

## STEM Enrichment Conference Program

**Monday 1 July 2019**

<b>0830-0910</b>	REGISTRATION OPEN				
<b>0910 - 0955</b>	<b>0910-0920 WELCOME TO COUNTRY &amp; CONFERENCE OPENING BY A/PROF MARIA PARAPPILLY - DIRECTOR STEM ENRICHMENT ACADEMY</b> <b>0920-0925 OPENING ADDRESS BY PROF ALISTAIR RENDALL, VICE-PRESIDENT AND EXECUTIVE DEAN, COLLEGE OF SCIENCE AND ENGINEERING, FLINDERS UNIVERSITY</b> <b>0925-0955 PLENARY SESSION - PROF VEENA SAHAJWALLA, ARC LAUREATE FELLOW, DIRECTOR: ARC Green Manufacturing Research Hub, Centre for Sustainable Materials Research &amp; Technology, UNSW</b>				
<b>Room:</b>	STH 2 Lecture Theatre, Physical Sciences Building				
<b>1000-1100</b>	CONCURRENT SESSION 1				
<b>Session:</b>	1A - Waste to Value	1B - Physics: random experiments	1C - Science and Social Media	1D - Chemistry	1E - Tour - Saving Nemo
<b>STEM area:</b>	Engineering	Physics	Science Communication	Gases	Biology
<b>Presenter:</b>	Prof Veena Sahajwalla, Anirban Ghose and Irshad Mansuri (UNSW)	Jason Dicker (Launceston College, Tasmania)	Toby Hendy (ANU)	Dr Sue Pyke (Flinders University)	Prof Karen Burke Da Silva and Cassie Hopner (Flinders University)
<b>Room:</b>	PHYS0006	P103/106	PHYS0007	PHYS121	
<b>1100-1125</b>	MORNING TEA				
<b>1130-1230</b>	CONCURRENT SESSION 2				
<b>Session:</b>	2A - Waste to Value	2B - Physics: random experiments	2C - Science and Social Media	2D - Chemistry	2E - Tour - Saving Nemo
<b>STEM area:</b>	Engineering	Physics	Science Communication	Gases	Biology
<b>Presenter:</b>	Prof Veena Sahajwalla, Anirban Ghose and Irshad Mansuri (UNSW)	Jason Dicker (Launceston College, Tasmania)	Toby Hendy (ANU)	Dr Sue Pyke (Flinders University)	Prof Karen Burke Da Silva and Cassie Hopner (Flinders University)
<b>Room:</b>	PHYS0006	P103/106	PHYS0007	PHYS121	
<b>1230-1310</b>	LUNCH				

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<b>1315-1415</b>	<b>CONCURRENT SESSION 3</b>				
<b>Session:</b>	3A - Waste to Value	3B - Physics: random experiments	3C - Science and Social Media	3D - Chemistry	3E - Tour - Saving Nemo
<b>STEM area:</b>	Engineering	Physics	Science Communication	Gases	Biology
<b>Presenter:</b>	Prof Veena Sahajwalla, Anirban Ghose and Irshad Mansuri (UNSW)	Jason Dicker (Launceston College, Tasmania)	Toby Hendy (ANU)	Dr Sue Pyke (Flinders University)	Prof Karen Burke Da Silva and Cassie Hopner (Flinders University)
<b>Room:</b>	PHYS0006	PHYS Lab 103 & 106	PHYS0007	PHYS121	
<b>WRAPUP</b>	Anchor Court/PHYS0008				

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### Tuesday 2 JULY 2019

0830-1015	<b>0850 - WELCOME BY A/PROF MARIA PARAPPILLY - DIRECTOR STEM ENRICHMENT ACADEMY</b> <b>0855 - LIGHTNING KEYNOTE BY A/PROF RACHEL POPELKA-FILCOFF, FLINDERS UNIVERSITY</b> <b>0905 - LIGHTNING KEYNOTE BY DR OLIVIA SAMARDZIC, DEFENCE SCIENCE AND TECHNOLOGY GROUP</b> <b>0915 - LIGHTNING KEYNOTE BY JANE RAPSEY, COCHLEAR LIMITED</b> <b>0925 - LIGHTNING KEYNOTE BY DR KATHARINA RICHTER, UNIVERSITY OF ADELAIDE</b>				
<b>Room:</b>	ALERE Function Centre				
0945-1005	ROUND TABLE DISCUSSION LED BY FLINDERS UNIVERSITY STEM ACADEMICS				
1005-1010	CLOSING				
<b>1015-1115</b>	<b>CONCURRENT SESSION 4</b>				
<b>Session:</b>	4A - LEGO PHYSICS	4B - Chemistry	4C - Mission to Mars	4D - Light, Heat and Sounds: how they are linked, and how to save the planet	4E - Interferometer workshop
<b>STEM area:</b>	Physics	Electro Chemistry	Physics	Physics	Physics
<b>Presenter:</b>	A/PROF MARIA PARAPPILLY (Flinders University)	Prof Claire Lenehan (Flinders University)	Dr Gail Iles (RMIT)	Dr David Hoxley (LaTrobe University)	Craig Ingram Georgina Sylvia Georgia Bolingbroke (The University of Adelaide)
<b>Room:</b>	PHYS0006	CHEM 1st year Lab	PHYS0008	EASC230	
1115	MOVE TO WORKSHOP				
<b>1125-1225</b>	<b>CONCURRENT SESSION 5</b>				
<b>Session:</b>	5A - LEGO PHYSICS	5B - Chemistry	5C - Mission to Mars	5D - Light, Heat and Sounds: how they are linked, and how to save the planet	5E - Interferometer workshop
<b>STEM area:</b>	Physics	Electro Chemistry	Physics	Physics	Physics

