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August was 'Women's month' and SACI women have certainly taken front stage. 1 Three of our SACI members have been recognised by the DST for their 2 contributions to Physical and Engineering Sciences. They are Prof Priscilla Baker, Prof Jeanet Conradie and Dr Nosipho Moloto. Priscilla is also on the SACI Council. Also: Dr Patricia Forbes (SACI Exec) won the 2014 Chemical Education award. You can read all about the DST awards in the newsletter. A listing of all other SACI 9 2014 awards made at the AGM are given below – congratulations to all.

Don't forget about the Analitika 2014 and BOCC 2014 conferences that take place 18 in the months ahead. A report on the successful IUPAC conference held in Durban 19 last week will be given in the next newsletter; as well as more information on the ²⁰ SACI awardees.

²³ Neil Coville

SACI office

The SACI office has now moved back to Wits. It is located on the 8th Floor of Gate House room 822 We will keep the UKZN e-mail address in operation till the end of the year. However, the new e-mail address will fortunately be the same as we had when the office was last at Wits.

Laila Smith SACI School of Chemistry University of Witwatersrand Private Bag X3, Wits, 2050 Tel: 011 717 6705 Fax: 086 766 9041 saci.chem@wits.ac.za



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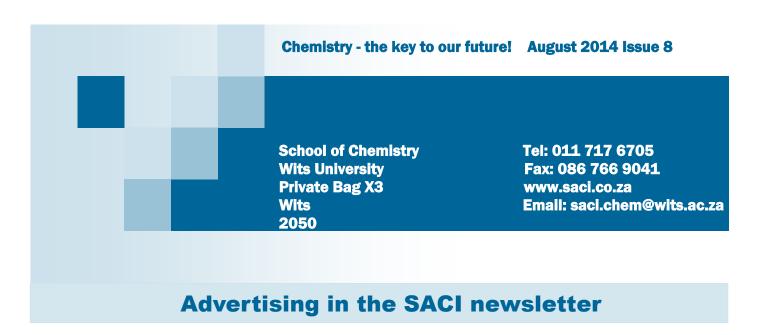
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SACI NEWS



The newsletter provides a means of getting messages to our membership. Currently the SACI membership stands at over 1000. This newsletter thus provides a means of advertising employment opportunities, conferences and workshops, and even for companies/Universities to promote themselves. We encourage members to use the Newsletter for advertising purposes.

All SACI related conferences and events are advertised for free; if not a SACI related event there could be a small charge.

For advertising costs contact Laila at the SACI office

SACI scarves and ties



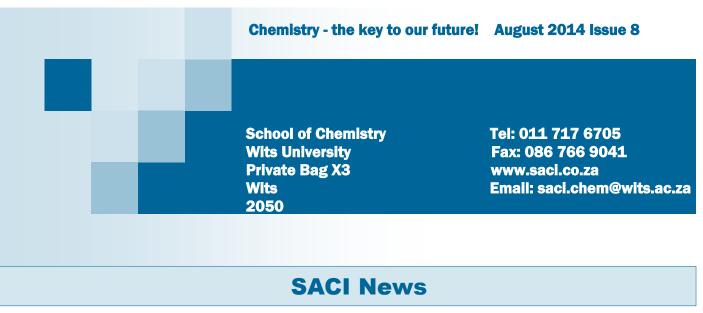


The SACI scarves (for women) and ties (for men) are now available from Laila in the SACI office. Cost of either is R100 (+ postage).



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2014 Awards

The following awards were announced at the 2014 SACI AGM. Congratulation to all the winners.

The Gold Medal

Professor Len Barbour, University of Stellenbosch

Chemical Education

Dr Patricia Forbes, University of Pretoria

SASOL Innovator of the Year

Professor Orde Munro, University of KwaZulu-Natal

Raikes Medal Dr Andreas Lemmerer, University of the Witwatersrand

Sasol Post graduate Medals

Dr Adeniyi Sunday Ogunlaja, Rhodes University Mr Myron Mario Johnson, University of the Witwatersrand Ms Kathryn Jean Wicht, University of Cape Town Mr Collins Obuah, University of Johannesburg

