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**2007 HEFMA Conference**

This year's HEFMA Conference will be hosted by the Walter Sisulu University from 22 to 26 October 2007. The Conference will be held at the beautiful Mpekweni Sun on the East Coast near Port Alfred. The theme for the conference is "Facilities—Working Together". Please register as soon as possible by following the conference link on the HEFMA website at [www.hefma.org](http://www.hefma.org). For enquiries, contact Janine at 043 708 5253.

**Feedback from the 2007 AUDE Conference**

*By Master Ngoma, HEFMA President and Director: Maintenance Services, Tshwane University of Technology.*

Our strategic partners AUDE had their annual conference during April 2-4, 2007 at the University of Bath in U.K. I had an opportunity to attend the conference representing HEFMA. The exposure gathered whilst attending the conference would certainly be used across the institutions even at HEFMA level.

The conference was attended by 102 delegates from all universities across U.K. and 4 international guests representing strategic partners i.e. APPA, TEFMA and HEFMA. The conference lasted for three days. There were some paper presentations in the morning with some small group sessions of workshops in the afternoon each day. The theme of the conference was "**Renew and Regeneration**" of facilities.

I was particularly touched, if not all delegates, by the first presentation from Vice Chancellor, University of Liverpool Professor J. Drummond Bone. "**Trends in HE and their impact on the Estate**". Prof touched on issues that are of great concern in educational sector whereby the estate people are not taken on board at the early stage during the plenary sessions. This approach leads to lack of flexibility of most facilities in our institutions and subsequent to that the implementation is ultimately prolonged. He strongly emphasized the involvement of the estate people at the early stage in design which would ultimately take care of; **much more diverse facilities,**

**flexible in space and the buildings that are more involved in the business of the university as a whole.**

I had an opportunity to attend a workshop presented by Nick Goff, Construction Director, HBG "**Sustainable Construction- where we are today and what's in the future**" I was quite impressed by the manner he addressed the issue of excessive rubble during construction and demolition. The solutions he shared enlightened most delegates because of environmental impact that we are exposed to during constructions.

Vice Chancellor of University of Lincoln, Professor David Chidwick also presented a paper on "**A new approach to effective estate strategy**". Prof highlighted the 'contents' of Estate strategy that set in the context of local/ regional economic and spatial strategies, through changing learning and teaching paradigms and space management to efficiency and

cost utilization of the estate. Prof gave examples of joined-up academic, research and community use of the same infrastructure.

AUDE and HEFMA had been in discussion for the exchange programs for their membership. AUDE secretary Mr. Rod Mallinder and Mr. Master Ngoma the HEFMA President had been spearheading the discussions. The matter was finally adopted during the AUDE Annual General Meeting at the conference which leads to the signing of **Memorandum of Understanding** between the two organizations.

The MOU is based on the selected objectives, namely;

- Fostering a commitment to collaboration by our respective organizations and their members to more effectively serve the facilities management profession in the United Kingdom and in Southern Africa.

*Continued on p 2...*



Rod Mallinder (Secretary of AUDE and Master Ngoma President of HEFMA) signing the Memorandum of Understanding between HEFMA and AUDE.



## US staff member receives first TEFMA/HEFMA scholarship

Kevin Matthew (Head: Architectural Services Office) at the Department of Facilities Management, has become the first person to receive the TEFMA / HEFMA scholarship for 2007 worth R38 000. The Higher Education Facility Management Association of Southern Africa (HEFMA) is connected to the Tertiary Education Facilities Management Association (TEFMA), a representative body for facilities management in the Australasian tertiary education sector, by means of a memorandum of agreement signed between the two associations.

According to Mr. Reenen du Plessis (Director: Facilities Management) and immediate Past President of HEFMA, a number of facilities management departments at tertiary institutions in Southern Africa are members of HEFMA. "At present, about 15 tertiary institutions are members of HEFMA," he says.

"This is something that Kevin can be really proud of," says Mr. Du Plessis. "Kevin will have the option to choose a topic in his field of study or in an area where he sees a need for fur-

ther research and that topic will then be submitted to both TEFMA and HEFMA for final approval. Once the topic has been approved, TEFMA will put him in contact with the right Universities in Australasia where he can conduct his research.

