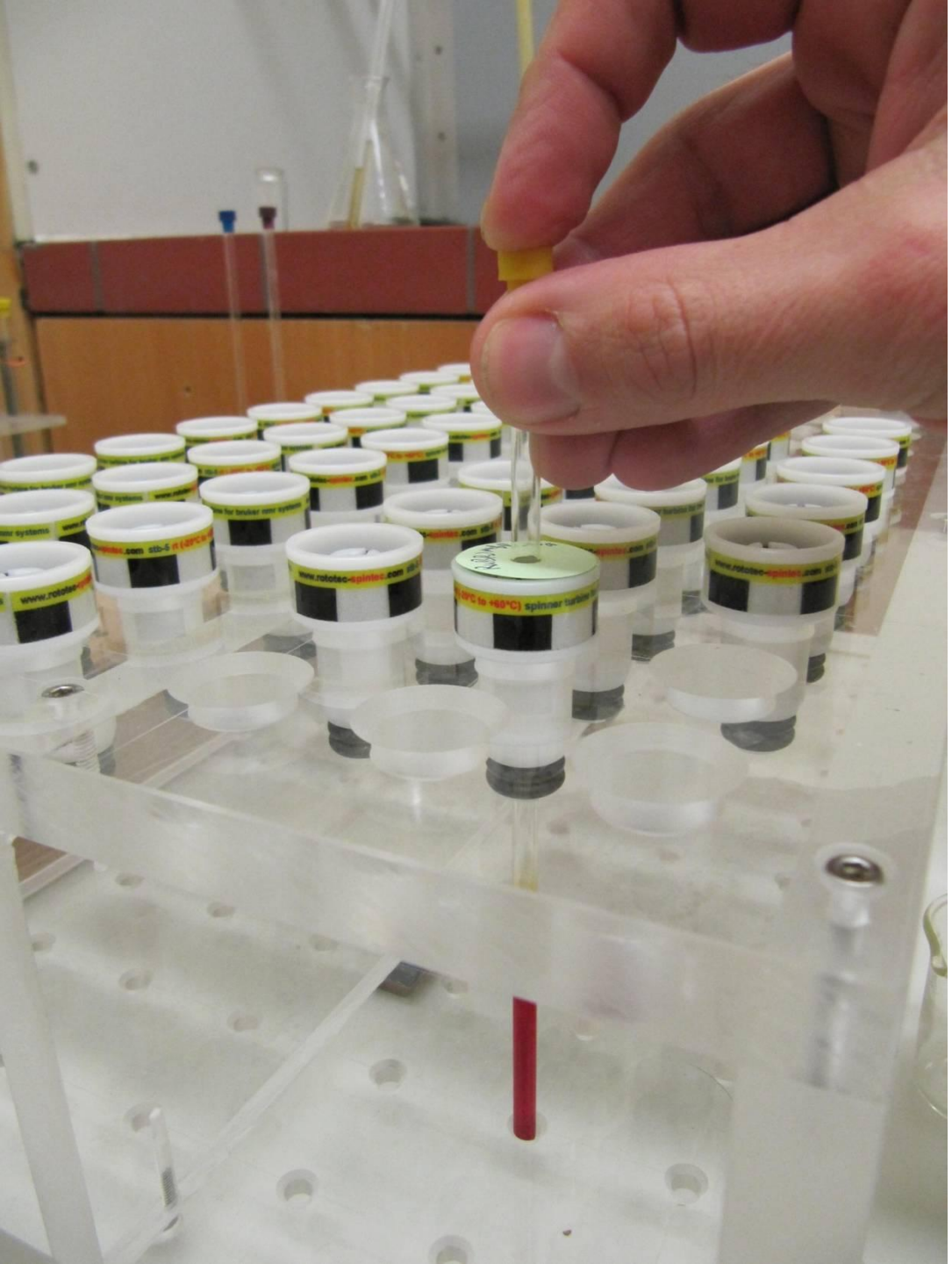
Name

Personal sample number

Date

Usel paper label only once

Any unlabelled, damaged or wrong tubes will be removed and discharged without further notice!



