

ANSDAC



PRELIMINARY WORKSHOP PROGRAMME

5DAY 1 – Monday – 5 July 2021	
13:00 – 13:15	Welcome – Nico Fischer (University of Cape Town)
13:15 – 14:15	Introduction to X-ray absorption (XAFS) theory and experiment
14:15 – 14:30	Break
14:30 – 16:00	Introduction to data analysis (Athena 1) and breakout rooms for tutorial sessions
16:00 – 16:15	Break
16:15 – 17:00	XAFS data analysis (Athena 2), tutorials and application (LCF)
approx. 17:00	End of day 1

DAY 2 – Tuesday – 6 July 2021	
13:00 – 14:30	XAFS data analysis (Athena 2), tutorials and application (LCF)
14:30 – 14:45	Break
14:45 – 15:15	Experimental considerations for performing XAFS studies
15:15 – 16:00	Introduction to EXAFS data analysis and tutorials (Artemis 1)
16:00 – 16:15	Break
16:15 – 17:00	Tutorials continued (Artemis 1)
approx. 17:00	End of day 2

DAY 3 – Wednesday – 7 July 2021	
13:00 – 14:30	Introduction to EXAFS data analysis and tutorials (Artemis 2)
14:30 – 14:45	Break
14:45 – 16:00	Tutorials continued (Artemis 2)
16:00 – 16:15	Break
16:15 – 17:00	XAFS data analysis (Artemis 3)
approx. 17:00	End of day 3

DAY 4 – Thursday – 8 July 2021	
13:00 – 14:15	Q&A on XAFS data analysis
14:15 – 14:30	Break
14:30 – 16:00	XAFS data analysis (Artemis 4)
16:00 – 16:15	Break
16:15 – 17:00	How to write a beamline application and Q & A
approx. 17:00	End of day 4

ANSDAC



PRELIMINARY WORKSHOP PROGRAMME

DAY 5 – Monday – 12 July 2021	
13:30 – 15:00	Introduction to X-ray Diffraction & crystallography – Dave Billing (University of Witwatersrand)
15:00 – 15:30	Break
15:30 – 17:00	Introduction to X-ray Diffraction & crystallography – Dave Billing (University of Witwatersrand)
approx. 17:00	End of day 5

DAY 6 – Tuesday – 13 July 2021	
13:30 – 15:00	Introduction to X-ray Diffraction & X'Pert Highscore – Sabine Verryn (XRD Analytical and Consulting cc)
15:00 – 15:30	Break
15:30 – 16:30	Introduction to Rietveld refinement - ?
approx. 17:00	End of day 6

DAY 7 – Wednesday – 14 July 2021	
13:30 – 14:00	Rietveld refinement applications in industry – Esna du Plessis SASOL
14:00 – 15:00	Introduction to Topas GUI & exercises – Esna du Plessis (SASOL)
15:30 – 16:00	Break
15:30 – 16:30	X'Pert Highscore practical – Sabine Verryn (XRD Analytical and Consulting cc)
approx. 16:30	End of day 7

DAY 8 – Thursday – 15 JULY 2019	
13:30 – 14:00	Topas 7 launch mode – Dave Billing (University of Witwatersrand)
14:00 – 15:30	Pair Distribution Function (PDF) – beyond classical XRD I – Dave Billing (University of Witwatersrand)
15:30 – 16:00	Break
16:00 – 17:00	Large datasets, PDF extraction & analysis with Topas, quick small box modelling (PDF)
approx. 17:00	End of day 8

DAY 9 – Friday – 16 July 2021	
13:30 – 14:30	Rietveld refinement Freeware – Johan de Villiers (University of Pretoria)
14:30 – 16:00	Rietveld refinement Freeware – Johan de Villiers (University of Pretoria)
16:00 – 16:30	Break
16:30 – 17:30	Student specific questions with software
approx. 17:30	End of day 9

ANSDAC



PRELIMINARY WORKSHOP PROGRAMME

DAY 10 – Monday – 26 July 2021	
13:00 – 14:30	Introduction to neutron techniques – 1
14:30– 14:45	Break
14:45 – 16:00	Introduction to neutron techniques – 2
16:00 – 16:15	Break
16:15 – 17:00	Physical principles and experimental considerations of neutron techniques
approx. 17:00	End of day 10

DAY 11 – Tuesday – 27 July 2021	
13:00 – 14:00	Physical principles and experimental considerations of neutron techniques
14:00 – 14:15	Break
14:15 – 16:00	Introduction to data analysis – 1
16:00 – 16:15	Break
16:15 – 17:00	Introduction to data analysis – 2
approx. 17:00	End of day 11

DAY 12 – Wednesday – 28 July 2021	
13:00 – 14:30	Neutron data analysis tutorials and applications
14:30 – 14:45	Break
14:45 – 16:00	Neutron data analysis tutorials and applications
16:00 – 16:15	Break
16:15 – 17:00	Neutron data analysis tutorials and applications
approx. 17:00	End of day 12