Mr. Matthew says he was really surprised when he received the news that he had been selected as the first recipient. "I haven't finalized the topic of my research, but there are a number of areas that I am interested in. In fact, the range is vast and covers areas from industrial design to aesthetic considerations of heritage buildings, from coordinating ergonomics in industrial kitchens to designing a virology laboratory."

He has been involved in the building industry for the last 36 years, of which 26 ½ years were spent working for Stellenbosch University in the field of facilities design.

Outside the scope of his University duties, he has designed and patented a wide range of dual access locking devices

which are commercially manufactured. He has also designed and manufactured a range of electronic surge protectors and has also invented a SMS/ Internet based intercom system.

As the Head Architectural Services, Mr. Matthew's office is involved in the design and documentation of a wide range of facilities in all areas of university involvement from academic, residential to sport and support services facilities.

"I am therefore looking to gain new insight on issues such as laboratory design, lecture hall design, student accommodation, energy and resource sustainability, life cycle costing, bench marking, material specifications, designs for the disabled, electronic applications such as access control, video security, audio visual teaching applications etc." says Mr. Matthew.

Mr. Matthew said that his office is responsible for moving projects requested by US departments, after the initial planning

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- Promote the exchange of information regarding facilities management and services
- Explore ways to leverage the strength and vitality of our respective organizations.
- Recognize and acknowledge each other's organization strategies.
- Continue building the bond between our organizations and respective members

The responsibility lies with the

membership of both organizations to make use of the opportunities that are provided by the MOU, or better still create opportunities that are within guidelines of this understanding.

The International Guests were also given slots for presentation during the conference. My presentation was mainly on three main aspects;

- Higher Education landscape across Southern Africa.
- Formation of Tshwane University of Technology

### • Formation of HEFMA

After one year in the office of HEFMA as a President-elect and few months as a President of HEFMA, may I state that I am most grateful for all the support and assistance that I have enjoyed from the both HEFMA and Management of TUT. I am also indebted to the many other colleagues within the sector of Facility and Estate for their assistance particularly those in our strategic alliances, AUDE, TEFMA and APPA in particular Mr. Chris Ahoy.



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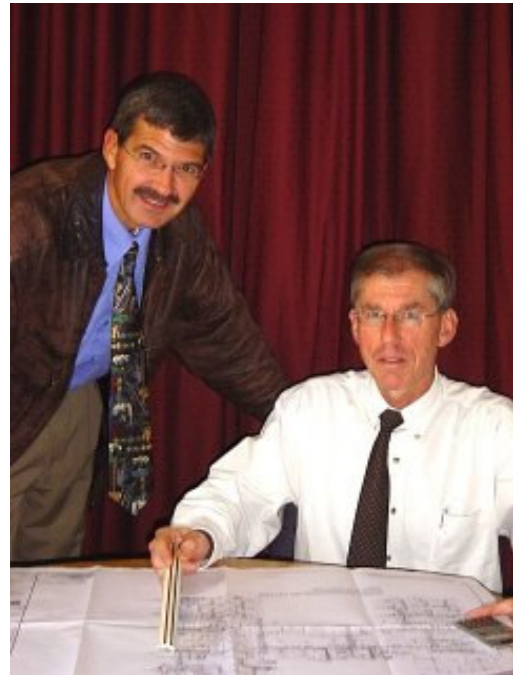
and estimating process, to a stage where the projects are fully researched, designed, documented, approved, and issued for construction, taking into consideration budgetary constraints, structural implications, statutory regulations etc. The responsibilities do not of course stop with documentation, but also continue into the construction phase. Mr. Matthew's office is also responsible for the archiving and indexing of all architectural, mechanical, electrical and structural drawings for all US buildings in electronic and hard copy formats.

Kevin has been awarded the Rector's Award for Excellent Achievement in the non-academic category in 2004 for

exceptional performance.

"This is a wonderful opportunity for me as a learning process and gives the University a window in which to interact with tertiary institutions in other countries and learn and implement concepts from each other about facilities management," says Mr. Matthew.

Mr. Kevin Matthew, Head of Architecture, (right), the first HEFMA member to receive the new TEFMA / HEFMA Scholarship, here with Mr. Reenen du Plessis, US Director of Facilities Management.