Spinner

Clean sample

Push sample all the way down in the spinner rack

Label must lie flat and firmly on the spinner

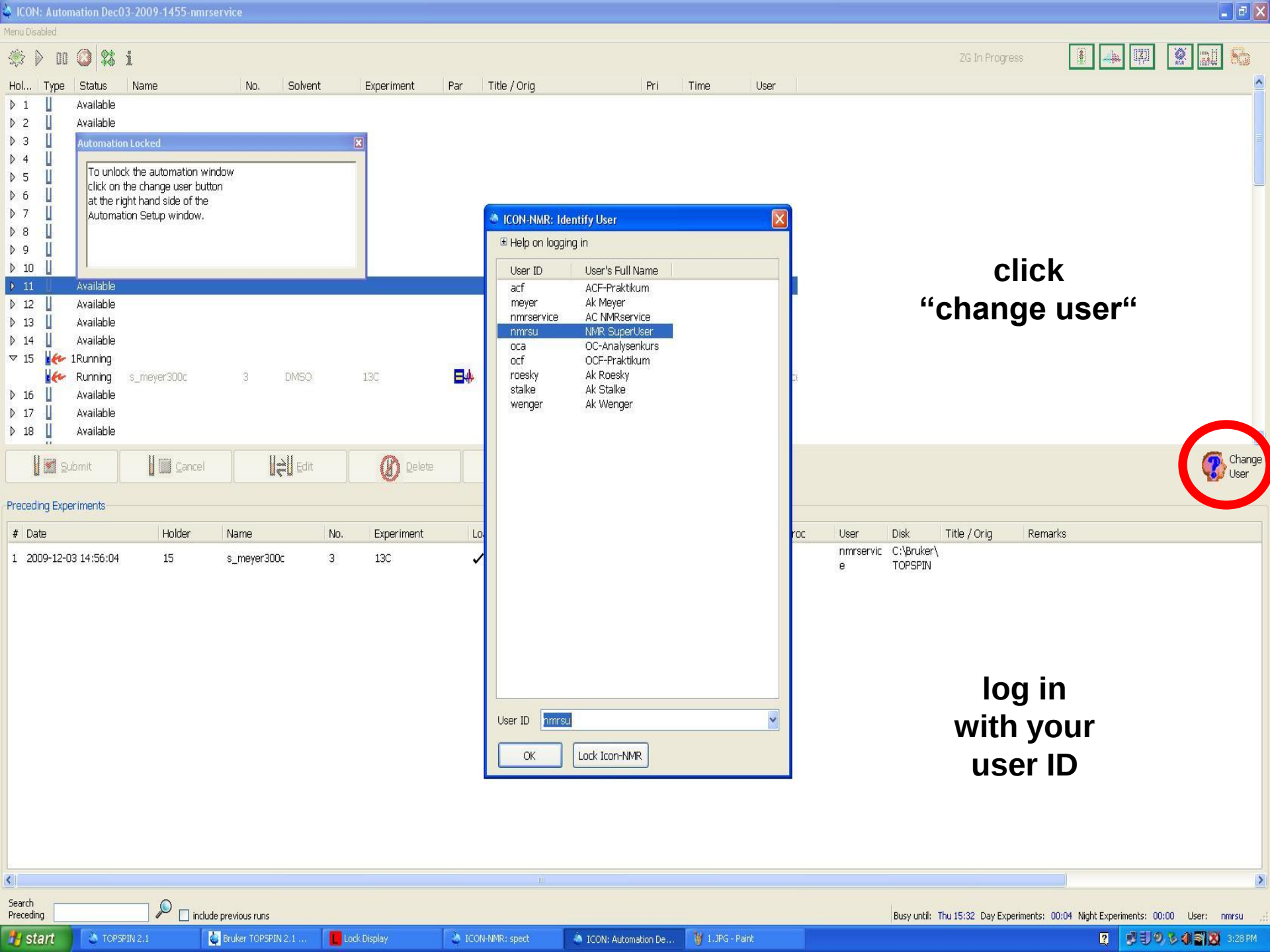
Avoid touching the spinner

Autosampler

Clean tube again!

