SAXS/WAXS Detectors: Present Limitations and Future Requirements

NARAYANAN T. E.S.R.F., Grenoble France – 38043

The specifications for optimal SAXS/WAXS detectors have been discussed on many occasions in the past. However, the advancement is rather slow owing to various technical constraints. This presentation will attempt to provide an overview of the different 2-D detectors currently available for time-resolved SAXS/WAXS experiments. These detectors lack the potential to fully exploit the properties of modern synchrotron sources in this type of applications. The present limitations in time and spatial resolution, and dynamic range will be demonstrated through illustrative examples. Further advancement of SAXS/WAXS technique largely depends on the availability of better detectors. Some future directions will be discussed.