جامعة الملك عبدالله للعلوم والتقنية

King Abdullah University of Science and Technology

Analytical Core Lab

Training Schedule Fall 2019

July

Instrument Name	Training Duration (hrs)	Max. Capacity	1	2	3	4	7	8	9	10	11	14	15	16	17	18	21	22	23	24	25	28	29	30	31
SOLIDS																									
BET – Physisorption	8	4								X	X														
Autochem 2950 /2920 – Chemisorption	8	3																		X	X				
ASAP 2020 – Chemisorption	4	3		N					N					N					N					N	
ASAP 2050 – Gas Adsorption	2	3		N					N					N					N					N	
Mercury Porosimetry	6	2			X	X																			X
Water Sorption	2	3		N					N					N					N					N	
PID Effi	8	2		N					N					N					N					N	
Zetasizer	3	4							X																
Surface Zetapotential	3	4							X																
Contact Angle	2	4												X											
Tensiometer	2	4												X											
Basic FTIR	3	4		X																				X	
Advanced FTIR (DRIFT/Microscopy)*	3	4		X																				X	
Basic UV-VIS-NIR	2	4							X																
Advanced UV-Vis-NIR (TAMS)*	3	4							X																
Fluorescence	2	4													X										
Isorsorp – Gravimetric Gas Adsorption**				N					N					N					N					N	
INORGANICS																									
CHNS-O	3	3		X					X					X					X					X	
Advanced CHNS-O (liquid autosampler)*	1	3		N					N					N					N					N	
Aquakem250 Autoanalyzer	3	2		X																					
Segmented Flow Analyzer	8	2		N					N					N					N					N	
Ion Chromatography	3	2		X																					
Karl Fisher Titrator	1	2		N					N					N					N					N	
Advanced Karl Fisher Titrator (stromboli)*	1	2		N					N					N					N					N	
Autotitrator	2	2		X																					
TOCTN	4	2		X										X										X	
Advanced TOCTN (solid sampler)*	2	2		N					N					N					N					N	
Viscometer	1	2		N					N					N					N					N	
Conductivity/PH/ISE	1	2		N					N					N					N					N	
TD-Fluorometer	2	2		N					N					N					N					N	
Turbidity	1	2		N					N					N					N					N	
Density Meter	2	2		N					N					N					N					N	
ICP-OES - Agilent 5110	4	2			X					X					X					X					X
ICP-OES - Optima 8300	2	2				X										X									
ICP-MS - Elan	3	2		X										X										X	
Microwave Digestion	2	2		X										X										X	
XRF	2	2				X					X					X					X				
Freeze Dryer	1	2		N					N					N					N					N	
Mill Grinder	1	2		N					N					N					N					N	
TGA - Netzsch	3	3		X					X					X					X					X	
TGA - TA	3	3		X					X					X					X					X	
DSC - TA	3	3		X																					
Simultaneous Thermal Analyzer (STA)	3	3		X																					
Advanced STA (MS)*	3	3		N					N					N					N					N	
Advanced STA (humidity generator)*	3	3		N					N					N					N					N	
Advanced TGA (FT-IR)*	3	3		N					N					N					N					N	
Laser Flash Apparatus	3	3		N					N					N					N					N	
Dilatometer	3	3		N					N					N					N					N	
ORGANICS																									
UPLC-PDA-MS-MS_trng_acl	5	2					X										X								
HPLC-TOF MS_trng_acl	3	2						X										X							
HPLC-Orbitrap-MS_trng_acl	6	2							N										N						
1290 LC-PDA_trng_acl	5	1								X										X					
GC-ECD-DPFD_trng_acl	3	2		N										N										N	
GC-TCD-FID_trng_acl	3	2				X										X									
GC FID_Gas Analyzer	1	2							N										N						
GPC-Dual Angle LS_trng_acl	6	2									X										X				
GPC-RID (Aqua)_trng_acl	6	2								X										X					
GPC-RID (DMF)_trng_acl	6	2							N										N						
Headspace-GC-FID-TCD-MS_trng_acl	6	2		X										X										X	
HT-GPC_trng_acl	5	3	X										X										X		
HT3-GC-FID-MS_trng_acl	6	2		X										X										X	
LC-PDA-Fractionation_trng_acl	7	1		N										N										N	
MALDI-TOF-MS_trng_acl	4	2			X										X										
Purge and Trap-GC-FID-NPD-MS_trng_acl	6	2										X										X			
TSQ-GC-MS-MS_trng_acl	6	2							N																
UPLC-PDA-MS (single quad)_trng_acl	6	2		N										N										N	
Accelerated Solvent Extraction_trng_acl	2	2							N																
DryVap_trng_acl	2	2							N																
Freeze-dryer (Small)_trng_acl	1	2		N										N										N	
Rotavap_trng_acl	2	2							N																
Turbovap_trng_acl	1	2		N										N										N	