## President's feedback on the second Executive meeting of 2007

By Master Ngoma—HEFMA President 2007

One of my favorite quotes comes from Will Rogers: "Even if you are on the right track, if you sit there you will get run over" I believe Hefma is on the right track. Since our last executive meeting, Hefma has been aggressively "operationalising" the strategic plans. Each executive member has aligned the work of the committee with the major component of the plan. I would be remiss if I were not to recognize and give a special thanks to the Executive Committee for their dedication and commitments to align and at times, realign their energies and activities to the strategic plan.

### TEFMA/HEFMA Scholarship

As previously announced in our newsletter, the draft of scholarship criteria was finalized and tabled at the executive meeting held on February 20, 2007 at Wits University. The President-elect, Mr. McDonald Ndzo was then tasked to implement and

oversee the scholarship process. After the approval of the criterion, group e-mail was sent to all Hefma member institutions for participation. From all institutions, only one candidate from Stellenbosch University responded to this opportunity of life time. Mr. Kevin Mathews was the only candidate and he was appointed unopposed. He went through an interview on May 25, 2007 at Stellenbosch University. We wish him all the best in his studies.

### Review of Constitution

The position of Information Services was finally amended to our constitution. This is after group e-mail was sent to Hefma participating institutions and more votes were in favor of the amendment. Mr. Theron Marcel was officially appointed into this position for the period of two years. I urge all Hefma membership to start contributing to this news letter because it is only through your participation that we could produce a high quality news letter.

### Outreach into Africa

The Past President, Mr. Reenen Du Plessis has managed to make contact with Botswana University. He would be making further contacts with Zambia, Namibia and Dar-Es-Salaam Universities shortly. We intend to visit this identified institutions before our 2007 conference. Mr. Cedric Achilles has sent draft letters to non-Hefma institutions for the participation in Hefma and we are awaiting their responses.

### Business Partners

Hefma is fortunate to have willing Business Partners like Johnson Controls and Ifihlile Gree South Africa who are interested and willing to share their time, talents, and financial resources. In an effort to make their participation more meaningful, feedback sessions during the annual meeting, proper criteria will be developed to take care of that. Like all good business, they are looking for "return on investment." As a professional association, Hefma

must remain neutral and not endorse any particular product or business. We all agree that recognition for financial support is appropriate and that the levels of recognition would be established.

There have been some logistical issues that resulted into delays in getting this sorted. We hope to report progress in this area in our next news letter.

### Conference 2007

Walter Sisulu University has now finalized their conference details and all that is available through the link from Hefma website which is [www.hefma.org](http://www.hefma.org). All Hefma membership is payable at Mr. Emmanuel Prinsloo who can be reached at (011) 717 9012. I would like to encourage all members to start making use of early bird registration for the conference because there is less time left to the conference.

Wishing you all well and see you at the conference.



## US implements SMS based intercom system

By Kevin Matthew - Head: Architectural Services, University of Stellenbosch. Contact Kevin at [kwm@sun.ac.za](mailto:kwm@sun.ac.za).



Example of an InterCell terminal.

There will always be a need in hostels, residential complexes, offices and the like, for intercom communication between a security entrance and the accommodation units / office units. This would preferably be person to person viz. between the visitor who arrives at the security entrance and the person to be contacted. There will also be a continuing need for a type of notice board system in the same types of institutions. There are a number of reasons for the necessity for this service.

- To notify people or groups of people about certain events, issues etc
- To pass on or leave a short message with a specific person.
- To notify of a postal or other delivery.
- To announce ones arrival to gain access, etc.

In a typical hostel it is found that this type of residence is split into sections, and like most hostels, the intercom systems are configured according to the same pattern as the hostel layout. The efficiency rate of intercom communications is low and this is because of certain inherent problems.

The most obvious reason is that the persons being called are not always within earshot of the nearest intercom station. This could be for a multitude of reasons like not being within the audible boundaries of the station, or being in a situation where the ambient noise level conflicts with the broadcast message such as background conversation, music etc., or the persons being called may not even be in the building in question.

But there are many other in-

herent problems that need to be address such as:

- The noise and or volume levels of traditional intercoms are such that the messaging is not always clear due to echoing in passages.
- Disturbing noises cause high irritation levels to students especially during exam time and late at night.
- Initial installation costs are high due to required conduiting, wiring, equipment distribution etc.
- Ongoing maintenance costs to the whole system but especially with regard to wiring and slave units are reasonably high and there is also the vandalism element.
- Capital and installation losses if the installation has to be completed in a rented building or facility which is to be used for a limited time.
- Room-by-room intercom systems are prohibitively expensive and are more prone to vandalism.
- Requirements in a medical Faculty hostel are different to most student hostels in that medical students may be on ward or emergency duty and therefore need to be contactable at any time.

