



## Preliminary Program Overview

Wednesday, 31 October 2018 - Day 1				
08:30 - 09:00	ARMS10 Opening Ceremony			
09:00 - 09:30	<b>Keynote 1</b> "Mining Rock Mechanics in China" Manchao HE - State Key Laboratory for Geomechanics and Deep Underground Engineering, China University of Mining and Technology, Beijing, China			
09:30 - 10:00	<b>Keynote 2</b> "Key Complex Process Couplings and Challenges in the Effective Recovery of Deep Geothermal Energy" Derek ELSWORTH - Department of Energy and Mineral Engineering, Geosciences, G3 Center and EMS Energy Institute, Pennsylvania State University, University Park, USA			
10:00 - 10:30	<b>Keynote 3</b> "Eurocode 7: Genesis, Development and Implications for Rock Engineering" John HARRISON - Professor and Keck Chair of Engineering Rock Mechanics at University of Toronto			
10:30 - 11:00	AM Coffee/Tea Break			
Wednesday, 31 October 2018 - Day 1 Poster Session - Summit 1 10:30 - 11:00 (Presenter Attendance is required)				
<b>B</b> Rock Dynamics	<b>I</b> Special Applications and Case Studies	<b>D</b> Rock Tunnel and Caverns	<b>H</b> Smart Technologies in Mining and Rock Engineering	<b>F</b> Environmental Impact and Risk Assessment in Rock Engineering
584	229	555	134	509
579	426	533	181	470
55	403	253		589
		335		227
<b>A</b> Rock Property and Rock Mass Characterization	<b>A</b> Rock Property and Rock Mass Characterization	<b>G</b> Site Investigation and Monitoring	<b>E</b> Numerical Modelling and Design Methodologies	
255	18	295	225	
303	272	542	440	
245	327	301	166	
483	132	400	460	
167	288	66	35	
37		238	123	
			81	
<b>Room</b>	<b>Summit 2</b>	<b>MR324</b>	<b>MR325</b>	<b>MR326</b>
11:00 - 12:30	<b>A1</b> Rock Property and Rock Mass Characterization	<b>C1</b> Mining Engineering	<b>B1</b> Rock Dynamics	<b>E1</b> Numerical Modelling and Design Methodologies
	478	94	380	246
	110	40	368	612
	198	54	257	147
	286	453	557	604
	607	566	609	560
	79	572	539	508
12:30 - 13:30	Lunch			

Room	Summit 2	MR324	MR325	MR326
13:30 - 15:30	<b>A2</b> Rock Property and Rock Mass Characterization	<b>C2</b> Mining Engineering	<b>G1</b> Site Investigation and Monitoring	<b>J</b> New Frontiers in Rock Mechanics/Engineering
	438	4	615	505
	331	80	103	424
	444	82	251	78
	599	118	352	163
	608	226	425	294
	398	292	610	464
	408	407	69	496
	48	293	159	597
15:30 - 16:00	PM Coffee/Tea Break			
Room	Summit 2	MR324	MR325	MR326
16:00 - 18:00	<b>A3</b> Rock Property and Rock Mass Characterization	<b>F</b> Environmental Impact and Risk Assessment in Rock Engineering	<b>D1</b> Rock Tunnel and Caverns	<b>I1</b> Special Applications and Case Studies
	479	168	481	33
	486	201	333	39
	554	41	487	235
	573	116	502	76
	96	342	214	137
	307	354	343	394
	199	194	130	516
	250	374	439	

### Thursday, 01 November 2018 - Day 2

08:30 - 09:15	<b>Rocha Medal Award &amp; Lecture</b> "The Design and Behaviour of Crush Pillars on the Merensky Reef" Michael DU PLESSIS - Department of Mining Engineering, University of Pretoria, South Africa			
09:15 - 10:15	Young Researcher Plenary Lectures			
10:15 - 10:45	AM Coffee/Tea Break			
Thursday, 01 Nov 2018 - Day 2 Poster Session - Summit 1 10:15 - 10:45 (Presenter Attendance is required)				
<b>A</b> Rock Property and Rock Mass Characterization	<b>E</b> Numerical Modelling and Design Methodologies	<b>D</b> Rock Tunnel and Caverns	<b>C</b> Mining Engineering	<b>J</b> New Frontiers in Rock Mechanics/Engineering
443	185	591	233	334
436	512	230	489	176
494	488	149	321	219
7	543	356	434	109
135	221	174	462	
74	105	344	61	
204	289	179	115	
237	304	313	101	
500	332		358	
75	20		62	
	156			
	183			