August

Instrument Name	1	4	5	6	7	8	11 – 15	18	19	20	21	22	25	26	27	28	29
SOLIDS																	
BET – Physisorption				X	X												
Autochem 2950 /2920 – Chemisorption																X	X
ASAP 2020 – Chemisorption				N						N					N		
ASAP 2050 – Gas Adsorption				N						N					N		
Mercury Porosimetry	X																
Water Sorption				N						N					N		
PID Effi				N						N					N		
Zetasizer				X													
Surface Zetapotential				X													
Contact Angle										X							
Tensiometer										X							
Basic FTIR																	
Advanced FTIR (DRIFT/Microscopy)*																	
Basic UV-VIS-NIR				X													
Advanced UV-Vis-NIR (TAMS)*				X													
Fluorescence											X						
Isorsorp – Gravimetric Gas Adsorption**				N						N					N		
INORGANICS																	
CHNS-O				X						X					X		
Advanced CHNS-O (liquid autosampler)*				N						N					N		
Aquakem250 Autoanalyzer				X													
Segmented Flow Analyzer				N						N					N		
Ion Chromatography				X													
Karl Fisher Titrator				N						N					N		
Advanced Karl Fisher Titrator (stromboli)*				N						N					N		
Autotitrator				X			EID al Adha										
TOCTN										X							
Advanced TOCTN (solid sampler)*				N						N					N		
Viscometer				N						N					N		
Conductivity/PH/ISE				N						N					N		
TD-Fluorometer				N						N					N		
Turbidity				N						N					N		
Density Meter				N						N					N		
ICP-OES - Agilent 5110					X						X					X	
ICP-OES - Optima 8300	X											X					
ICP-MS - Elan										X							
Microwave Digestion										X							
XRF	X					X						X					X
Freeze Dryer				N						N					N		
Mill Grinder				N						N					N		
TGA - Netzsch				X						X					X		
TGA - TA				X						X					X		
DSC - TA				X													
Simultaneous Thermal Analyzer (STA)				X													
Advanced STA (MS)*				N						N					N		
Advanced STA (humidity generator)*				N						N					N		
Advanced TGA (FT-IR)*				N						N					N		
Laser Flash Apparatus				N						N					N		
Dilatometer				N						N					N		
ORGANICS																	
UPLC-PDA-MS-MS_trng_acl		X						X									
HPLC-TOF MS_trng_acl			X						X								
HPLC-Orbitrap-MS_trng_acl				N						N							
1290 LC-PDA_trng_acl					X						X						
GC-ECD-DPFD_trng_acl															N		
GC-TCD-FID_trng_acl	X																X
GC FID_Gas Analyzer				N						N							
GPC-Dual Angle LS_trng_acl						X						X					
GPC-RID (Aqua)_trng_acl					X						X						
GPC-RID (DMF)_trng_acl				N						N							
Headspace-GC-FID-TCD-MS_trng_acl															X		
HT-GPC_trng_acl														X			
HT3-GC-FID-MS_trng_acl															X		
LC-PDA-Fractionation_trng_acl															N		
MALDI-TOF-MS_trng_acl																X	
Purge and Trap-GC-FID-NPD-MS_trng_acl													X				
TSQ-GC-MS-MS_trng_acl				N						N							
UPLC-PDA-MS (single quad)_trng_acl															N		
Accelerated Solvent Extraction_trng_acl				N						N							
DryVap_trng_acl				N						N							
Freeze-dryer (Small)_trng_acl															N		
Rotavap_trng_acl				N						N							
Turbovap_trng_acl															N		

