

Photon detection devices & GSPCs at ISIS and Task 22.3

Nigel Rhodes

NMI3 JRA Meeting, PSI
March 30 – 31, 2009



Science & Technology Facilities Council

ISIS

Introduction

The ISIS Scintillation Detectors

Ancient Charm and 16 Channel MA PMTs

Reflectometers and WLS fibre detectors

GSPCs

Task 22.3



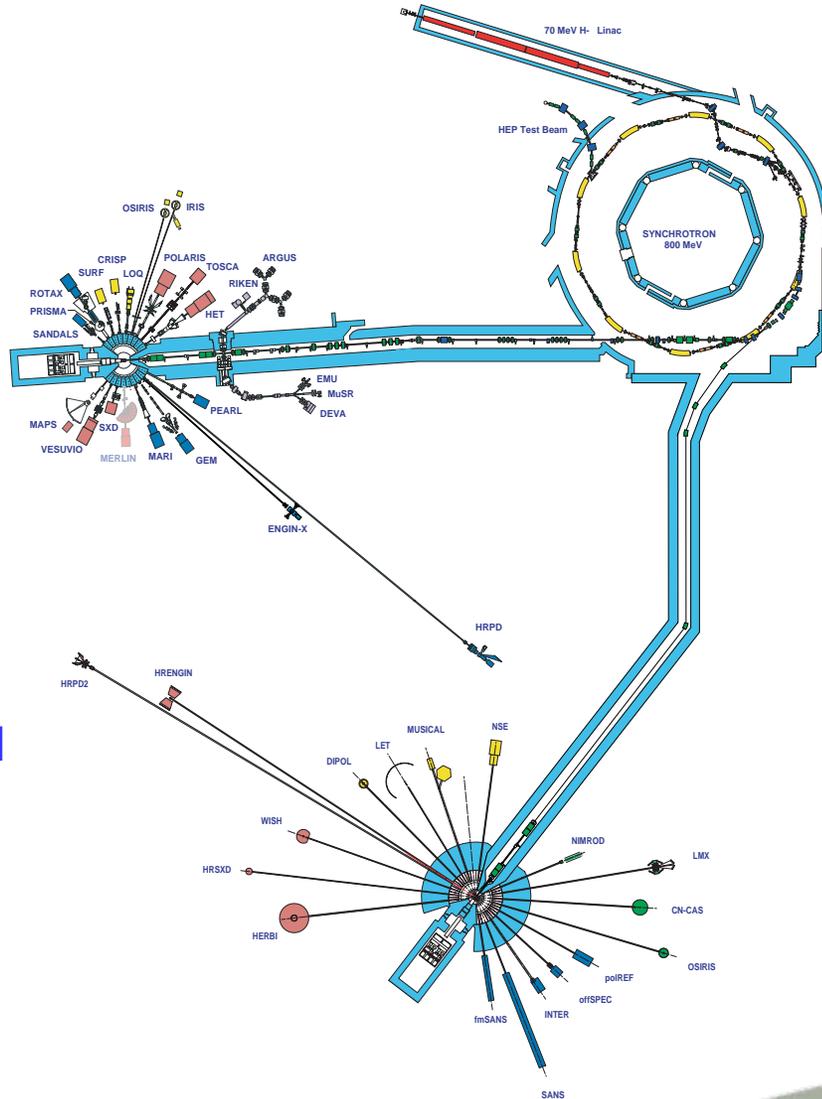
The Harwell Science and Innovation Campus