James Moir Medals

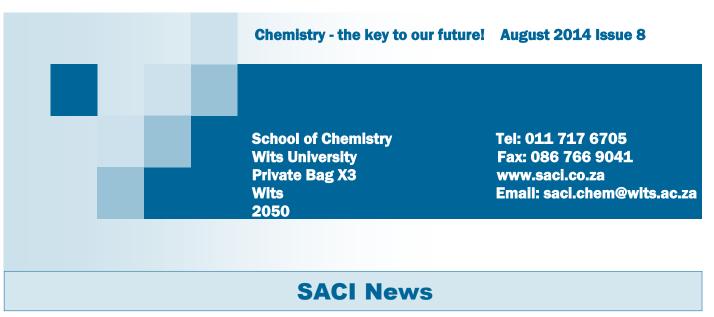
Mr Emil Mamedov Ms Sharista Ragunath Mr Ian Strydom Mr Pieter Lourens Pohl Mej. Marcelle Dunn

Ms Tracey Saywood Ms Nicola Anne Dare Ms Jireh Beatrix May-Li Smit Ms Sumayya Chohan Cape Peninsula University of Technology Durban University of Technology University of Pretoria Nelson Mandela Metropolitan University North-West University (Potchefstroom Campus) Rhodes University University of Cape Town University of the Free State University of KwaZulu-Natal, Pietermaritzburg



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At the AGM the following Fellows and Life Members were recognised: New Fellows

Prof Jan Boeyens Dr Mike Booth Prof Ivan Green Prof Sreekantha Jonnalagadda Prof Klaus Koch Prof Trevor Letcher

Life Members Mr R.E. Bartel Mr J.S. Harker Mr V.A. Soffiantini

RSC News

The RSC will be hosting a Roadshow for students to be held in Johannesburg (17th Nov) and Pretoria (18th Nov) Durban (19th Nov) and Cape Town (20th Nov) later this year. More details later.

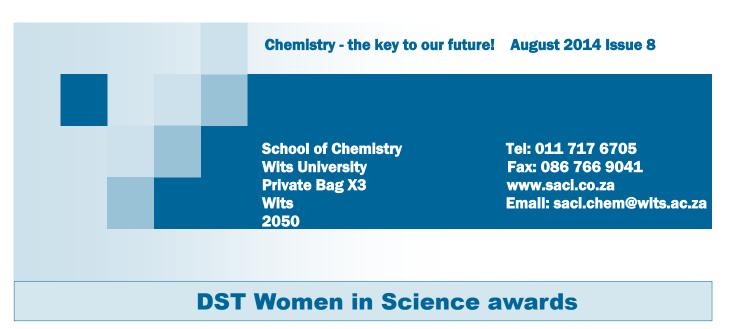
DST Women in Science awards

SACI women members excel! Three of our SACI members have been recognised by the DST for their contributions to Physical and Engineering Sciences. They are Prof Priscilla Baker, Prof Jeanet Conradie and Dr Nosipho Moloto. Priscilla is also on the SACI Council. (Taken from: <u>http://mg.co.za/report/sa-women-in-science-awards-2014</u>)

Distinguished women researchers (Physical and Engineering Sciences category). Winner: Professor Priscilla Baker



Professor Priscilla Baker



In 1990 Professor Baker was part of the first class to obtain a BSc majoring in Ocean and Atmospheric Science at the University of Cape Town.

She obtained a National Diploma in Analytical Chemistry (first class) in 1993 at the Cape Peninsula University of Technology. Drawn into the domain of electrochemical research during her National Diploma internship, she graduated with a BSc honours (chemistry) in 1995, and in 1997 successfully completed her MSc dissertation on the evaluation of trace metals in the atmosphere, as a Council for Scientific and Industrial Research bursary holder at the University of the Western Cape.

Baker completed her PhD in the area of novel metal tin oxide composites as anodes for phenol degradation in 2004 at Stellenbosch University.

She is currently employed as a professor of chemistry at the University of the Western Cape. She is coleader of SensorLab, an electrochemistry research group in the Department of Chemistry that focuses on the fundamental and applied electrodynamics of smart materials for sensors, energy devices, and environmental and health solutions.

Smart materials

Her specialisation is in the application of frequency-modulated electrochemical techniques, notably electrochemical impedance spectroscopy (EIS) to the design and evaluation of electrochemical smart materials.