These are just some of the reasons which stimulated a rethink of the available intercom systems.

The basis of the concept is that visitors to a building are be able to contact residents on a seamless basis, for as many hours of the day as possible even when the residents are not physically in the building. The way this is done is via a terminal whereby the visitor can contact a resident by means of a cell phone SMS.

The next level of communication is inter-resident communication. This is done via an Inter-

net linked PC which is set up to issue broadcast SMS's to residents. All this is achieved by employing intriguing packages combining computer, Internet, messaging and cell phone technologies.

There are two main processes and the outcomes to these are a highly effective and cost efficient communications system. These two basic inputs are:

- User interaction: Visitor, resident, administrator.
- System process: Software and systems to achieve full route communications.

The first interaction of the InterCell system is for the visitor. This is at a vandal proof PC terminal. Basic instructions on the terminal guide the visitor to be able to navigate an alphabetical pull-down menu of names of residents in the building. After selecting a name, the visitor enters a second command section where the visitor's name must be entered as well as options for a cell phone number and a short typed message before sending the message to the resident.

This message is then picked up as a SMS message by the resident where upon he can respond by means of a return SMS and if the resident is available can meet the visitor at the reception area. There are also other choices of reply.

The immediate response to the message sent by the visitor is a small text window on the terminal screen, which shows the exact status of what has transpired e.g.

- "Message sent in progress"
- "Message failed or not delivered"
- "On study leave – not available"
- "Message delivered"
- "Reply"

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*"This message is then picked up as a SMS message by the resident where upon he can respond by means of a return SMS and if the resident is available can meet the visitor at the reception area."*



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These return messages are default but are editable and the reply would be the unique reply from the resident.

To cover the basic steps of the process of communication flow, the following takes place.

- The visitor selects the resident's name.
- The visitor types in a custom message etc.
- The visitor sends the message.

The InterCell system looks up the resident's cell number in the database and extracts the cell phone number. This is then sent to the WSAP's SMS server via the Internet. It is delivered as an SMS message to the handset of the resident via the cellular network, which is identified by the WASP system.

The format of the message to the resident is shown for example as:

The visitor alert, the location identity of at which entrance it emanated from, date and time of message and lastly the custom text.

The progress of the message is

immediately displayed as a small window on the InterCell terminal allowing space for other transactions that may be queuing. Examples of these messages would be:

- Sent
- Delivered
- Unavailable
- Reply

The resident can now respond to the SMS message by clicking the reply button. The reply is then picked up and through a similar but reverse process and is displayed on the InterCell terminal screen.

The time that expires between the time that the message is sent and the SMS being received is between 6 to 8 seconds and this also applies to the return message.

The person who would typically control the day to day administration of the system would in the case of an educational institution either be the head student or principal of the residence. This person would be able to alter certain configuration settings of the InterCell processes such as minimum

time lapse between calls to the same cell number, hours of service and message setup for example language use, default message etc.

As part of the administration of the system, the name and cell number of each resident will have to be entered into the system on the initial set-up and thereafter only updates will be necessary.

Reports of usage are also provided by the system which may be printed out.

The system can be described in 3 main sectors:

- The visitor terminal which could be at one or more entrances or positions.
- The application server and system admin software. This software can be installed on the terminal PC.
- The WASP Messaging Server which the InterCell application server which utilises the Internet to send SMS's.

The terminal enclosure is a direct spin-off of the Campus E-mail station project, the aim of which is to reduce traffic in

computer user areas. The resulting spin-off was the design and production of a multi-purpose, very rugged, inexpensive, vandal resistant, lockable and aesthetically pleasing enclosure to house a complete PC with a flat screen.

Future development of the InterCell terminal includes:

- Activation of a door/gate release by means of punching in of a code on the receiver's cell phone, to allow access on request.
- Improving security by means of Visitor View, where the terminal camera will send an image to the resident via the same communication protocol as previously mentioned.
- Messaging broadcasting, where messages are sent *en masse* via SMS to a group of recipients. This electronic notice board is found to be an extremely effective and useful function in terms of hostel management and communication. These communiqués would typically be to announce a house committee meeting, a dance, a sport event etc.



