

RAPID PRODUCT DEVELOPMENT ASSOCIATION OF SOUTH AFRICA

CHAIRMAN'S REPORT 2006

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, held at the CSIR Conference Centre in Pretoria. During the past six years the association has grown steadily, both regarding its national and international recognition through active participation by its members, and the scope of its activities. It can be confirmed that RAPDASA is increasingly being accepted as mouthpiece of the product development community in South Africa. It is therefore a pleasure to report on the activities of the past year.

Management Committee

The Management Committee elected by the Sixth Annual General Meeting was constituted as follows:

Chairperson:	Prof. Dimitri Dimitrov
Vice Chairperson:	Prof. Deon de Beer
Secretary:	Mrs Pauline Bullok
Treasurer:	Mr Ludrick Barnard
Members:	Dr Willie du Preez
	Mr Bob Bond
	Mr P Bezuidenhut
	Mr Paul du Plessis
	Mr Bruce Crawford
	Mr Eugene Erfort
	Mr Andrew Mkoko
	Mr Richard Schultz

Management Committee meetings were held regularly every 6-8 weeks starting from January, March, May, 18 July, 30 August, 5 October, 1 November. A number of ad hoc informal one-on-one meetings of committee members also occurred during the course of the year to handle RAPDASA issues.

Main Objective: RAPDASA's main objective was and is to contribute to the improvement of the SA product development capabilities and competitiveness.

Progress with Projects

The Management Committee was involved in executing the following projects as specialised focus areas of RAPDASA:

- Additive Manufacturing – promotion of a better utilisation and coordination of existing RP facilities in South Africa, as well as disseminating of research results.

This has to be done in association with our sister institutions – PISA and the National Institute for Foundrymen, who are also the main users of these facilities. A substantial role in this regard plays also the already established Tooling Association of South Africa (TASA). A particular support to our activities is demonstrated by the Western Cape Tooling Initiative, and the Western Cape Provincial Government, Sector Economic

Development. It is not a random that these two organisations held their annual meetings in conjunction with the RAPDASA Conference, which as you know in this year has its special theme on Competitive Tooling. Some dedicated events were organised such as the RP User Group Meeting in Durban. This meeting was a great success. Unfortunately due to various reasons – although planned – meeting in the other three provinces didn't take place. However, this aim was further achieved by frequent visits to industrial companies mainly from representatives of the main service providers established at educational Institutions – the Centre for Rapid Prototyping and Manufacturing (CRPM) at CUT Bloemfontein, the RPD Laboratory at the University of Stellenbosch, the Rapid Prototyping Centre (RPC) at the CPUT. During this year for example the RPD Lab processed about 200 inquiries and carried out close to 150 projects in the field of reverse engineering and part inspection, computer modelling, rapid prototyping and tooling. Our colleagues from CUT carried out even more projects this year, in the region of 750. The branches being served are mainly the automotive, electronic and household industries. It looks similarly in the other RP Centres too as it can be seen at the exhibition hall. Some projects were executed also for the aerospace industry – a proper drive in this field is still to come. In addition the medical industry has to be seen as the sector having enormous potential.

- Books and publications in journals
 - A handbook with a working title “Rapid Prototyping in SA Academic and Industrial Environment”, highlighting the facilities available in SA, as well as showing research results, is envisaged and under development.
 - A number of papers authored by RAPDASA members on work done in the field have been published or accepted for publishing in the internationally highly respected Rapid Prototyping Journal, UK – altogether six, or in SA credited journals. A special edition of the New Generation Sciences was dedicated to the best RAPDASA papers from previous conferences, and more specifically from the 2004 Conference.
 - Several papers, authored by RAPDASA members, were presented at specialised local and international conferences and published in the proceedings, i.e. at the Conference on Virtual and Rapid Prototyping 2005, Leiria, Portugal, at the 7th International Conference on Frontiers of Design and Manufacturing in Guangzhou, China, at the FIRPA Conference in Helsinki, at TCT Conference in UK. A particular mentioning deserves the appearance of Paul du Plessis at RAPID 2006 in Chicago, maybe the most reputable RP Conference in the world, as well the invitation by Terry Wohlers to Michel Truscott to present at EuroMold later this year.
 - A number of papers were published also in the Metalworking News, one of the most widely read trade journals.
- Technology and Human Recourses for Industry Programme (THRIP) projects – the 2006 THRIP Excellence Award for SMME Development, technology transfer and competitiveness improvement was given to the RPD Laboratory for projects run entirely in the field of rapid technologies.
- Workshops – it is a practice that the annual conference is preceded by workshops on relevant topics. This line was set already at the Second Annual Conference in Stellenbosch, 2001. The current 7th Conference doesn't make an exception. Three workshops run in parallel with a good number of attendees - altogether about 60. Of particular importance we see here the participation of students.
- Tooling Design and Tool-making:
Several RAPDASA members – D. Dimitrov, W du Preez, D de Beer, Bob Bond and others participate actively in various initiatives and organisations related to the tooling industry such as
 - TASA and Western Cape Tooling Initiative