EIS is a technology that characterises organic and inorganic materials according to their equilibrium electrical properties. These materials include polymeric hydrogels that can be applied in organic fuel cells and as membrane materials for water treatment, as well as novel polymer composites that have been applied in the design of immunosensors that can detect the presence of mycotoxins (toxic chemicals produced by fungi) in fish species and water analysis.

Baker's more recent research includes the design and evaluation of novel electroactive actuator systems (materials that change in size or shape when stimulated by an electric field) for environmental and health monitoring.

In addition to extensive electrochemistry instrumentation, her research laboratory houses advanced spectro -electrochemical techniques such as in situ subtractively normalised Fourier transform infrared spectroscopy, a Raman spectroscopy and atomic force microscopy instrument, as well as one of only two Krüss Drop Shape Analyzers in South Africa for membrane water treatment research.

She collaborates with researchers in the United States of America, Germany and France, and is an active member of two research consortia funded by the European Union's Seventh Framework Programme on Research and Technological Development.

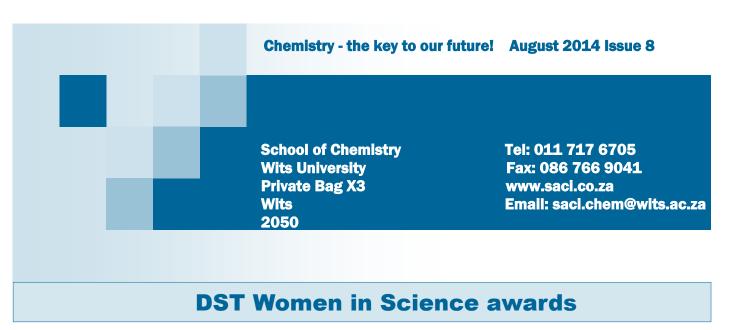
She has participated in international teaching and training programmes at Bangor University in the United Kingdom, the University of Coimbra in Portugal, and the University of Cergy-Pontoise in France.

Baker has supervised more than 50 honours, MSc and doctoral researchers, as well as postdoctoral fellows.



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In 2006, Baker was elected chair of the Electrochemistry Division of the South African Chemical Institute and has since hosted two major international electrochemistry conferences in South Africa.

Proceedings from these conferences were published in international peer-reviewed journals, Electrochimica Acta (Elsevier, 2010) and Analytical Letters (Taylor and Francis, 2011), with Baker as guest editor. In 2013, she was elected Vice Chair of the Analytical Electrochemistry Division of the International Society of Electrochemistry.

Runner up: Professor Jeanet Conradie



Professor Conradie obtained a master's degree in physics in 1981, after which she chose to raise her three children before returning to the academic field. With her wide-ranging interest in science and research, she decided to change her focus area, and continued with a PhD degree in chemistry, which she obtained in March 2000.

She spent six months as a postdoctoral fellow at the Department of Physical Chemistry, University of Tromsø, Norway, between 2002 and 2003. She is currently a professor in chemistry at the University of the Free State. Her PhD degree in chemistry and her strong background in physics, computer science, mathematics and applied mathematics have led to her research interest and expertise gradually developing into the direction of computational chemistry.

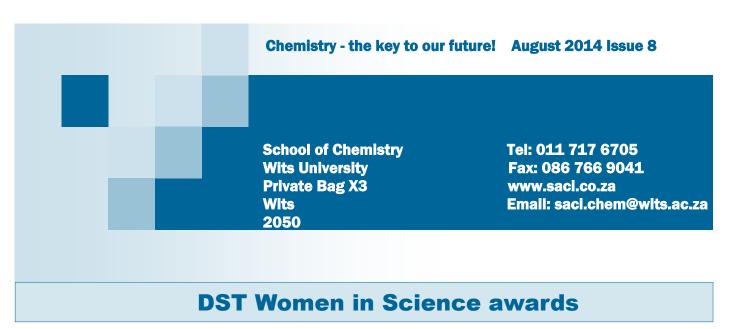
Computational chemistry is a combination of chemistry and physics (quantum physics), where mathematical methods are used to solve chemistry problems through high-performance computerised calculations. Conradie has been a National Research Foundation-rated researcher since 2001 and is currently rated as C3. Her research focus is the synergy between experimental and computational chemistry in understanding the structure and reactivity of transition metal complexes. A supercomputer is used to simulate and predict the behaviour of atoms and molecules in the real world. These reactions can be difficult and even dangerous to execute experimentally.