Use next free holder (usually on the left side close to magnet)

Inner circle: holder 1 - 60
Outer circle: holder 61- 120


ICON: Automation Dec03-2009-1455-nmrservice
Menu Disabled
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Running s_meyer300c 3 DMSO 13C
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Automation Locked
To unlock the automation window
click on the change user button
at the right hand side of the
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Submit
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meyer Ak Meyer
nmrservice AC NMRservice
nmrsu NMR SuperUser
oca OC-Analysenkurs
ocf OCF-Praktikum
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1 2009-12-03 14:56:04 15 s_meyer300c 3 13C nmrservice C:\Bruker\TOPSPIN
Search Preceding
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Busy until: Thu 15:32 Day Experiments: 00:04 Night Experiments: 00:00 User: nmrsu
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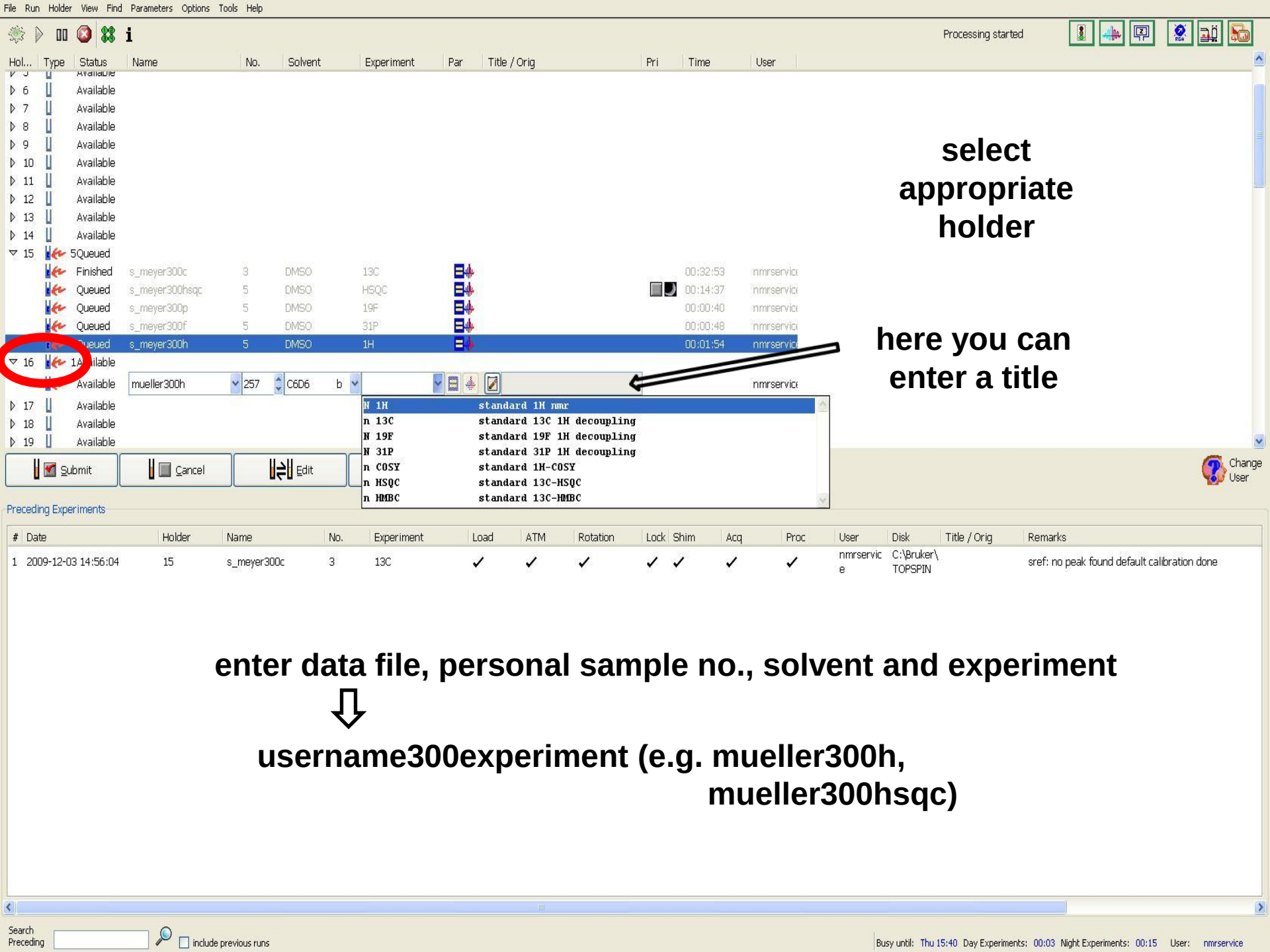