Photo's from our beautiful South African campuses, US and UP in the photo above.



## New R440m Science Building for UWC

By Cedric Achilles, University of the Western Cape and HEFMA Secretary.

Part of Brian O' Connell's (UWC rector) dream for University of the Western Cape was to build a science building that could be a monument to science, a building that could inspire South Africa to develop a strong science culture. "It must be a place where the best minds in the world could meet scientists and generate energy for the science project. Black scientists in particular could come here to participate. It must be a symbol of where South Africa is going" he said.

A similar project was undertaken in Queensland, Australia and the Rector and four staff members went to see what a "good science building looks like". The UWC delegation also visited similar buildings in the United Kingdom. Plans were drawn up by a firm of architects and the cost of the building came to a frightening R440 million.

Phase one of the new building will house the department of biotechnology, the department of medical bioscience, the South African Herbal Science and Medicine Institute, the South

African National Bioinformatics Institute and faculty administration, including the dean's office.

The building will also provide teaching space, offices for academics and administrative, technical and visiting staff. It will also accommodate a range of special facilities, including an animal house for small rodents, a cold room, an autoclave preparation room, a cadaver room, areas for embalming, a dark room, a radio isotope suite, green houses, storage rooms and certain central facilities, small libraries and meeting areas for different departments, a faculty boardroom and a range of laboratory spaces.

UWC's much improved financial status has strengthened the institution and afforded it the ability to reposition itself. "It has given the university an incredible lift and released new energy and creativity at UWC," said the Rector.

- Research in bioinformatics is primarily in the genomics of diseases, particularly cancer; HIV; tuberculosis and malaria.
- In biotechnology, one major project concerns the genetic

features of extremophiles, living organisms that survive in extreme conditions such as Antarctica and volcanic craters. This work has major importance, both in advancing our understanding of what makes for survival and in advancing metagenomic theory.

- Significant work has been done on the interface between indigenous knowledge systems and clinical science at the South African Herbal Science and Medicine Institute. One of its programmes brings together 30 nyangas and sangomas and a distinguished team of clinical, botanical scientists in a felicitous partnership.
- Medical biosciences concentrate on high-level research into male fertility with the support of the Medical Research Council and the fertility unit at Tygerberg Hospital, and prepares students for dentistry and the allied health sciences.

Work on the project – a six storey, 120m long "monument to science" – will begin in just more than a month on UWC's main campus off Modderdam Road.

*"It must be a place where the best minds in the world could meet scientists and generate energy for the science project."*

## Accident report at Sahsmi Extensions, UWC

By Heinrich Arends, University of the Western Cape.

On 17 April 2007, at approx. 09:50, the main contractor, Salbro Construction was in the process of setting up formwork for the second floor reinforced concrete ring beam. There was no scaffolding in place on the eastern and western walls, where the construction was underway.

The formwork carpenter walked along a formwork plank which was not properly secured. He subsequently lost his

balance and with no safety harnesses attached to him, fell approx. 6,5m to the ground, with fortunately a few branches of an adjacent situated tree to break his fall.

The injury sustained was a broken ankle, and Mr A Gonsalves, the university's safety & fire officer was on the accident scene within 10 minutes. The injured person was stabilised and transported by the main contractor, Mr Sedick Salie, to hospital. Discharge of the patient was on Thursday 19 April 2007 after which he had to

recover at home with his ankle in a plaster-of - paris cast.

The following remedial action was taken by the main contractor:

- Work was halted until the site was compliant with the necessary health & safety requirements.
- The construction of scaffolding along both the eastern and western walls including railings for protection of workers against falling. A scaffolding certificate was

submitted to Technical Services by a registered erector.

- Closing up of the site as it was accessible to unauthorised persons and presented a risk to the university. Appropriate signage also had to be put in place.
- A site office/container with signage inclusive of first aid kit as per health and safety requirements.
- Clearing up of props and other equipment which proved dangerous for on-site personnel.



## 2007 Conference Venue



Some pictures of the conference venue at Mpekweni Beach Resort. Visit [www.mpekweni.co.za](http://www.mpekweni.co.za) for more information.