Room	Summit 2	MR324	MR325	MR326
10:45 - 12:30	<b>A4</b> Rock Property and Rock Mass Characterization	<b>C3</b> Mining Engineering	<b>G2</b> Site Investigation and Monitoring	<b>H1</b> Smart Technologies in Mining and Rock Engineering
	99	83	77	93
	104	232	125	92
	339	276	217	31
	404	417	418	188
	523	535	419	311
	493	540	113	544
	325	600	390	187
12:30 - 13:30	Lunch			
Room	Summit 2	MR324	MR325	MR326
13:30 - 15:30	<b>A5</b> Rock Property and Rock Mass Characterization	<b>ECF</b> Early Career Forum	<b>D2</b> Rock Tunnel and Caverns	<b>K</b> Rock Slopes
	299	230	114	271
	310	309	154	409
	382	155	260	605
	387	280	437	601
	565	495	592	182
	571	284	180	317
	427		529	391
	568		585	355
15:30 - 16:00	PM Coffee/Tea Break			
Room	Summit 2	MR324	MR325	MR326
16:00 - 18:00	<b>A6</b> Rock Property and Rock Mass Characterization	<b>Early Career Forum</b>	<b>B2</b> Rock Dynamics	<b>E2</b> Numerical Modelling and Design Methodologies
	177		6	107
	239		258	448
	590		203	44
	22		16	85
	27		138	106
	70		456	596
	68		517	360
	468		581	378

### Friday, 02 November 2018 - Day 3

08:30 - 09:15	<b>ISRM Franklin Award &amp; Lecture</b> "Thermal-Hydraulic-Mechanical-Chemical Couplings that Define the Evolution of Flow and Transport Behavior in Fractured Rocks" Hide YASUHARA - <i>Department of Civil and Environmental Engineering, Ehime University</i>
09:15 - 09:45	<b>Keynote 4</b> "Rock Fracturing by Low Power Microwave Treatments – Observation, Mechanism and Application" Jian ZHAO - <i>Professor in Resources Engineering Department of Civil Engineering at Monash University</i>
09:45 - 10:15	<b>Keynote 5</b> "The Roles of Higher-Frequency Waves in "Unexpected" Problems of Earthquakes" Koji UENISHI - <i>Professor at Department of Advanced Energy, Graduate School of Frontier Sciences, And Department of Aeronautics and Astronautics, School of Engineering, The University of Tokyo</i>
10:15 - 10:45	AM Coffee/Tea Break

Room	Summit 2	MR324	MR325	MR326
10:45 - 12:30	<b>A7</b> Rock Property and Rock Mass Characterization	<b>G3</b> Site Investigation and Monitoring	<b>D3</b> Rock Tunnel and Caverns	<b>H2</b> Smart Technologies in Mining and Rock Engineering
	32	435	158	216
	122	165	157	498
	160	50	318	329
	161	422	196	499
	385	170	146	445
	415	375	60	124
	26	200	64	9
	513			
12:30 - 13:30	<b>Lunch</b>			
Room	Summit 2	MR324	MR325	MR326
13:30 - 15:30	<b>I2</b> Special Applications and Case Studies	<b>B3</b> Rock Dynamics	<b>D4</b> Rock Tunnel and Caverns	<b>E3</b> Numerical Modelling and Design Methodologies
	133	268	30	1
	396	381	117	482
	73	414	145	567
	184	558	190	441
	29	141	191	120
	534	296	224	274
	47	34	316	300
	480	319	347	308
15:30 - 16:00	<b>PM Coffee/Tea Break</b>			
16:00 - 16:30	<b>Keynote 6</b> <b>"Rock Mechanics Developments in Singapore"</b> <b>Zhiye ZHAO</b> - Associate Chair (Research) at School of Civil and Environmental Engineering Director, Nanyang Centre for Underground Space at Nanyang Technological University, Singapore			
16:30 - 17:00	<b>Keynote 7</b> <b>"Failure of Anisotropic Rocks such as Shales, and Implications for Borehole Stability"</b> <b>Robert ZIMMERMAN</b> - Professor of Rock Mechanics at Imperial College London, UK with expertise in Civil Engineering, Mechanical Engineering, Petroleum			
17:00 - 18:00	<b>ARMS 10 Closing Ceremony</b>			