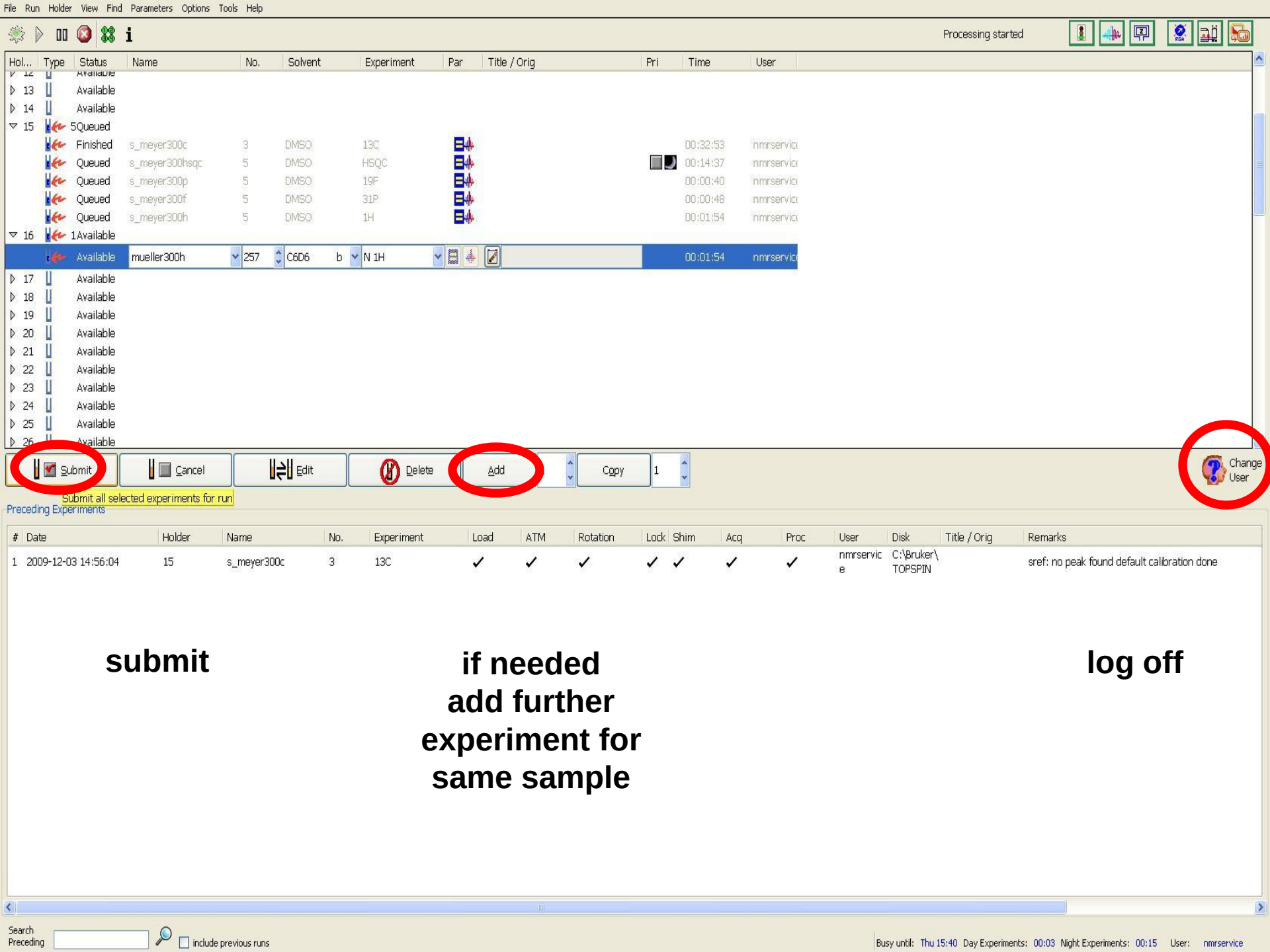
select appropriate holder

here you can enter a title

enter data file, personal sample no., solvent and experiment

⇩

username300experiment (e.g. mueller300h, mueller300hsqc)


