



**INDIAN INSTITUTE OF TECHNOLOGY BOMBAY**  
**MATERIALS MANAGEMENT DIVISION**  
**Powai, Mumbai 400076**

**Purchase Requisition No. 1000012121 (SRM/RFX No. 6100000195)**

**Technical Specifications of High Speed CMOS Camera with LED Backlighting**

The proposed camera will be utilized for observing formation of sprays at high speeds. It should meet (or exceed) the following minimum specifications

Minimum qualifications	
1	<p>High Speed CMOS camera</p> <ul style="list-style-type: none"><li>• ISO Monochrome : 16000T/6400D/ISO64000</li><li>• Active pixels: At least 1 MegaPixel</li><li>• Pixel size: 20 x 20 um</li><li>• Frame rate at 1 Mega Pixel: At least 7500 fps</li><li>• Quantum efficiency: at least 50%</li><li>• Global Electronic Shutter: less than or equal to 1 microsecond (independent of frame rate)</li><li>• Digitization: 12 bit</li><li>• F-mount with adapter for C-mount lens</li><li>• 18 GB RAM, upgradable up to 72 GB</li><li>• Accompanying software should give full control of the camera</li></ul>
2	<p>LED backlighting</p> <ul style="list-style-type: none"><li>• White LED</li><li>• 200mm x 200mm of active light area</li><li>• Color Temperature: 5700 °K</li><li>• Luminescence minimum 80000 cd/m<sup>2</sup> in continuous mode</li></ul>

**Live demonstration of camera is a must for technical evaluation.**