September

Instrument Name	1	2	3	4	5	8	9	10	11	12	15	16	17	18	19	24	25	26	29	30
SOLIDS																				
BET – Physisorption									X	X										
Autochem 2950 /2920 – Chemisorption																	X	X		
ASAP 2020 – Chemisorption			N					N					N			N				
ASAP 2050 – Gas Adsorption			N					N					N			N				
Mercury Porosimetry				X	X															
Water Sorption			N					N					N			N				
PID Effi			N					N					N			N				
Zetasizer								X												
Surface Zetapotential								X												
Contact Angle													X							
Tensiometer													X							
Basic FTIR			X																	
Advanced FTIR (DRIFT/Microscopy)*			X																	
Basic UV-VIS-NIR								X												
Advanced UV-Vis-NIR (TAMS)*								X												
Fluorescence														X						
Isorsorp – Gravimetric Gas Adsorption**			N					N					N			N				
INORGANICS																				
CHNS-O			X					X					X			X				
Advanced CHNS-O (liquid autosampler)*			N					N					N			N				
Aquakem250 Autoanalyzer			X																	
Segmented Flow Analyzer			N					N					N			N				
Ion Chromatography			X																	
Karl Fisher Titrator			N					N					N			N				
Advanced Karl Fisher Titrator (stromboli)*			N					N					N			N				
Autotitrator			X																	
TOCTN			X										X							
Advanced TOCTN (solid sampler)*			N					N					N			N				
Viscometer			N					N					N			N				
Conductivity/PH/ISE			N					N					N			N				
TD-Fluorometer			N					N					N			N				
Turbidity			N					N					N			N				
Density Meter			N					N					N			N				
ICP-OES - Agilent 5110				X					X					X			X			
ICP-OES - Optima 8300					X										X					
ICP-MS - Elan			X										X							
Microwave Digestion			X										X							
XRF					X					X					X			X		
Freeze Dryer			N					N					N			N				
Mill Grinder			N					N					N			N				
TGA - Netzsch			X					X					X			X				
TGA - TA			X					X					X			X				
DSC - TA			X																	
Simultaneous Thermal Analyzer (STA)			X																	
Advanced STA (MS)*			N					N					N			N				
Advanced STA (humidity generator)*			N					N					N			N				
Advanced TGA (FT-IR)*			N					N					N			N				
Laser Flash Apparatus			N					N					N			N				
Dilatometer			N					N					N			N				
ORGANICS																				
UPLC-PDA-MS-MS_trng_acl	X										X								X	
HPLC-TOF MS_trng_acl		X										X								X
HPLC-Orbitrap-MS_trng_acl			N										N							
1290 LC-PDA_trng_acl				X										X						
GC-ECD-DPFD_trng_acl								N								N				
GC-TCD-FID_trng_acl										X								X		
GC FID_Gas Analyzer			N										N							
GPC-Dual Angle LS_trng_acl					X										X					
GPC-RID (Aqua)_trng_acl				X										X						
GPC-RID (DMF)_trng_acl			N										N							
Headspace-GC-FID-TCD-MS_trng_acl								X								X				
HT-GPC_trng_acl							X													
HT3-GC-FID-MS_trng_acl								X								X				
LC-PDA-Fractionation_trng_acl								N								N				
MALDI-TOF-MS_trng_acl									X								X			
Purge and Trap-GC-FID-NPD-MS_trng_acl						X														
TSQ-GC-MS-MS_trng_acl			N										N							
UPLC-PDA-MS (single quad)_trng_acl								N								N				
Accelerated Solvent Extraction_trng_acl			N										N							
DryVap_trng_acl			N										N							
Freeze-dryer (Small)_trng_acl								N								N				
Rotavap_trng_acl			N										N							
Turbovap_trng_acl								N								N				