File Run Holder View Find Parameters Options Tools Help
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Queued s_meyer300hsqc 5 DMSO HSQC 00:14:37 nmrservic
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Queued s_meyer300f 5 DMSO 31P 00:00:48 nmrservic
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Submit
Cancel
Edit
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1
Change User
Submit all selected experiments for run
Preceding Experiments
Date Holder Name No. Experiment Load ATM Rotation Lock Shim Acq Proc User Disk Title / Orig Remarks
1 2009-12-03 14:56:04 15 s_meyer300c 3 13C ✓ ✓ ✓ ✓ ✓ ✓ ✓ nmrservice C:\Bruker\TOPSPIN sref: no peak found default calibration done
submit
if needed
add further
experiment for
same sample
log off
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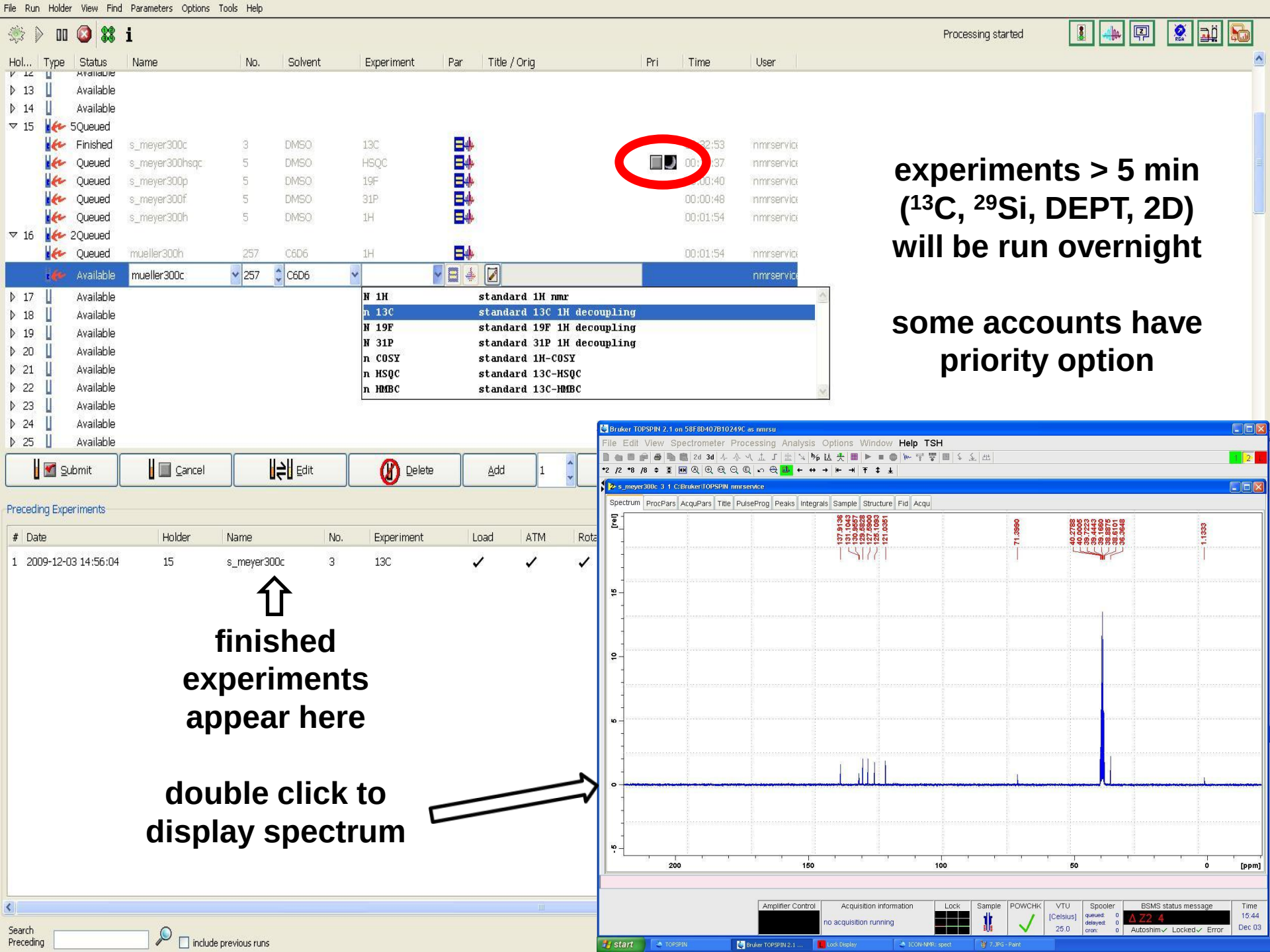
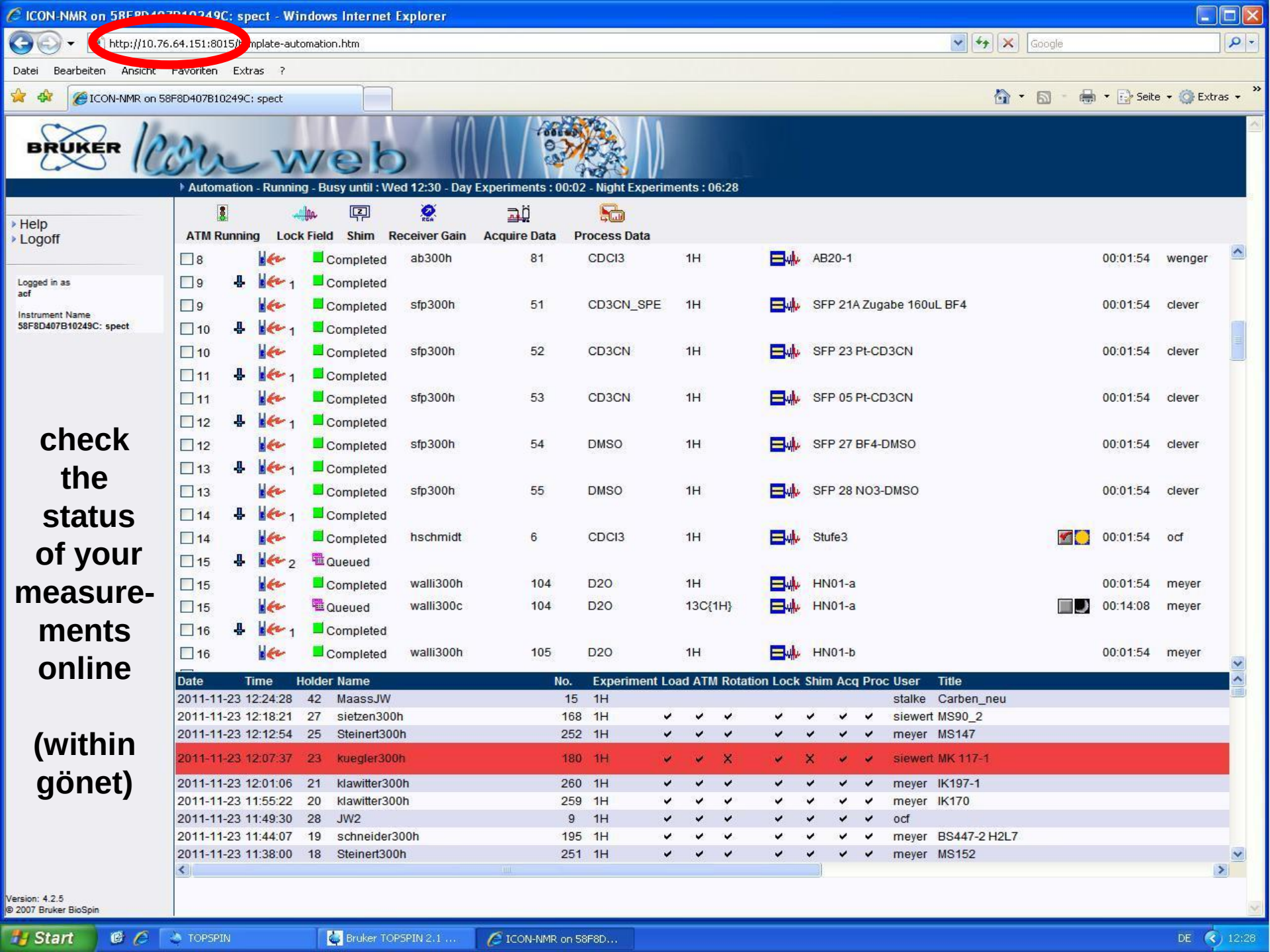
include previous runs
Busy until: Thu 15:40 Day Experiments: 00:03 Night Experiments: 00:15 User: nmrservice



