# Polycrystals: Microstructure and Effective Properties Workshop

Andrew Wiles Building, Oxford

### Monday 26 March 2018 - L3

11.00am	Registration with refreshments - Common Room
	Chair Tomonari Inamura
	Goro Miyamoto (Tohoku University)
11.30am	Variant coupling of martensite and bainite structures in
	steels
12.30pm	Lunch
	Chair Alexander Korsunsky
	Robert Pond (University of Exeter)
2.00pm	Mechanistic Models of Deformation Twinning and
	Martensitic Transformations
	Angkana Rüland (Max Planck, Leipzig)
3.00pm	Microstructures in SMA: Rigidity, Non-Rigidity and
	Simulations
4.00pm	Refreshments – Common Room
	Chair Konstantinos Koumatos
	Angus Wilkinson (University of Oxford)
4.30pm	High Angular Resolution Electron Backscatter Diffraction
	studies of Fe-C Martensitic Steels
5.30pm	Poster Reception – Common Room





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#### Tuesday 27 March 2018 - L5

	Chair Giovanni Zanzotto
9.30am	Thomas Waitz (University of Vienna) Martensitic microstructure in nanocrystalline NiTi shape memory alloys - experiments and modelling
10.30am	Refreshments – Common Room
	Chair Giovanni Zanzotto
11.00am	Barbora Benešová (University of Würzburg) A model for polycrystalline shape-memory alloys derived from microscopically motivated assumptions
Midday	Akinobu Shibata (Kyoto University) Hydrogen-related fracture behaviour of martensitic steels
1.00pm	Lunch
	Chair Bianca Stroffolini
2.00pm	Anja Schlömerkemper (University of Würzburg) On the characterisation of subclasses of symmetric polyconvex functions
3.00pm	Michaël Peigney (École des Ponts Paris Tech) Energy bounds and estimates for polycrystalline shape memory alloys at small strains
4.00pm	Refreshments – Common Room
7.30pm	Workshop Dinner – Seminar Room 9, St Anne's College





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### Wednesday 28 March 2018 - L5

	Chair Pierluigi Cesana
9.30am	Klaus Hackl (Ruhr-University Bochum) Micromechanical modeling of polycrystalline shape memory alloys – energies and evolution
10.30am	Refreshments – Common Room
	Chair John Ball
11.00am	Petr Sedlák (Czech Academy of Sciences) Experimental study and phenomenological modelling of NiTi SMA
Midday	<b>Kaushik Bhattacharya (Caltech)</b> Polydomain liquid crystal elastomers





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