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Conradie is one of the top 10 researchers at the University of the Free State in terms of publication output units since 2009, and in 2012 she was number one of the top 10 researchers at the university in terms of ranking per impact factor of journals. In 2011, Conradie and her co-authors were invited to contribute to two cover articles in the high-impact international chemistry journals, Dalton Transactions and the European Journal of Inorganic Chemistry.

Conradie's research group focuses on the characterisation of known and unknown transition metal complexes and intermediates by synthetic and computational chemistry. Transition metal porphyrin and related compounds, O,O'-chelated titanocene and titanium complexes, beta-diketonato-carbonyl complexes of rhodium(I) and rhodium(III), and dithizonato compounds of transition metal complexes are currently being investigated.

Conradie has supervised and graduated nine master's and two PhD students, most of them obtaining their degrees with distinction.

The training and experience the students obtain under her supervision empowers them to be competitive in national and international arenas. Her students have received a great deal of recognition, with students being selected as the best PhD student at the university in a specific year, winning prizes for the best poster at INORG2009, and being awarded gold, silver and bronze medals at the Student Symposium on Natural Science. Currently, Conradie is supervising two MSc and two PhD students, as well as two postdoctoral research fellows, and is the co-supervisor of two more PhD students.

Conradie has 115 academic publications in print, published three technical reports, delivered 21 lectures at national and international conferences, including keynote lectures by invitation, and has made several poster contributions to international conferences. Most of her publications are in high-impact journals such as Accounts of Chemical Research, Nature Chemical Biology, Journal of the American Chemical Society, Journal of Chemical Theory and Computation, Journal of Physical Chemistry A, Organometallics, Dalton Transactions, Electrochimica Acta, and Journal of Physical Chemistry B.

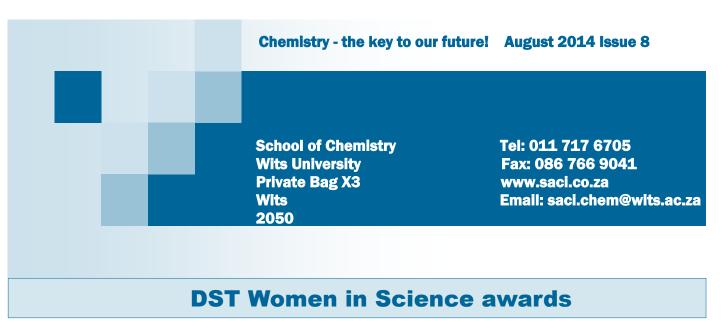
She has several international collaborators, including Professor A Ghosh (Department of Chemistry and Centre for Theoretical and Computational Chemistry, University of Tromsø, Norway), Professor SJ Lippard (Massachusetts Institute of Technology, Cambridge, Massachusetts), Prof. P Brothers (Auckland, New Zealand), Professor TC Harrop (Department of Chemistry, University of Georgia, USA) and Professor JW Niemantsverdriet (Eindhoven University of Technology, the Netherlands).

The international impact of her research, specifically related to density functional theory calculations, is reflected inter alia by the fact that a link to one of her articles was placed on the webpage of Scientific Computing and Modelling NV of the Vrije Universiteit, Amsterdam, by the developers of the Amsterdam Density Functional computational chemistry software programme.



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Distinguished Young Women Researchers (Physical and Engineering Sciences category).



<u>Dr Nosipho Moloto.</u>

Winner: Dr Nosipho Moloto

Dr Nosipho Moloto obtained her PhD in chemistry from the University of the Witwatersrand, where she is currently a lecturer and researcher. Moloto's research career began while she was studying for an MSc at the University of Zululand. During her MSc studies she published three papers, won a number of student prizes and received a scholarship to do research work at the University of Manchester under Professor Paul O'Brien, with whom she still collaborates. She then joined the nanotechnology innovation centre at the Council for Scientific and Industrial Research to pursue research while completing her PhD, and gained valuable experience in project management and student supervision. She published seven papers during her PhD studies.

Towards the end of her PhD studies, she was selected for an exchange programme with the Massachusetts Institute of Technology (MIT).

