

## Postdoc position (2 yrs.) for the development of an Inverse Compton Scattering X-ray source based on high gradient linear accelerator technology

The Smart\*Light Project is a compact Inverse Compton Source (ICS) Hard X-ray source which is currently under development at Eindhoven University of Technology (TU/e). This compact ICS source will consist of an in-house built 100 keV DC photogun which will produce low emittance electron bunches to be injected into a novel 30 MeV X-band accelerating structure, designed specifically for the capture of 100 keV electrons. Completing this system is a state-of-the-art amplified femtosecond laser system and an interaction chamber for the generation of Hard X-rays. All parts have been built or purchased, and are ready for integration. We are looking for an experienced accelerator physicist who will take charge of the conditioning of the X-band accelerator structure, and the subsequent generation and characterization of relativistic electron beams. Together with the rest of the TU/e Smart\*Light team, the candidate will subsequently produce the first X-rays, which will be applied to cultural heritage studies, in close collaboration with material scientists of the international Smart\*Light consortium.

The position is available immediately. For more information please contact prof. Jom Luiten ([o.j.luiten@tue.nl](mailto:o.j.luiten@tue.nl)) or dr. Peter Mutsaers ([p.h.a.mutsaers@tue.nl](mailto:p.h.a.mutsaers@tue.nl)).