



RAPID PRODUCT DEVELOPMENT ASSOCIATION OF SOUTH AFRICA

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ASSOCIATION OF SOUTH AFRICA**

**2024 CHAIRMAN'S REPORT**

**October 29<sup>th</sup>, 2024**

**RAPDASA  
Annual General Meeting**

**BOARDWALK HOTEL AND CONFERENCE VENUE, GQEBERHA, SOUTH  
AFRICA**

**Chairperson: Dr Ntombi Mathe-Maleboho**

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## 1. Introduction

The Rapid Product Development Association of South Africa (RAPDASA) was formally founded at the First Annual General Meeting of the Association on 8 November 2000, at the CSIR International Conference Centre in Pretoria. This year marks the 25<sup>th</sup> annual RAPDASA conference. It has been an exciting year for RAPDASA with many changes and new initiatives.

The RAPDASA conference has grown substantially over the last 3 of years and have partnered with RobMech (the Robotics and Mechatronics conference), PRASA (the Pattern Recognition Association of South Africa), and the Advanced Materials Initiative (AMI).

The latest conference (called the RAPDASA-RobMech-PRASA-AMI 2024 Conference) was held at the Boardwalk Hotel and Conference Venue in Gqeberha, South Africa, hosted by Stellenbosch University and Nelson Mandela University. The theme for the conference was “*Unlocking Advanced Manufacturing*”.

This report will highlight some of the activities of the RAPDASA organisation for the year, it will provide feedback on the 2024 conference and conclude with some updates from AM service providers in South Africa.

## 2. RAPDASA Management Committee

The RAPDASA management committee for 2023 was elected during the Annual General Meeting held on 1<sup>st</sup> November 20223 at the Council for Science and Industrial Research International Convention Centre, Pretoria, South Africa. Several members were also co-opted during the year to support the management committee. Members of the management committee were as follows:

- Ntombizodwa Mathe (Chairperson)
- André van der Merwe (Vice Chairperson)
- Francois du Rand (Treasurer)
- Lerato Tshabalala (Industry Workshops)
- Deon de Beer (Sponsorships)
- Heinrich van der Merwe (Industry Day)
- Daniel Kirkman (Technical Support)
- Willie du Preez (Conference Editor)- Co opted
- Rynette Coetzer (Administration)
- Washington Makoana (Marketing and Website)- Co opted

RAPDASA management committee meetings were held on:

- MANCOM 01-2024 24 November 2023
- MANCOM 02-2024 08 December 2023
- MANCOM 03-2024 26 January 2024
- MANCOM 04-2024 31 May 2024
- MANCOM 05-2024 30 August 2024
- MANCOM 06-2024 25 October 2024

Executive committee meetings were held on:

- EXCO 01-2024 23 February 2024
- EXCO 02-2024 26 April 2024
- EXCO 03-2024 28 June 2024
- EXCO 04-2024 26 July 2024
- EXCO 05-2024 20 September 2024

### **3. Industry Day: June 2024**

This year, RAPDASA had the pleasure of hosting a standalone Industry Day at Nelson Mandela University. The event aimed to encourage active participation from industry and academia involved in additive manufacturing, advanced materials, robotics and pattern recognition, within the Eastern Cape province.

It took place on Thursday, June 13, 2024, at the Ocean Sciences campus, Nelson Mandela University, in Gqeberha, South Africa.

### **4. 2024 Annual Conference**

The RAPDASA conference has grown substantially over the last number of years, and we have partnered with RobMech (the Robotics and Mechatronics conference), Advanced Materials Initiative (AMI), and PRASA (the Pattern Recognition Association of South Africa).

The 2024 conference was hosted by Stellenbosch University and Nelson Mandela University at the Boardwalk Hotel, Qqeberha, South Africa.

The conference had a total of 186 (full conference, 1 day attendance, and industry day).

The main conference featured a total of 123 presentations (of which 8 was keynote presentations), while an additional 5 presentations were presented in the industry track.

The pre-conference seminar on “Design and additive manufacturing of titanium and platinum group metal parts”, had 8 technical presentations, and 1 keynote addresses, while 12 presentations and 1 keynote address, were delivered at the seminar on “computational and data-driven modelling”.

119 full papers were accepted for publication after a double-blind peer review process, 6 more paper are currently under review. 5-7 papers are to be

published in the SA Journal of Industrial Engineering, and the rest of the papers in the conference proceedings.

Thank you to all participants and presenters for sharing your work through the RAPDASA-RobMech-PRASA-AMI conference. The quality of these publications is truly impressive, and we appreciate your trust in us to showcase your contribution.