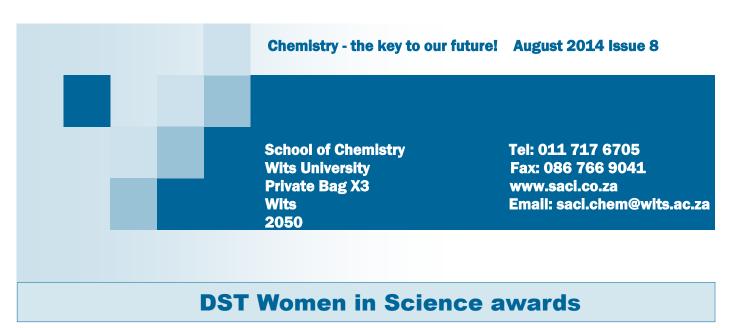
She then worked as a postdoctoral fellow for a year in Professor MG Bawendi's lab at MIT. After returning from MIT, she briefly joined the University of Johannesburg and subsequently went to the School of Chemistry at the University of the Witwatersrand. Since joining the University of the Witwatersrand, she has been slowly building her own independent research group. Her research training focused largely on finding various synthetic methods for the production of semiconductor nanocrystals. While her group still focuses on this, they have started to venture into the application of these materials, looking into electronic devices such as photovoltaics and gas sensors, as well as biological applications as labelling materials. Her current group comprises of five full-time and two part-time PhD students, as well as two MSc students.

Moloto has thus far published more than 20 papers in accredited international journals (H index of 5, an index that measures both the productivity and impact of the published work of a scientist or scholar).



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She has attracted research funding from various sources such as Thuthuka, the Technology and Human Resources for Industry Programme, Eskom and Carnegie, and is involved in various local and international research collaborations. She has also been active in various forums and committees, co-ordinating the Materials III course in the Faculty of Science, serving on the School of Chemistry's safety committee, occasionally sitting on the selection and interviewing panels for the Faculty of Science, participating in the university's Energy Forum, and serving as a focus area co-ordinator for the Materials for Energy Group (a group of researchers in chemistry, physics and metallurgy who are conducting research in energy-related topics).

Moloto is an executive member of the South African Nanotechnology Initiative and the Gauteng Region of the South African Chemical Society. She is also a co-founder of the annual Nanotechnology Young Researchers' Symposium, which has been successfully running since its inception in 2007. She was on the organising committees of the NanoAfrica 2012 and 2014 conferences, the biggest and longest-running nanotechnology conference in Africa. She also does volunteer work to promote science in association with the South African Agency for Science and Technology Advancement.

Her future and ongoing research focuses on the further applications of computational chemistry in determining the structure and energy of transition metal complexes, transition states and reaction intermediates. The computational chemistry will be applied to both homogeneous and heterogeneous systems.

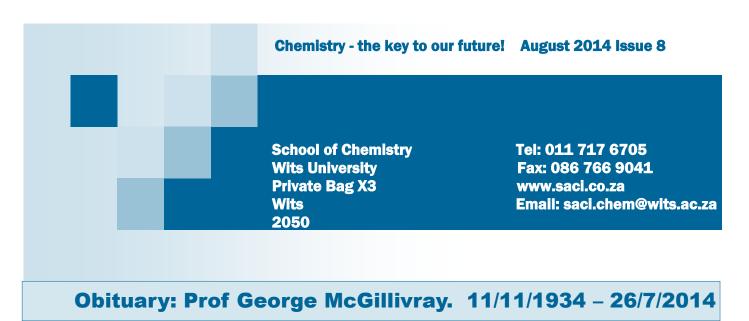
Obituary: Prof George McGillivray. 11/11/1934 – 26/7/2014





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George McGillivray was born on 11th November 1934 in Alice, Eastern Cape where his father was associated with the Lovedale Missionary Institute. For senior school, he was a boarder at Dale College in King Willliams Town. In 1952 he went to Rhodes University where he majored in physics and chemistry, and then went on to do a Chemistry Honours degree. He was a junior lecturer and then a lecturer in Chemistry at Rhodes for 5 years. During this time he was a warden of Atherston house.

He went to Liverpool University in 1961 to do a PhD under Professor George Kenner. His thesis was on the 'Synthesis of Pyroketones and Porphyrin', He graduated in 1964 and then returned to Pretoria, where he joined the staff of the Chemistry Department at the University of South Africa (Unisa) as a lecturer. His research work was not only in the field of synthetic chemistry but also on the teaching of a practical subject (chemistry) in a distance learning environment.