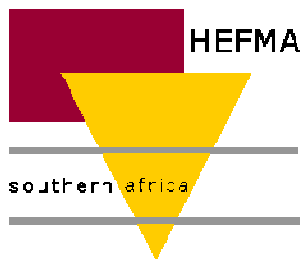
Photographs showing the accident scene during construction work at UWC. The project involves the adding of two floors to an existing structure.



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Higher Education Facilities Management  
Association of Southern Africa



**The mission of HEFMA is:**

1. To develop and maintain high quality standards in the management, maintenance, operation, planning, utilization and development of the physical infrastructure of higher education institution campuses.
2. To promote professional ideals and standards that would assure the best academic environment; and to engage in such other related activities as may be desirable or required to fulfil the objectives of the organization.
3. To provide the best professional service to Higher Education through constant education, information and resource creation.

**Attention HEFMA members—your newsletter needs you.**

HEFMA is a young, growing association, reflected in the pages of your magazine, *Hefmania*.

Your magazine relies on the input from you, the members of HEFMA. It has been gratifying indeed to note the increasing input from members in the pages of this edition.

So please keep your informative and interesting articles, together with great photographs, coming in. Whenever you feel the urge to put finger to keyboard, please do so, and send us the fruits of your labour.

A hearty word of thanks to all those HEFMA members that have contributed in the past, and especially to this edition. Let this be an inspiration to all HEFMA members to contribute newsworthy articles in abundance! Now sit back and enjoy reading the current issue of Hefmania.

## Hefmaniac of the month Tukkies' pioneer of Aikido

'n Besondere eer het Mnr Paul de Beer van die Departement: Fasiliteitebestuur, UP, onlangs te beurt geval toe hy verneem het dat die Aikidostigting, Japan hom tot die graad van 5de Dan (Godan) in Aikido bevorder het. Meestergrade van hierdie kaliber word jaarliks deur die hoogste gesag van die Aikikai by die Kagami-biragi, of Nuwe Jaar-seremonie, persoonlik deur die Doshu, hoof van die inter-nasionale Aikido gemeenskap, in Japan afgekondig.

Mnr de Beer is tans die hoogste gegradeerde aikidoka in Afrika met meer as 40 jaar ondervinding van die Japannese krygskunste. Hy word as een van die eerste pioniers van Suid-Afrikaanse Aikido erken. Vir sy aandeel in sport het TuksSport hom in 1991 met 'n verdienstelike toekening vereer en in 2006 UP erekleure

aan hom toegeken vir sy gewaardeerde bydrae in Aikido.

Hy het sy krygskuns-loopbaan op 14-jarige ouderdom met karate begin waarin hy later provinsiale-, en SA Weermag kleure verwerf en in 1973 tot 2de Dan bevorder is. Hy was ook in hierdie tyd deur die wêreldbekende Gogen Yamaguchi (10de Dan Gjukai karate) as instrukteur bevestig.

Mnr de Beer oefen nog al hierdie jare aktief en is sedert 1977 as stigterslid van die Aikido Federasie van Suid Afrika, en later ook as stigterslid van die Konfederasie van Suid-Afrikaanse Krygskunste op hoë vlak betrokke met die bevordering en instruksie van Aikido in Suid Afrika. Hy verskyn van tyd tot tyd op televisie en van sy artikels word in nasionale tydskrifte

gepubliseer.

Hy geniet internasionale erkenning en onderneem verskeie oorsese reise om Suid-Afrika te verteenwoordig en verder te studeer:

- In 1986 studeer hy onder M Kanetsuka (nou 7de Dan, Aikikai) in Britanje
- In 2002 onder N. Tamura (8ste Dan, Aikikai) op Reunion Eiland
- In 2003 onder H. Tada (9de Dan, Aikikai) in Italië
- In 2004 word hy genooi vir 'n maandlange studietoer na Japan. Hy oefen onder 18 verskillende top meesters, waaronder Ueshiba Moriteru (Doshu) en M Masuda (8th Dan, Aikikai)
- In 2006 verteenwoordig hy Suid Afrika by die 35-jarige feesviering van die Hong Kong Aikikai. Hy besoek



Paul de Beer — die hoogste gegradeerde Aikidoka in Afrika.

China en word uitgenooi om van die klasse in Beijing te behartig.

Mnr de Beer gee besondere erkenning aan die instrukteurs, familie en studente wat hom oor soveel jare geïnspireer, bygestaan en opgehef het.