October

Instrument Name	1	2	3	6	7	8	9	10	13	14	15	16	17	20	21	22	23	24	27	28	29	30	31
SOLIDS																							
BET – Physisorption						X	X																
Autochem 2950 /2920 – Chemisorption																	X	X					
ASAP 2020 – Chemisorption	N					N					N					N					N		
ASAP 2050 – Gas Adsorption	N					N					N					N					N		
Mercury Porosimetry		X	X																			X	X
Water Sorption	N					N					N					N					N		
PID Effi	N					N					N					N					N		
Zetasizer						X																	
Surface Zetapotential						X																	
Contact Angle											X												
Tensiometer											X												
Basic FTIR	X																				X		
Advanced FTIR (DRIFT/Microscopy)*	X																				X		
Basic UV-VIS-NIR						X																	
Advanced UV-Vis-NIR (TAMS)*						X																	
Fluorescence												X											
Isorsorp – Gravimetric Gas Adsorption**	N					N					N					N					N		
INORGANICS																							
CHNS-O	X					X					X					X					X		
Advanced CHNS-O (liquid autosampler)*	N					N					N					N					N		
Aquakem250 Autoanalyzer	X																						
Segmented Flow Analyzer	N					N					N					N					N		
Ion Chromatography	X																						
Karl Fisher Titrator	N					N					N					N					N		
Advanced Karl Fisher Titrator (stromboli)*	N					N					N					N					N		
Autotitrator	X																						
TOCTN	X										X										X		
Advanced TOCTN (solid sampler)*	N					N					N					N					N		
Viscometer	N					N					N					N					N		
Conductivity/PH/ISE	N					N					N					N					N		
TD-Fluorometer	N					N					N					N					N		
Turbidity	N					N					N					N					N		
Density Meter	N					N					N					N					N		
ICP-OES - Agilent 5110		X					X					X					X					X	
ICP-OES - Optima 8300			X										X										X
ICP-MS - Elan	X										X										X		
Microwave Digestion	X										X										X		
XRF			X					X					X					X					X
Freeze Dryer	N					N					N					N					N		
Mill Grinder	N					N					N					N					N		
TGA - Netzsch	X					X					X					X					X		
TGA - TA	X					X					X					X					X		
DSC - TA	X																						
Simultaneous Thermal Analyzer (STA)	X																						
Advanced STA (MS)*	N					N					N					N					N		
Advanced STA (humidity generator)*	N					N					N					N					N		
Advanced TGA (FT-IR)*	N					N					N					N					N		
Laser Flash Apparatus	N					N					N					N					N		
Dilatometer	N					N					N					N					N		
ORGANICS																							
UPLC-PDA-MS-MS_trng_acl									X										X				
HPLC-TOF MS_trng_acl										X										X			
HPLC-Orbitrap-MS_trng_acl	N										N										N		
1290 LC-PDA_trng_acl		X										X										X	
GC-ECD-DPFD_trng_acl						N										N							
GC-TCD-FID_trng_acl								X										X					
GC FID_Gas Analyzer	N										N										N		
GPC-Dual Angle LS_trng_acl			X										X										X
GPC-RID (Aqua)_trng_acl		X										X										X	
GPC-RID (DMF)_trng_acl	N										N										N		
Headspace-GC-FID-TCD-MS_trng_acl						X										X							
HT-GPC_trng_acl					X										X								
HT3-GC-FID-MS_trng_acl						X										X							
LC-PDA-Fractionation_trng_acl						N										N							
MALDI-TOF-MS_trng_acl							X										X						
Purge and Trap-GC-FID-NPD-MS_trng_acl				X										X									
TSQ-GC-MS-MS_trng_acl	N										N										N		
UPLC-PDA-MS (single quad)_trng_acl						N										N							
Accelerated Solvent Extraction_trng_acl	N										N										N		
DryVap_trng_acl	N										N										N		
Freeze-dryer (Small)_trng_acl						N										N							
Rotavap_trng_acl	N										N										N		
Turbovap_trng_acl						N										N							