We extend our heartfelt gratitude to all our sponsors and exhibitors for their unwavering support of the RAPDASA-RobMech-PRASA-AMI conference. None of this would be possible without their contributions. Together, may we continue to grow inclusively and Unlocking Advanced Manufacturing, welcoming participants from across Africa and the globe. The sponsors for this year's conference are:

Platinum:

- Department of Science, Technology & Innovation

Silver:

- Advanced Materials Initiative (CSIR, Mintek, Necsa)

Bronze:

- Anton Paar Pty Ltd
- Stellenbosch University
- Akhani 3D Pty Ltd
- 

Over and above our sponsors, we also had the following exhibitors:

- Aditiv Solutions
- Akhani 3D
- AMI (CSIR, Mintek, Necsa)
- Anton Paar Pty Ltd
- BunnyCorp (Nexus Advanced Geometries)
- Caldeaz Manufacturing
- CRPM – CUT
- Multitrade 3D Systems
- Necsa SOC Ltd.
- PDTS – CUT
- SOLVIT Engineering
- Weartech Pty Ltd

An appreciation goes to 2024 conference co-Chairs, Prof Andre van der Merwe and Heinrich van der Merwe for their hard work and dedication in bring yet another successful conference together. The conference organizing team consisted of:

- André van der Merwe (Co-Chair Organising Committee)
- Heinrich van der Merwe (Co-Chair Organising Committee)
- Deon de Beer
- Willie du Preez
- Daniel Kirkman
- Francois du Rand
- Washington Makoana
- Jaco van der Walt (resigned)
- Natasha Botha (RobMech)
- Callen Fischer (RobMech)
- Riaan Stopforth (RobMech)
- Beatrice van Eden (PRASA)
- Ndivhuwo Makondo (PRASA)
- Rosinah Modiba (AMI)
- Marandela Mulaudzi (AMI)

Finally, a special thanks to the following people who made a tremendous contribution to the conference.

- Willie du Preez, the editor for RAPDASA-RobMech-PRASA-AMI proceedings, thank you for managing the academic side of the conference, including the paper review and publication processes. The quality of the papers submitted year and after and the consistency at which you pursue this, is appreciated. A big appreciation to the Track Directors, Reviewers and the individuals that chose to submit their papers to our proceedings. Your hard work and time do not go unnoticed.
- Rynette Coetzer for managing administration for RAPDASA as well as the annual conference. There are very few people that possess the level of integrity, work ethics and passion for their work like you do for RAPDASA.

## **5. Marketing and Electronic Media**

RAPDASA has been running an ongoing social media marketing campaign throughout the year on Facebook, Instagram, and LinkedIn. Marketing activities were driven by Washington Makoana, Thuli Makhali and Digi-Guru.

## **6. Dimitrov Scholarship**

The Dimitrov Scholarship supported Abel Thabiso Matthews, Daniel Schutz, Hosia Kgomo, Jacquiline Tau, Muzi Mavundla and Tebogo Ledwaba to attend RAPDASA 2024 conference. The selection is based on the student's paper acceptance and thus gives them an opportunity to present their work at the conference. A big thank you to our contributors and sponsors towards the scholarship for making sure that we are able to support the students with this initiative. As a non-profit organization, we are always looking for a way to give back to the community, this is one of the ways that RAPDASA contributes towards the next generation of scientists and engineers.

## **7. Financials**

RAPDASA currently has a healthy financial status as per treasurer's report. On behalf of RAPDASA, I want to thank our Treasurer, Francois Du Rand, for her tireless contributions in this regard.

## **8. Highlights of the South African AM industry for 2024**

Upon creation of this report, AM service providers in South Africa were given an opportunity to report on major developments in their respective organisation during 2023. This section includes a summary of the responses received.

### **Aditiv Solutions**

Aditiv Solutions has delivered two HYRAX machine to the CSIR in 2024. One is based at the Learning Factory and the second system is based at the Photonics Centre AM



facilities. The team exhibited at RAPID + TCT conference from June 25-27, 2024, in Los Angeles, US. The three-day event featured the latest in 3D-printing technology from the industry's leading product and service providers.

Aditiv Solutions have also expanded in other business areas and we have provided substantial engineering consultation services in the field of additive manufacturing.

### **HH Industries**

HH Industries is actively supporting metal Additive Manufacturing in Nigeria with the export of gas and power solutions for metal AM activities. Collaboration has been key to going forward and HH Industries is enthusiastically involved in a number of Research and Development activities with various research institutions in South Africa.

### **Multitrade 3D Systems**

Multitrade 3D Systems has had its best year for installations in South Africa with the commissioning of two metal Laser Powder Bed Fusion systems for various industry customers in 2024. Overall, 4 new systems were delivered and installed since December 2023. Multitrade 3D Systems have expanded their product portfolio by incorporating more metal AM machines to their product selection. The addition of the MX3D product line allows for the industry's best WAAM technology to be available and supported in Sub-Saharan Africa.

## 9. Conclusion

Since its first conference in 2000 at the CSIR, the RAPDASA conferences has grown substantially. This is possible due to the nature and spirit of collaboration that exists within the RAPDASA community.

I would like to thank the RAPDASA Executive and Management Committees, AMI, RobMech and PRASA representatives for their support during this year.

Lastly, I would like to thank the conference organisers again for hosting another excellent event.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Ntombi Mathe', written in a cursive style.

Ntombi Mathe  
(Chairperson)