

AMI Precious Metals 2017 Preliminary Programme · 17–19 October 2017

Conference Day 1–Wednesday, 18 October 2017

07:30–08:30	Registration and early morning refreshments
08:30–08:35	Emergency and safety procedures
08:35–08:45	Welcome Address G.L. Smith, <i>Conference Chairperson</i>
08:45–08:55	Opening Address S. Ndlovu, <i>SAIMM President</i>
08:55–09:35	Keynote Address: How to make SA mining business globally attractive again? F. Fourie, <i>Anglo Platinum</i>
09:35–10:00	SAMMRI: Working towards sustainability V. Ross, <i>SAMMRI Board</i>
10:00–10:25	Can research, development and innovation extend the life of the PGM mining industry? S.M. Rupprecht, <i>University of Johannesburg, South Africa</i>
10:25–10:35	Sponsor Presentation BME
10:35–11:00	Mid-morning Refreshments
11:00–11:40	Keynote Address: PGMs recovery in China W. Haibei, <i>BGRIMM</i>
11:40–12:20	Keynote Address: PGMs: A cornucopia of possible applications L.A. Cornish, [†] <i>University of the Witwatersrand, South Africa, African Materials Science and Engineering Network (AMSEN), DST-NRF Centre of Excellence in Strong Materials, hosted by University of the Witwatersrand, South Africa</i>
12:20–12:40	The effect of Mo incorporation on the CO oxidation activity of ceria and ceria-palladium solution combustion synthesized catalysts S. Naidoo, S. Singh and H.B. Friedrich, <i>University of KwaZulu-Natal, South Africa</i>
12:40–13:40	Lunch
13:40–14:00	Computational modelling of Ti₅₀Pt_{50-x}M_x (M: Ni, Ir, Pd) shape memory alloys R. Modiba, H.R. Chauke and P.E. Ngoepe, <i>University of Limpopo, South Africa, CSIR, South Africa</i>
14:00–14:20	Pd_{0.02}Ce_{0.98}O_{2-δ}: A copper- and ligand-free quasi-heterogeneous catalyst for aquacatalytic Sonogashira cross-coupling reactions P.P. Mpungose, N.I. Sehloko, T. Cwele, G.E. Maguire and H.B. Friedrich, <i>University of KwaZulu-Natal, South Africa</i>
14:20–14:40	First-principles study of phase stability, elastic and electronic properties of Ti-Al-Ir alloys R.G. Diale, H.R. Chauke and P.E. Ngoepe, <i>University of Limpopo, South Africa</i>
14:40–15:00	Afternoon Refreshments
15:00–15:20	B2 and B19 TiPtZr high temperature shape memory alloys M.P. Mashamaite, H.R. Chauke and P.E. Ngoepe, <i>University of Limpopo, South Africa</i>
15:20–15:40	First-principles studies of Fe-Al-X (X=Pt, Ru) alloys C.S. Mkhonto, H.R. Chauke and P.E. Ngoepe, <i>University of Limpopo, South Africa</i>
15:40–16:00	Solar Photocatalytic Hydrogen Production from Glycerol Reforming using Ternary Pt/TiO₂/Graphene T.W.P. Seadira, G. Sadanandam, T. Ntho, C.M. Masuku and M.S. Scurrall, <i>University of South Africa, South Africa</i>
16:00	Day 1 Conference Close

Conference Day 2–Thursday, 19 October 2017

07:30–08:30	Registration & early morning refreshments
08:30–08:35	Emergency and safety procedures
08:35–08:45	Welcome address G.L. Smith, <i>Conference Chairperson</i>
08:45–09:25	Keynote Address: The road to lower emission D. Jolie, <i>Anglo American</i>
09:25–10:05	Keynote Address: The Platreef Project, A platinum mine game changer G. Mouton, <i>Ivanplats</i>
10:05–10:15	Sponsor Presentation <i>RHI, AG</i>
10:15–10:25	Sponsor Presentation <i>Sandvik</i>
10:25–10:50	Mid-morning Refreshments
10:50–11:30	Keynote Address: TBC P. Ngoepe, <i>University of Limpopo, South Africa</i>
11:30–11:50	The effect of water on benzyl alcohol oxidation reaction over Pt/TiO₂ A. Kunene and E. van Steen, <i>University of Cape Town, South Africa</i>
11:50–12:10	A deeper probe at strong electrostatic adsorption to deposit platinum onto Co₃O₄/SiO₂ S. Govender and E. van Steen, <i>University of Cape Town, South Africa</i>
12:10–13:10	Lunch
13:10–13:30	Metal and alloy spheroidization using high-temperature radio-frequency plasmas H. Bissett and I.J. Van der Walt, <i>The South African Nuclear Energy Corporation SOC Ltd. (Necsa), South Africa</i>
13:30–13:50	Co oxidation over Au-Pd doped graphene: A first principles study T.A. Ntho, <i>Minek, South Africa</i>
13:50–14:10	Pd/MgTi/rGO nanocomposite materials for hydrogen storage: Synthesis, characterisation and application J. Baloyi and T.A. Ntho, <i>Minek, South Africa</i>
14:10–14:30	Gold/Titania nanostructure on a honeycomb monolith for CO oxidation reaction S. Mavuso and T.A. Ntho, <i>Mintek, South Africa</i>
14:30–14:50	A comparative study of hardness of Pt-Cr-V and Pt-Al-V alloys in the as-cast condition and annealed condition B.O. Odera* and L.A. Cornish [†] , * <i>Cape Peninsula University of Technology, Cape Town</i> , [†] <i>University of the Witwatersrand, South Africa, African Materials Science and Engineering Network (AMSEN), DST-NRF Centre of Excellence in Strong Materials, hosted by University of the Witwatersrand, South Africa</i>
14:50–15:10	Plasmonic catalysts for energy conversion and environmental protection M.S. Scurrall, <i>University of South Africa, South Africa</i>
15:30–15:50	Alternative carbon materials as practical and more durable fuel cell electrocatalyst supports than conventional carbon blacks M.L. Stevenson and G. Patrick, <i>HySA/Catalysis, South African Council for Mineral Technology, Mintek, South Africa</i>
15:50	Conference Close