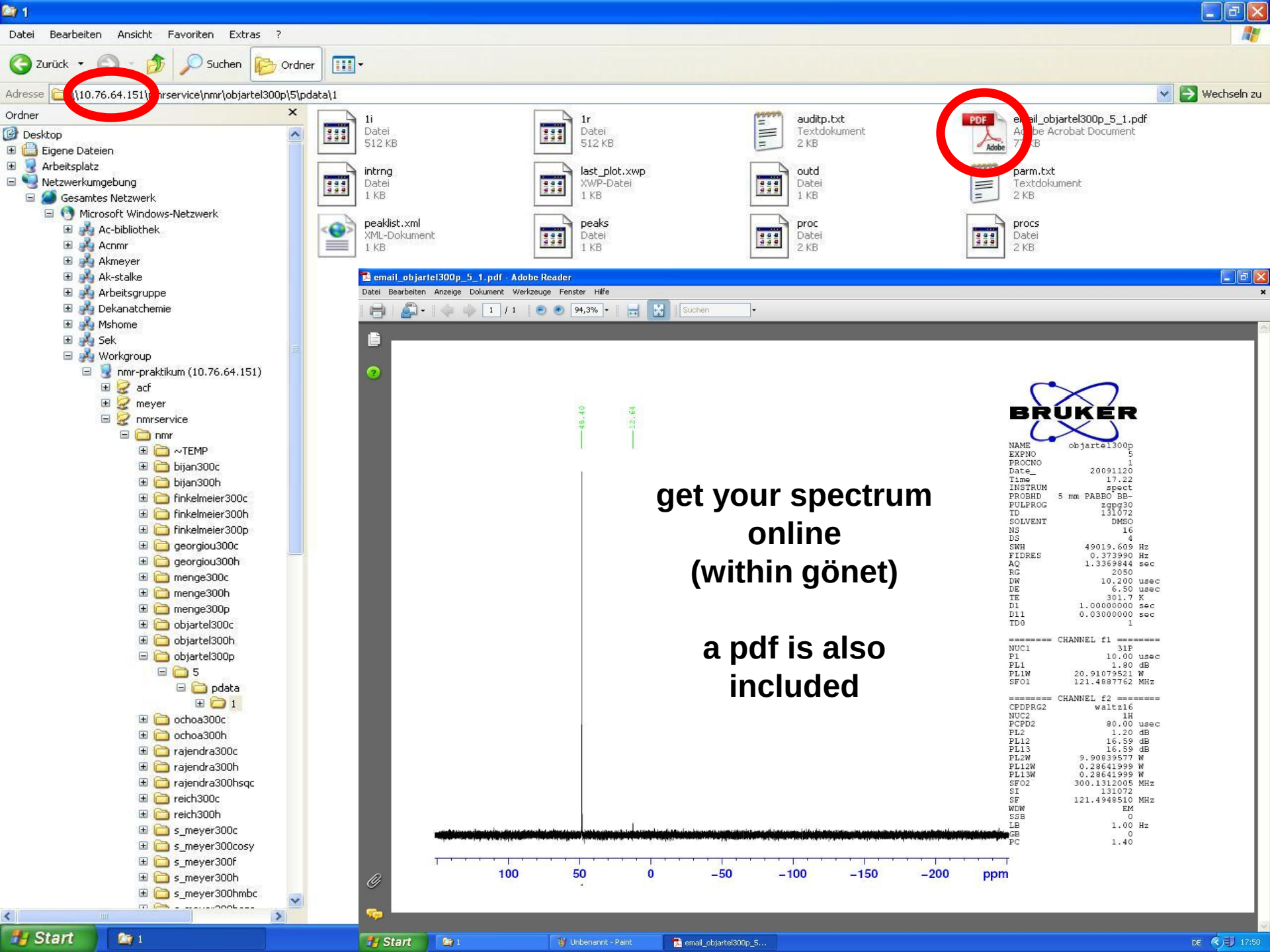
experiments > 5 min (^{13}C, ^{29}Si, DEPT, 2D) will be run overnight