ISIS: A two target station facility

TS-1

50% of the TS-1 detectors are scintillation based



6 of 7
TS-2 phase 1
instruments
seen first
neutrons

TS-2

The Seven TS-2 Day One Instruments

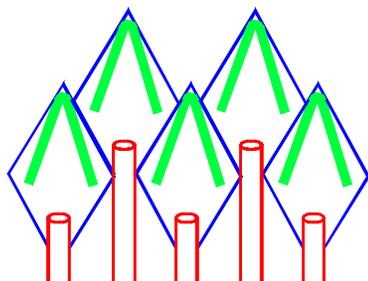
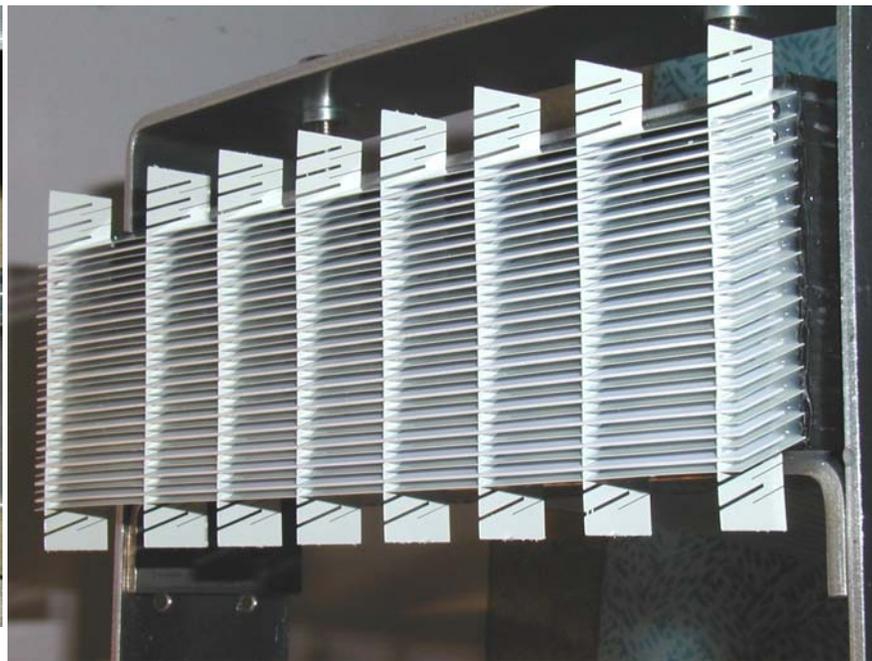
NIMROD	SANDALS	Scint
LET	Low Energy Transfer Chopper Spectrometer	Gas
WISH	Diffractionmeter for Magnetic Studies	Gas
SANS 2D	SANS	Gas
INTER	Reflectometer	Scint
PoIREF	Reflectometer	Scint
OffSPEC	Reflectometer	Scint

