

ABSTRACT

SCIENTIFIC INSTRUMENT EMULATOR

A scientific instrument emulator is disclosed and comprises a computer (1) including a memory (3) and at least two processors (2,9). An analogue I/O module (6) is configured within the computer (1) and connects via a bus (11) thereby permitting conversion of analogue signals
5 into digital signals for processing by the processors (9). The module (6) permits connection to monitoring and/or sampling devices such as transducers which permit analysis and recording of physical phenomena. The emulator is programmable via a library of processing functions stored in the memory (3) to adapt the processors (9) to emulate the operation of
10 a plurality of scientific instruments thereby permitting display of monitored events on a VDU (10) in real-time and/or storage of data relating to the events in the memory (3). Data can also be recorded in analogue format using one or more tape recoders connectable to the module (6).

Fig. 1