

Associate Professor **Anthony Beaucamp** is an active contributor to the international community for ultra-precision engineering. After spending 10 years in the UK optical fabrication industry, during which time he participated on the development of several key optical finishing techniques towards various scientific projects run by the NASA and ESO, he has moved to full-time employment in academia since 2010 and recently joined Keio University to run a laboratory focused on design and manufacture. His current research topics cover automated design (topological optimization, inverse ray-tracing, generative AI), digital manufacture (digital twins, machine learning for automated path planning, multi-scale modelling of fine abrasive processes), as well as a long-term commitment to the development of hybrid surface finishing systems. With more than 10 international patents (granted and pending) and over 100 publications (>50 in peer-reviewed journals), Dr. Beaucamp also currently serves on the editorial review boards of several well-known manufacturing journals. This well-established track-record in ultra-precision manufacture was recognized through the award of the F. W. Taylor medal of CIRP in 2015, for his contributions to super-fine finishing technology.