ENGIN-X: The Engineering Diffractometer

V DETECTOR



VENETIAN DETECTOR



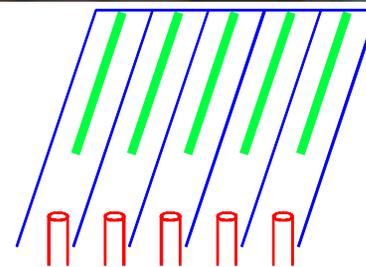
SCINTILLATOR



FIBRE



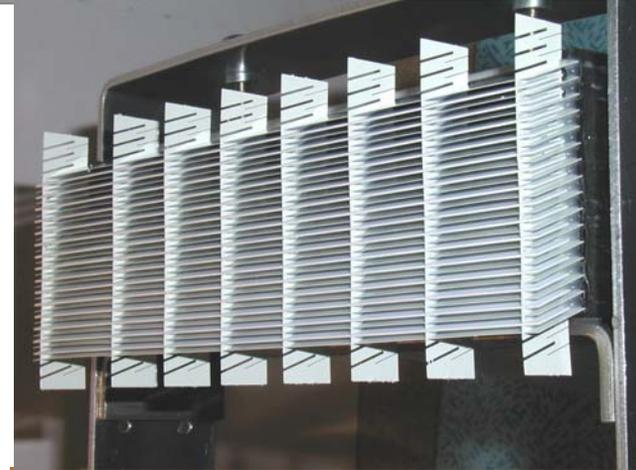
REFLECTOR



Science & Technology Facilities Council

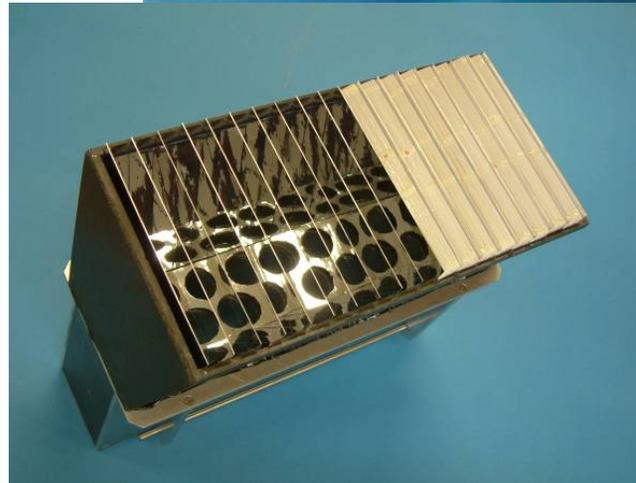
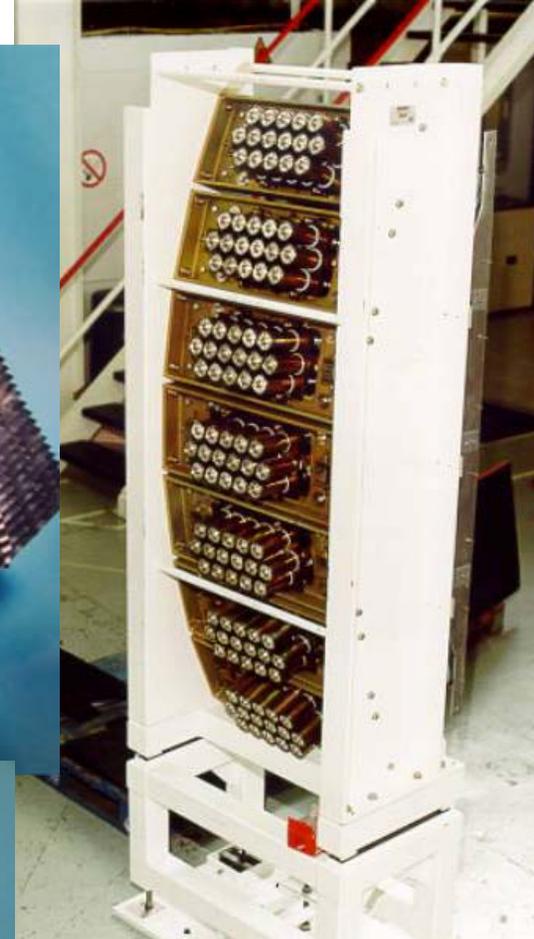
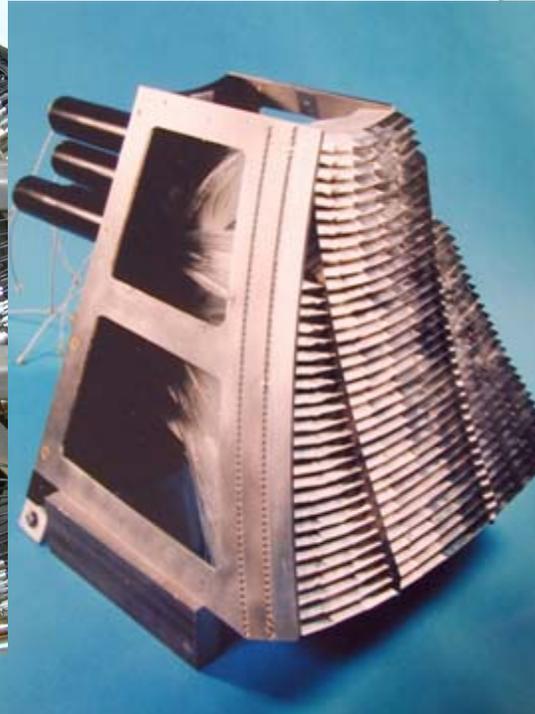
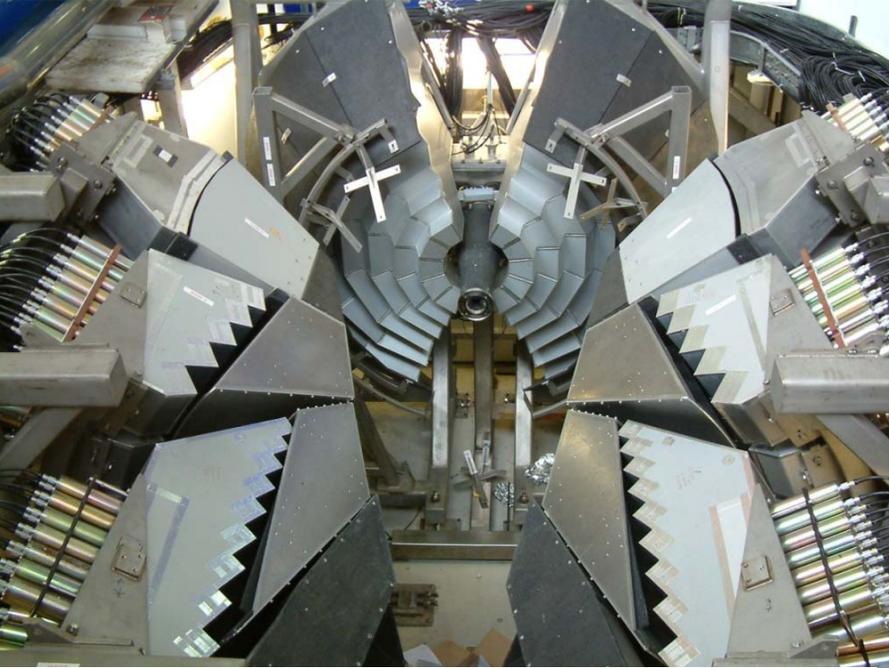
ISIS

The Seven TS-2 Day One Instruments



Eventually the Venetian design was selected for use in the final detector array

The Seven TS-2 Day One Instruments



Science & Technology Facilities Council

ISIS

A Menagerie of Neutron Beam Monitors

