

Camera investigates extremely fast events that generate UV light.

Specialised Imaging

reports how several leading research groups are using an **optimized version of its SIM Framing Camera** to make **ultra-fast UV measurements** of challenging transient processes.



Image captions: A: SIM ultrafast framing camera

Incorporating an UV optical module

and UV intensified CCD enables the SIM camera to optimally operate in the 200-600nm spectral range and capture high quality images at rates of up to one billion frames per second.

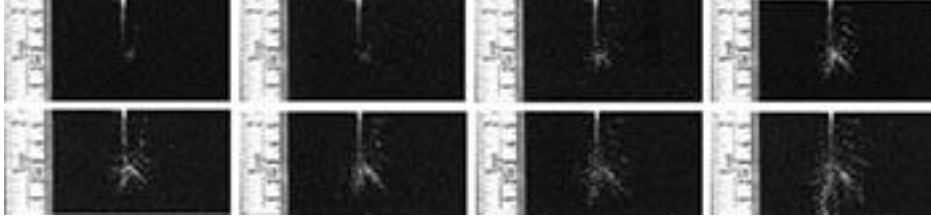
Keith Taylor, Technical Director of Specialised Imaging said “We are excited to be able to report on the groundbreaking research being undertaken with our UV-optimized SIM framing cameras. Characterising the spark discharge behaviour associated with high voltage transformers used in power stations is one of the fastest events to capture using a camera, lasting only a few tens of nanoseconds. We collaborated with the client to demonstrate how our SIMX-16 UV camera could be triggered with minimum delay and offers the light sensitivity to capture the very short duration self-illuminating event. To protect the SIM camera from the spark discharge or the electromagnetic pulse generated by it, this experiment was conducted inside a Faraday cage.”

He added

“Other research benefiting from UV optimized SIM framing cameras includes investigation into short duration light flashes resulting from sonoluminescence experiments and a study looking at the mechanism of plasma being used to modify the electrical properties of polymer films.”

Benefiting from continuous development

he SIM framing camera range has established itself as the leading ultra-high-speed camera for industrial and academic research groups around the world. Capable of capturing images at one billion frames per second, with gating down to 3ns, the SIM framing camera takes the capture of images for accurate, high-speed analysis of fast transient events to a new level.



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Image captions: B: Capturing High Voltage Electrical Discharge phenomena in the UV-Visible using a SIM camera

To learn more about the high voltage transformer

research being conducted using a UV-optimized SIM framing camera please visit <https://specialised-imaging.com/about-us/news/pushing-ultra-high-speed-photography-to-the-limit/>

For further information

on the SIMX family of ultra high-speed framing cameras please visit <https://www.specialised-imaging.com/products/framing-cameras/simx> or contact Specialised Imaging on +44-1442-827728 (UK) / +1-951-296-6406 (USA) / +49-8141-666-8950 (Germany) / +86-1068-651-769 (China) / info@specialised-imaging.com.

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