November

Instrument Name	3	4	5	6	7	10	11	12	13	14	17	18	19	20	21	24	25	26	27	28
SOLIDS																				
BET – Physisorption			X	X																
Autochem 2950 /2920 – Chemisorption														X	X					
ASAP 2020 – Chemisorption			N					N					N					N		
ASAP 2050 – Gas Adsorption			N					N					N					N		
Mercury Porosimetry																			X	X
Water Sorption			N					N					N					N		
PID Effi			N					N					N					N		
Zetasizer			X																	
Surface Zetapotential			X																	
Contact Angle								X												
Tensiometer								X												
Basic FTIR																		X		
Advanced FTIR (DRIFT/Microscopy)*																		X		
Basic UV-VIS-NIR			X																	
Advanced UV-Vis-NIR (TAMS)*			X																	
Fluorescence									X											
Isorsorp – Gravimetric Gas Adsorption**			N					N					N					N		
INORGANICS																				
CHNS-O			X					X					X					X		
Advanced CHNS-O (liquid autosampler)*			N					N					N					N		
Aquakem250 Autoanalyzer			X																	
Segmented Flow Analyzer			N					N					N					N		
Ion Chromatography			X																	
Karl Fisher Titrator			N					N					N					N		
Advanced Karl Fisher Titrator (stromboli)*			N					N					N					N		
Autotitrator			X																	
TOCTN								X										X		
Advanced TOCTN (solid sampler)*			N					N					N					N		
Viscometer			N					N					N					N		
Conductivity/PH/ISE			N					N					N					N		
TD-Fluorometer			N					N					N					N		
Turbidity			N					N					N					N		
Density Meter			N					N					N					N		
ICP-OES - Agilent 5110				X					X					X					X	
ICP-OES - Optima 8300										X										X
ICP-MS - Elan								X										X		
Microwave Digestion								X										X		
XRF					X					X					X					X
Freeze Dryer			N					N					N					N		
Mill Grinder			N					N					N					N		
TGA - Netzsch			X					X					X					X		
TGA - TA			X					X					X					X		
DSC - TA			X																	
Simultaneous Thermal Analyzer (STA)			X																	
Advanced STA (MS)*			N					N					N					N		
Advanced STA (humidity generator)*			N					N					N					N		
Advanced TGA (FT-IR)*			N					N					N					N		
Laser Flash Apparatus			N					N					N					N		
Dilatometer			N					N					N					N		
ORGANICS																				
UPLC-PDA-MS-MS_trng_acl						X										X				
HPLC-TOF MS_trng_acl							X										X			
HPLC-Orbitrap-MS_trng_acl								N										N		
1290 LC-PDA_trng_acl									X										X	
GC-ECD-DPFD_trng_acl			N										N							
GC-TCD-FID_trng_acl					X										X					
GC FID_Gas Analyzer								N										N		
GPC-Dual Angle LS_trng_acl										X										X
GPC-RID (Aqua)_trng_acl									X										X	
GPC-RID (DMF)_trng_acl								N										N		
Headspace-GC-FID-TCD-MS_trng_acl			X										X							
HT-GPC_trng_acl		X										X								
HT3-GC-FID-MS_trng_acl			X										X							
LC-PDA-Fractionation_trng_acl			N										N							
MALDI-TOF-MS_trng_acl				X										X						
Purge and Trap-GC-FID-NPD-MS_trng_acl	X										X									
TSQ-GC-MS-MS_trng_acl								N										N		
UPLC-PDA-MS (single quad)_trng_acl			N										N							
Accelerated Solvent Extraction_trng_acl								N										N		
DryVap_trng_acl								N										N		
Freeze-dryer (Small)_trng_acl			N										N							
Rotavap_trng_acl								N										N		
Turbovap_trng_acl			N										N							