In 1968 he went to the USA on both an Ernest Oppenheimer Advanced Study grant and a travel grant from the CSIR. He did post-doctoral work under Professor EC Taylor at Princeton University and worked on the synthesis of heterocyclics in collaboration with a group at Norwich University. Back in Pretoria in 1969, he was appointed Professor of Organic Chemistry. In 1975 he again travelled overseas to Houston where he worked under Professor Stevens at Rice University for a year.

At Unisa his interests were two fold – helping those students, who had not had the benefit of a laboratory at school and good quality science and mathematics teaching, to enter university for a science degree. To this end, introductory courses in Chemistry, Physics and Maths were designed to bridge the gap for such students. His other challenge was teaching the practical aspect of the subject and various approaches were used over time as the number of students increased. At one stage Potchefstroom University offered their laboratories during vacations for a concentrated practical course. In 1986 Professor McGillivray was invited to take part in a symposium at the 13th IUPAC Conference in Chemical Education in Puerto Rico. He was also a visiting Professor at the Open University in Israel. In 1991 he was appointed Head of the Chemistry Department at UNISA

In 1996 he was appointed Dean of Science at UNISA. He encouraged the development of computer laboratories in both UNISA's Pretoria and regional offices for use by students, thanks to a donation from AECI. He was a plenary lecturer at the 6th International Chemistry Conference in Africa, held in Accra, Ghana. For the first time, distance learning was given plenary lecture status.

He served on the Northern Transvaal Section of SACI and was a Council member. He retired from UNISA at the end of 1999

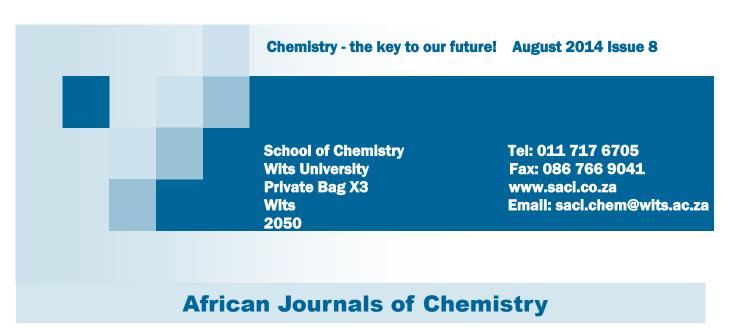
In 2002 he was involved in the establishment of The University of the Third Age (U3A) in Pretoria and worked hard with his committee to grow this organisation for the retired. He also gave time to the Citizens' Advice Bureau, an office in the Pretoria CBD helping those less fortunate with their problems. He was married to Rosemary Taylor and they have two sons, George (Geordie) a pediatrician in Melbourne and Richard a financier in Hong Kong In 2013 he and Rosemary relocated to Knysna and settled in the Belvidere Park Retirement Village. Soon after he was diagnosed with kidney cancer, a condition he fought bravely for a year.

Rose McGillivray and Gus Gerrans



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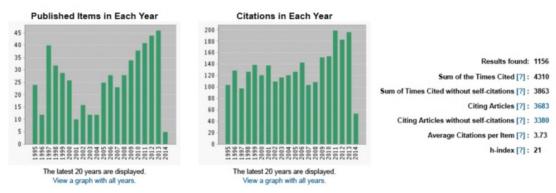


South African Journal of Chemistry

This Journal is published electronically. The webpage is: <u>http://www.saci.co.za/</u>

Report on SAJChem (taken from annual report)

Thanks to Graham Jackson for his contributions to the journal as editor-in-chief the last couple of years. Under his leadership the journal went from strength to strength. He introduced an electronic submission/management system that took some time to develop. It is working reasonably well at the moment. Most of the editors make use of the new system and the remaining ones have also indicated that all new papers will be handled through the system. Gert Kruger took over from Graham as editor-in-chief recently. A users-manual for the editors on using the system was recently prepared and introduced. Stats about the Journal are presented below.