some accounts have priority option



check the status of your measure-ments online

(within gönet)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FIDRES 0.373990 Hz
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RG 2050
DW 10.200 usec
DE 6.50 usec
TE 301.7 K
D1 1.00000000 sec
D11 0.03000000 sec
TD0 1
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NUC1 31P
P1 10.00 usec
PL1 1.80 dB
PL1W 20.91079521 W
SFO1 121.4887762 MHz
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 1.20 dB
PL12 16.59 dB
PL13 16.59 dB
PL2W 9.90839577 W
PL12W 0.28641999 W
PL13W 0.28641999 W
SFO2 300.1312005 MHz
SI 131072
SF 121.4948510 MHz
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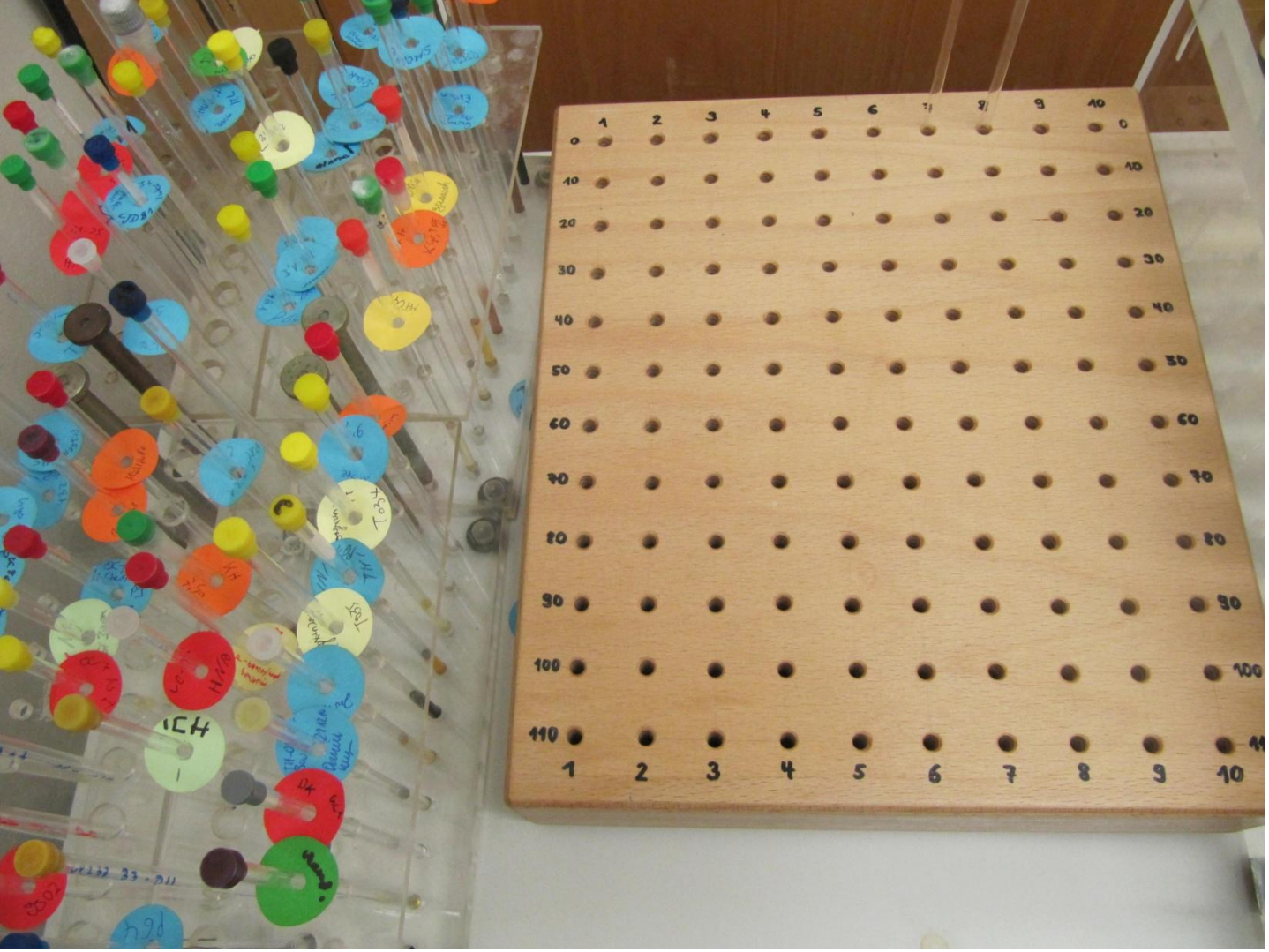

Pick up

finished samples will be placed in timber pick up rack under holder no. (early morning)

Samples not picked up will end up in the storage rack on the left

Have fun!