**Project List**

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| **Project**  | **Mentor/group website** | **Opening** |
| **Title 1: Metamaterials for Liquid Crystal on Silicon devices** The proposed research aims on the Liquid Crystal on Silicon (LCoS) device development and characterisation procedure. In particular, use of metamaterials to improve reflectivity and response time of the LCOS at 1550nm wavelength. A student will be working alongside a research staff to understand our optical setup and measurement techniques. He will write a program in MATLAB to control an LCoS device and take measurement. The program will be tested and the measurement results will be analysed.  | Professor Daping Chu,Dr. Mike Pivnenko<https://www.cpds.eng.cam.ac.uk/> | 1 |
| **Title 2: High power Liquid Crystal on Silicon devices**The proposed research aims to develop a Liquid Crystal on Silicon (LCoS) device which is capable to work at elevated radiance power at 1064nm wavelength. LCOS device characterisation procedure and data analysis using MATLAB is the main responsivity of the student. A student will be working with an optical setup and measurement techniques. Some work in the clean room for device assembly is also expected. | Professor Daping Chu,Dr. Mike Pivnenko<https://www.cpds.eng.cam.ac.uk/> | 1 |
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