

RAPDASA

RAPID PRODUCT DEVELOPMENT ASSOCIATION OF SOUTH AFRICA

PRE-CONFERENCE SEMINAR ON DESIGN AND ADDITIVE MANUFACTURING OF TITANIUM PARTS



Tuesday 2 November 2021
CSIR, Pretoria



science & innovation
Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA

Hosted by Central University of Technology, Free State
Supported by the Department of Science and Innovation

PROGRAMME

Programme Director: Dr Kobus van der Walt

8:30 – 9:00 Registration		
9:00 – 9:10	Welcoming Address	<u>Dr Kobus van der Walt, CUT</u>
9:10 – 9:30	Opening Address	<u>Ms Mmamose Seloane</u> Director: Technology Localisation, DSI
9:30 – 9:50	Direct metal laser sintering production of Ti6AL4V parts from a purely elemental powder blend	<u>LA Ramosena, TC Dzogbewu and WB du Preez</u>
9:50 – 10:10	Surface morphology of LPBF manufactured Ti6AL4V processed by centrifugal barrel finishing	<u>NW Makoana, I Mathoho, L Tshabalala and I Yadroistev</u>
10:10 – 10:30	Examining various mixing techniques and their effect on the uniform dispersion of carbon nanotubes within a Ti6AL4V (ELI) matrix	<u>M Mashabela, M Maringa and TC Dzogbewu</u>
10:30 – 11:00 Tea		
11:00 – 11:20	Investigation of acoustic emission signal during laser powder bed fusion at different operating modes	<u>Dr D Kouprianoff</u>
11:20 – 11:40	Comparative analysis of the high velocity impact behaviour of wrought and stress relieved DMLS Ti6AL4V (ELI)	<u>TC Moleko, M Maringa and WB du Preez</u>
11:40 – 12:00	Effect of varying energy density on the microstructure of TIC/TI-6AL-4V metal composite	<u>P. Ramasobane, P. Lekoadi, PM Mashinini and B Masina</u>
12:00 – 12:20	Additive Manufacturing: Looking Beyond Prototyping	<u>I Adam</u>
12:20 – 12:40	An overview of the status of implementation of MAM technology in South African industries, within the context of the CPAM MAM program	<u>Dr M Maringa</u>
12:40 – 12:50	Closure	<u>Dr Kobus van der Walt</u>
12:50 – 14:00 Lunch		