



High Polymer Research Group

60th Conference 2022

Shrigley Hall, Pott Shrigley, Cheshire

PROGRAMME

“Polymers in Extreme Environments”

Sunday 24th April – Thursday 28th April 2022

Programme organised by
Professor Eva Malmström Jonsson and Dr Gareth Crapper

The HPRG is pleased to acknowledge financial support
from the following companies



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acknowledges the
contribution of Evonik.

Monday 25th April

08:45	Professor Andy Cooper Welcome to the 60 th Meeting of the High Polymer Research Group	Chair, HPRG University of Liverpool
Session 1	Chair – Dr Jerry Winter	
09:00	Professor Neil Bourne Extreme Timescales	School of Materials University of Manchester
10:00	Professor Chris Ober <i>Extreme UV Patterning for Fast Electronics: Making materials vanish with nm-scale precision</i>	Materials Science and Engineering Cornell University
11:00	Coffee	
Session 2	Chair – Professor Rachel O'Reilly	
11:30	Professor Sanat Kumar Polymer-grafted nanoparticles under extreme confinement	Chemical Engineering Columbia University
12:30	Lunch	
15:15 – 17:00	Coffee and Tea	
Session 3	Chair – Dr Gareth Crapper	
17:00	Professor Lorna Dougan The physics of life in extreme environments	School of Physics and Astronomy University of Leeds
18:00	Professor Matthew Gibson Antifreeze Polymers for the Biologic Cold Chain	Department of Chemistry University of Warwick

HPRG Council Meeting, Brabazon Suite, 19:00

Tuesday 26th April

Session 4	Chair – Professor Matthew Gibson	
09:00	Professor Timothy P Lodge Extreme kinetics: Dynamics of copolymer micelles	Department of Chemical Engineering and Materials Science University of Minnesota
10:00	Professor Linda Schadler Nanodielectrics under high electric field	College of Engineering and Mathematical Sciences University of Vermont
11:00	Coffee	
Session 5	Chair – Dr Gareth Crapper	
11:30	Professor Dr Miriam M Unterlass New production technique for high-performance polymers	Department of Chemistry Universität Konstanz
12:30	Lunch	
15:15 – 17:00	Coffee and Tea	
Session 6	Chair – Professor Cameron Alexander	
17:00	Marion Ingle Design (or lack of) for using polymers in extreme environments	Sandberg LLP
18:00	Dr Matthieu Gresil Early damage detection in composites	Materials Science and Engineering Monash University

Wednesday 27th April

Session 7	Chair – Professor Athene Donald	
09:00	Professor David Bucknall Polymers designed for the Ocean Depths	School of Engineering and Physical Sciences Heriot-Watt University
10:00	Dr Matthew Unthank Epoxy network polymers for applications in extreme environments	Department of Applied Sciences University of Northumbria
11:00	Coffee	
Session 8	Chair – Dr Andrew Burgess	
11:30	Dr Victoria Garcia Sakai Neutron irradiation effects on polymer semiconductors	ISIS Neutron and Muon Source Science and Technology Facilities Council
12:30	Lunch	
15:15 – 17:00	Coffee and Tea	
Session 9	Chair – Professor Andy Cooper	
17:00	Professor Richard Thompson Plastic litter in the oceans: are there solutions to this global environmental problem?	School of Biological and Marine Sciences University of Plymouth
19:15	Drinks Reception (Tilden Suite)	
20:00	Conference Dinner (Tilden Suite)	