

1. 打开 Zetaview 仪器电源。



- 2. 打开电脑, 登录系统。
- 3. 双击桌面上的 Zetaview 图标, 启动 Zetaview 软件。



4. Zetaview 仪器开始初始化,初始化过程可以通过桌面右下角的进度条看到。初始化过程中,激光和显微镜会沿着导轨移动,直到他们识别到电极开关。

ZetaView 8.04.02 [ZNTA]		-
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5. 初始化结束后软件弹出退化框,提示用泵冲洗管路,由于使用泵易产生气泡,因此点击 "Skip"跳过此步骤。



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6. 软件界面出现"Please fill the cell with distilled water"的消息提示。

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8. 使用注射器(5ml或10ml)匀速注射至少5ml 蒸馏水(0.5ml/s到1ml/s)后,点击OK.

9. Zetaview 仪器开始执行 CellCheck ("Cell Quality Check in Progress"), CellCheck 的执行 过程可以通过窗口右下角的进度条看到。



- 10. CellCheck 合格后, 会出现"Please fill the cell with 100nm alignment suspension (dilution 1: 250,000)"的消息提示。
- 11. 配制 1: 250000 的标准液(一般先稀释 1000 倍, 再稀释 250 倍。比如 1µl 稀释到 1ml, 再从中取 100µl 加入到 25ml 纯水中)。用干净的注射器吸取 5ml 校准溶液, 注入样品



池。确认检测界面显示的颗粒数在 50-400 之间(最好是在 200 左右)后,即可点击 OK, 开始聚焦校准。注射过程中要尽量避免气泡形成。

12. Zetaview 仪器开始执行自动校准(请看进度条)



13. 然后进行聚焦优化(自动进行,无需手工操作,进度条显示)。



14. 最后执行对称性测试,生成一条抛物线。这条抛物线自动出现在 Analysis 菜单中,表明 样品池很干净(主要是指没有灰尘、气泡和其他可能黏附在样品池壁上的带正电荷的颗 粒)。





如出现翻转的抛物线或者折线,说明样品池内可能存在气泡,或者样品池不干净,会影响 检测结果。



15. 点击 OK 后,即可用纯水冲洗样品池内的标准液,直至纯水充满样品池时,软件检测界 面显示的颗粒数**小于 5**,仪器才用于样品测试。

- 16. 测试样品时,一般先将样品稀释 1000 倍,再将稀释后的样品注入样品池。检查软件界面显示的样品颗粒数目是否合适(50-400 之间,最好在 200 左右,不然的话,则需要调整样品的稀释倍数)。软件界面显示的样品颗粒数符合要求时,即可点击 measurement、Run video Acquisition,在弹出的界面设置样品名称、选择保存路径和 检测条件,点击OK,即可开始测试。需要注意的是,观察软件界面显示的颗粒数时,所用的参数要与样品的测试参数一致。
- 17. 仪器使用完毕后,要及时清洗仪器。先用缓冲液冲洗样品,直至软件检测界面显示的颗粒数小于 5;再用10 ml 以上的纯水冲洗缓冲液。
- 18. 确保软件已调至散射光模式下,关闭 ZetaView 软件,关闭 电脑和ZetaView 仪器。
- 19. 仪器关闭后注入空气排干水, 注入至少5 mL 1%的中性酶清洗液, 浸泡10分钟后, 注入空气排 干清洗液,
- 20. 再用 30 ml 以上的纯水冲洗样品池,最后向样品池内注入空气,直至废液管内不再出现液体 流出。倾倒废液缸内的废液并冲洗废液缸,将废液缸安装回原位。