December

Instrument Name	1	2	3	4	5	8	9	10	11	12	15	16	17	18	19	22	23	24	25	26	29	30	31
SOLIDS																							
BET – Physisorption			X	X																			
Autochem 2950 /2920 – Chemisorption														X	X								
ASAP 2020 – Chemisorption			N					N					N					N					N
ASAP 2050 – Gas Adsorption			N					N					N					N					N
Mercury Porosimetry														X	X								
Water Sorption			N					N					N					N					N
PID Effi			N					N					N					N					N
Zetasizer			X																				
Surface Zetapotential			X																				
Contact Angle								X															
Tensiometer								X															
Basic FTIR																		X					
Advanced FTIR (DRIFT/Microscopy)*																		X					
Basic UV-VIS-NIR			X																				
Advanced UV-Vis-NIR (TAMS)*			X																				
Fluorescence									X														
Isorsorp – Gravimetric Gas Adsorption**			N					N					N					N					N
INORGANICS																							
CHNS-O			X					X					X					X					X
Advanced CHNS-O (liquid autosampler)*			N					N					N					N					N
Aquakem250 Autoanalyzer			X																				
Segmented Flow Analyzer			N					N					N					N					N
Ion Chromatography			X																				
Karl Fisher Titrator			N					N					N					N					N
Advanced Karl Fisher Titrator (stromboli)*			N					N					N					N					N
Autotitrator			X																				
TOCTN								X										X					
Advanced TOCTN (solid sampler)*			N					N					N					N					N
Viscometer			N					N					N					N					N
Conductivity/PH/ISE			N					N					N					N					N
TD-Fluorometer			N					N					N					N					N
Turbidity			N					N					N					N					N
Density Meter			N					N					N					N					N
ICP-OES - Agilent 5110				X					X					X					X				
ICP-OES - Optima 8300										X										X			
ICP-MS - Elan								X										X					
Microwave Digestion								X										X					
XRF					X					X					X					X			
Freeze Dryer			N					N					N					N					N
Mill Grinder			N					N					N					N					N
TGA - Netzsch			X					X					X					X					X
TGA - TA			X					X					X					X					X
DSC - TA			X																				
Simultaneous Thermal Analyzer (STA)			X																				
Advanced STA (MS)*			N					N					N					N					N
Advanced STA (humidity generator)*			N					N					N					N					N
Advanced TGA (FT-IR)*			N					N					N					N					N
Laser Flash Apparatus			N					N					N					N					N
Dilatometer			N					N					N					N					N
ORGANICS																							
UPLC-PDA-MS-MS_trng_acl						X										X							
HPLC-TOF MS_trng_acl							X										X						
HPLC-Orbitrap-MS_trng_acl								N										N					
1290 LC-PDA_trng_acl									X										X				
GC-ECD-DPFD_trng_acl			N										N										N
GC-TCD-FID_trng_acl					X										X								
GC FID_Gas Analyzer								N										N					
GPC-Dual Angle LS_trng_acl										X										X			
GPC-RID (Aqua)_trng_acl									X										X				
GPC-RID (DMF)_trng_acl								N										N					
Headspace-GC-FID-TCD-MS_trng_acl			X										X										X
HT-GPC_trng_acl		X										X										X	
HT3-GC-FID-MS_trng_acl			X										X										X
LC-PDA-Fractionation_trng_acl			N										N										N
MALDI-TOF-MS_trng_acl				X										X									
Purge and Trap-GC-FID-NPD-MS_trng_acl	X										X										X		
TSQ-GC-MS-MS_trng_acl								N										N					
UPLC-PDA-MS (single quad)_trng_acl			N										N										N
Accelerated Solvent Extraction_trng_acl								N										N					
DryVap_trng_acl								N										N					
Freeze-dryer (Small)_trng_acl			N										N										N
Rotavap_trng_acl								N										N					
Turbovap_trng_acl			N										N										N

Confirmation of training appointment via email is required with supervisor/PI in CC.

Please send training request to the relevant email address

ACL.SOLIDS@kaust.edu.sa

ACL.INORGANICS@kaust.edu.sa

ACL.ORGANICS@kaust.edu.sa

X Training scheduled

N Training on Need basis

* Basic training required

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