A NOVEL X-RAY DETECTOR FOR IN-HOUSE XRD

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An X-ray detector has been enhanced year by year and quite significant change was seen in the last decade. A silicon strip detector was started to be used with in-house powder diffractometer around 2000 and rapidly spread. Today, it is almost a standard detector for in-house XRD. A hybrid pixel detector is another innovation on X-ray detector. It is now widely used not only with in-house XRD equipment, but also at synchrotron facilities. Both of those detectors use state-of-the-art semiconductor technologies. Using such technologies is necessary for the development of the advanced X-ray detector.

A novel X-ray detector for in-house XRD has been developed. The detail and some examples of XRD application will be shown.