Name: Christoph Karl

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- **Background:**
  Dipl.-Ing. at Otto-Von-Guerricke Universität Magdeburg, GERMANY 2010
  Intern for research at PLANSEE SE, Austria, 2007-08 and 2009-2010

- **PhD topic:** A study of the susceptibility of Ti alloys to oxygen ingress (2010-2013) Industrial Partner: Rolls-Royce plc.
  Description: Advanced high strength β and α+ β titanium alloys find application in the aerospace industry. Methods of processing and machining parts from titanium alloys require different heat treatments to generate desired microstructures and to achieve stress relief. Due to the high reactivity of titanium and its alloys to oxygen these treatments causes building up of an oxide layer and diffusion of oxygen into the material. Greater knowledge about the formation and the properties of the oxygen influenced zone could offer possible savings in time and manufacturing costs.
- **Experimental Techniques/Equipment:**
  SEM, OIM, Microhardness, EBSD, finite difference modelling (MatLab), HCF-testing,