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<b>Presenter:</b>	A/PROF MARIA PARAPPILLY (Flinders University)	Prof Claire Lenehan (Flinders University)	Dr Gail Iles (RMIT)	Dr David Hoxley (LaTrobe University)	Craig Ingram Georgina Sylvia Georgia Bolingbroke, (The Univeristy of Adelaide)
<b>Room:</b>	<b>PHYS0006</b>	<b>Phys121</b>	<b>PHYS0008</b>	<b>EASC230</b>	<b>PHYS Lab 103 &amp; 106</b>
1230	LUNCH				
1325-1425	CONCURRENT SESSION 6				
<b>Session:</b>	6A - LEGO PHYSICS	6B - Chemistry	6C -Mission to Mars	6D - Light, Heat and Sounds: how they are linked, and how to	6E - Interferometer workshop
<b>STEM area:</b>	Physics	Electro Chemistry	Physics	Physics	Physics
<b>Presenter:</b>	A/PROF MARIA PARAPPILLY (Flinders University)	Prof Claire Lenehan (Flinders University)	Dr Gail Iles (RMIT)	Dr David Hoxley (La Trobe University)	Craig Ingram Georgina Sylvia Georgia Bolingbroke, (The Univeristy of Adelaide)
<b>Room:</b>	<b>PHYS0006</b>	<b>CHEM 1st year Lab</b>	<b>PHYS0008</b>	<b>EASC230</b>	<b>PHYS Lab 103 &amp; 106</b>
<b>WRAPUP</b>	Anchor Court/PHYS0008				

## STEM Enrichment Conference Program

**Wednesday 3 JULY 2019**

0900	WELCOME BY A/PROF MARIA PARAPPILLY						
0915-0955	0915-0940 KEYNOTE ADDRESS BY DAWN SUMMERS, COO BEACH ENERGY LTD 0940-0955 INDUSTRY IMMERSION BY JANE RAPSEY, COCHLEAR LTD						
<b>Room:</b>	TONSLEY Lecture Theatre 1						
<b>1000-1100</b>	<b>CONCURRENT SESSION 7</b>					<b>TEACHER PROF DEVELOPMENT</b>	
<b>Session:</b>	7A - Zumo Robot MARS Exploration	7B - Zumo Robot MARS Exploration	7C - The Impulse Challenge	7D - Virtual Reality Experience	7E - Industry Tour	7F - Teacher PD#1 - History of the fundamental forces to the present	7F - Teacher PD#2 - Sustainable STEM: environmental science focused activities
<b>STEM area:</b>	Engineering	Engineering	Engineering	Computer Science	Engineering	Physics	Environmental Science
<b>Presenter:</b>	Dr Sherry Randhawa (Flinders University)	Dr Sherry Randhawa (Flinders University)	Dr David Hobbs (Flinders University)	Dr Marissa Bond (Flinders University)	STEM conference committee & STEM ambassadors	Jason Dicker (Launceston College, Tasmania)	Rebecca Phyland (Flinders University)
<b>Room:</b>	TONS 1.12	TONS 1.13	TONS 4.54	TONS 1.04/1.05	Zeiss and MicroX	TONS 1.14	TONS 1.08
1100-1120	MORNING TEA						
<b>1130-1230</b>	<b>CONCURRENT SESSION 8</b>					<b>TEACHER PD</b>	
<b>Session:</b>	8A - Zumo Robot MARS Exploration	8B - Zumo Robot MARS Exploration	8C - The Impulse Challenge	8D - Virtual Reality Experience	8E - Industry Tour	8F - Teacher PD#3 - FARLabs: Using the Freely Accessible Remote Laboratory to run real radioactivity experiments through a web browser	
<b>STEM area:</b>	Engineering	Engineering	Engineering	Computer Science	Engineering	Physics	

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<b>Room:</b>	<b>TONS 1.12</b>	<b>TONS 1.13</b>	<b>TONS 4.54</b>	<b>TONS 1.04/1.05</b>	<b>Zeiss and MicroX</b>	<b>TONS 1.07</b>
1230-1310	LUNCH					
1315-1415	CONCURRENT SESSION 9					<b>TEACHER PD</b>
<b>Session:</b>	9A - Zumo Robot MARS Exploration	9B - Zumo Robot MARS Exploration (Teacher PD)	9C - The Impulse Challenge	9D - Virtual Reality Experience	9E - Industry Tour	9F - Teacher PD#4 - Energy in history from Boyle to the 21st Century
<b>STEM area:</b>	Engineering	Engineering	Engineering	Computer Science	Engineering	Physics
<b>Presenter:</b>	Dr Sherry Randhawa (Flinders University)	Dr Sherry Randhawa (Flinders University)	Dr David Hobbs (Flinders University)	Dr Marissa Bond (Flinders University)	STEM conference committee & STEM ambassadors	Jason Dicker (Launceston College, Tasmania)
<b>Room:</b>	<b>TONS 1.12</b>	<b>TONS 1.13</b>	<b>TONS 4.54</b>	<b>TONS 1.04/1.05</b>	<b>Zeiss and MicroX</b>	<b>TONS 1.14</b>
1415	CLOSING CEREMONY					