

ESS Moderator Summary

Heathrow – 16th February 2001

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Chopper Spectrometers

High Energy	H ₂ O poisoned (50Hz-SP)
Thermal (below 100meV)	H ₂ O coupled (50Hz-SP)
Cold	H ₂ coupled (50Hz-SP)

Indirect Geometry Spectrometers

Si-111 backscattering (pulse shaping chopper)	H ₂ coupled (50Hz-SP)
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Si-111 backscattering (no pulse shaping chopper)	H ₂ poisoned (50Hz-SP)
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PG002 backscattering	H ₂ de-coupled (50Hz-SP)
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PRISMA type	H ₂ coupled (50Hz-SP/10Hz – SP)
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TOSCA	H ₂ O poisoned or H ₂ de-coupled (50Hz-SP maybe 10Hz-SP for high resolution)
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eVS	H ₂ O poisoned (50Hz-SP)
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<i>Neutron Spin Echo</i>	H ₂ coupled (16Hz-LP)
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Engineering

Diffraction	H ₂ O poisoned or de-coupled (50Hz-SP)
Radiography	H ₂ O/H ₂ coupled (50Hz-SP)

N.B. would like a CH₄ type moderator

Powder Crystallography

	H ₂ coupled (50Hz-SP or 10Hz-SP second choice)
	H ₂ O poisoned (50Hz-SP or 10Hz-SP second choice)

N.B. would like a CH₄ type moderator

Small Angle Neutron Scattering

H₂ coupled (10Hz-SP)
H₂ coupled (16Hz-LP)

Reflection

Liquids H₂ or CH₄ coupled (10Hz-SP)
Magnetic H₂ coupled (16Hz-LP)

Single-Crystal Diffraction

Normal diffraction H₂ decoupled (50Hz-SP)
H₂O coupled (50Hz-SP)

High resolution H₂O/H₂ poisoned (50Hz-SP)

Diffuse H₂ coupled (10Hz-SP or 16Hz-LP)

Low resolution H₂ coupled (50Hz-SP or 16Hz-LP)

Single peak H₂ coupled (16Hz-LP)

N.B. would like a CH₄ type moderator

Disordered Material Diffraction

H₂O de-coupled (50Hz-SP)
H₂ coupled (10Hz-SP)

Moderator	Coupling	50Hz-SP	10Hz-SP	16.6Hz-LP
H ₂ – 20K	Coupled	••••	•••••	•••••
	De-coupled	•		N.A.
	De-coupled Poisoned	••		N.A.
H ₂ O – 300K	Coupled	••		
	De-coupled			N.A.
	De-coupled Poisoned	•••••••	••	N.A.

- first choice
- second choice