- National Tooling Initiative (NTI)
- Institute for Advanced Tooling (IAT)
- 6th Framework Programme (FP6) of the European Union Project Euro Tooling 21.
- Advanced Manufacturing Technology Strategy (AMTS) - a number of RAPDASA members participated in the development of the Advanced Product Technologies Strategy as part of the process to develop an Advanced Manufacturing Technology Strategy for South Africa. A particular spin-off is the currently in implementation AMTS for the Aerospace Industry with special projects in digital manufacturing, light metal and composites, as well as affordable automation and reconfigurable equipment.

All these facts speak for a substantial influence and impact of the RAPDASA members on the SA product development and realisation front.

Website

A website for RAPDASA has been established at the web address <http://www.rapdasa.org.za>. This site will have to be further populated and RAPDASA members are invited to make contributions.

Meantime the existing site within the product development portal, <http://www.productdevelopment.co.za> should be better utilised and used for relevant information and dissemination of R&D results. A concrete step in this direction will be the publication of the conference proceedings on the website as well as the publication of selected papers in the New Generation Sciences journal.

GARPA

Deon de Beer continued to act as an active member in the Global Alliance of Rapid Prototyping Associations (GARPA), to which RAPDASA is affiliated. A recognition of these activities is the current representation of the GARPA international secretariat through the CUT Bloemfontein. A special thanks belong here to Jenny van Rennsburg, who among other obligations is managing with bravour the GARPA affairs.

Seventh Annual Conference

Mr Eugene Erfort and his colleagues of the Cape Peninsula University of Technology organised the Seventh Annual Conference of RAPDASA, which is taking place here in Langebaan on the West Coast just outside of Cape Town. Headed by Mr Erfort, the Organising Committee, supported actively by a committed Conference Secretariat, led by Nicole Titus, has succeeded in drawing to the conference keynote addresses very competent national and international speakers such as Dr Terry Wohlers, Dr Ian Campbell from Loughborough University in UK, Prof. Paulo Bartolo from Portugal. Altogether 49 papers were presented including 18 student papers in three parallel sessions. Nine papers are from abroad which make this conference really international.

- Exhibition - 5 exhibition stands representing research laboratories, service providers and vendors were counted this year – the trends laid last year continues.

A special thanks to Virginia Ellisac for her tremendous contribution to the seamless organisation of his event.

Finances

RAPDASA has maintained a healthy financial status documented by audited statements, and I want to express my appreciation to our Treasurer, Ludrick Barnard, for his work in this regard. (A dedicated Financial Report will be presented.)

Sponsorship

On behalf of all our members, I acknowledge with sincere appreciation the financial support that we have received from our sponsors for 2006 - SASOL Polymers, AMTS, CPRM, National Research Foundation (NRF), Z-Corp, and of course, the hosting institution – CPUT.

RAPDASA Memberships

It is important to know what the members of an organisation are expecting of it. Similarly like last year an appropriate Questionnaire was developed and distributed. Please fill it in – it will be a substantial help for the new Management Committee to meet further the needs and expectations of the members.

Conclusion

It has indeed been a privilege to lead RAPDASA in the 7th year of its existence and to experience the support of our members, stakeholders in industry and other collaborators. Sincere thanks to our international collaborators and supporters, and above all to Terry Wohlers and Ian Campbell. A special word of thanks goes to my very competent and committed colleagues of the Management Committee for their support and enthusiastic collaboration throughout the year. Here I would like particularly to underline the contribution of Pauline Bullok – she did an excellent job as MC secretary. With sustained commitment such as this an exciting and very awarding future of contributing to the growth of South Africa awaits us all!

Dimitri Dimitrov

Cape Town/ Langebaan
31 October/ 1 November 2006