It is clear that the numbers of papers per year (that are published by the journal) are steadily increasing since 2004. The number of citations is also increasing since 2008. Credit should go to the Science editors: Organic Chemistry

- Professor Willem van Otterlo
- Dr Leigh-Anne Fraser
- Dr Tricia Naicker Physical Chemistry
- Professor Bice Martincigh
- Analytical Chemistry
- Professor Luke Chimuka
- Dr Patricia Forbes Inorganic Chemistry
- Professor Simon Lotz
- Educational Chemistry
- Professor John Bradley
- Computational Chemistry
- Dr Gerhard Venter
- Nanochemistry
- Professor Neerish Revaprasadu

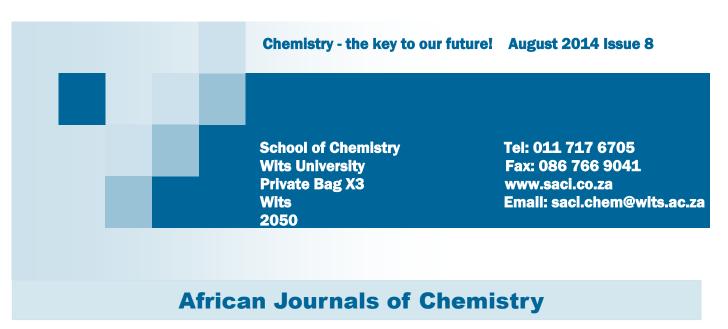


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South African Journal of Chemistry

We are considering appointing one more inorganic editor. This will be done in consultation with Prof. Simon Lotz. The editors from the rest of the fields appear to cope with the number of submissions.

The majority of the papers published are still from South Africa. The top 100 countries of authors that have published in the journal are presented below. Iran is in second place, followed by India and China. USA is in 5th place, followed by Germany, Australia and England. At least 14 other African countries are publishing in the journal.

In 2013, we have rejected a total of 106 papers, while 46 papers were published.

In 2010 the journal published 39 articles comprising 232 journal pages; the corresponding data for 2011 was 41 papers (262 pages), 2012 was 44 papers (285 pages) and 2013 was 46 papers (289 pages). 12

The current system does not have stats readily available about the (average) time it takes to publish papers. My feeling is that it still takes too long (more than 2 months). We will try to speed up the process by shortening the frequency of automated reminders to reviewers. We should also find a solution to shorten the time/process before too specialized papers are referred back to the author for publication elsewhere. Gert Kruger

African Journal of Pure and Applied Chemistry

African Journal of Pure and Applied Chemistry Table of Content Volume 8, Issue 5 May 2014

Submit manuscripts: http://ms.academicjournals.me; Editorial ffice:ajpac@academicjournals.org

African Journal of Chemical Education

Enquiries and manuscripts should be addressed to the Editor-in-Chief: email eic@faschem.org, PO Box 2305, Addis Ababa, Ethiopia. June 2014 edition published

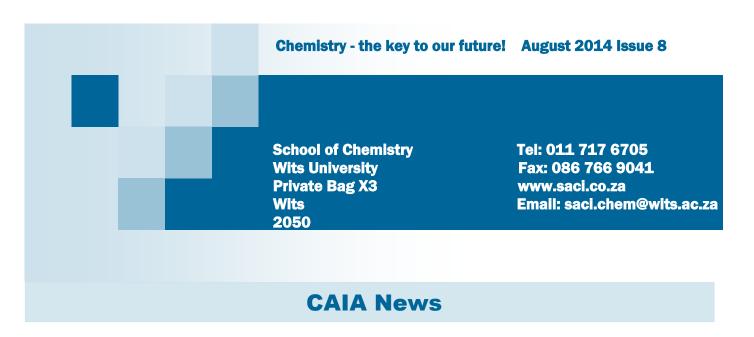
Nanonews in South Africa

For those doing nanochemistry: SAASTA now produces a newsletter. <u>nanonews@npep.co.za</u>. Prof Janice Limson, NPEP NanoNews Editor



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The latest issue of CAIA news i.e. Issue 138 July 2014, is available. Go to: www.caia.co.za or http:// www.caia.co.za/events.php?cat=n&pg=23 (events) or *e-mail: caia@iafrica.com*

SACI and SACI related Workshops

A short course on Inductively Coupled Plasma – Optical Emission Spectrometry (ICP-OES) will be presented by Dr Johann Fischer and Dr Ljiljana Marjanovic on 7 September 2014 - see attachment for details. Registration for the course is via the Analitika 2014 Conference website http:// www.analitika2014.co.za/



SHORT COURSE ON

INDUCTIVELY COUPLED PLASMA -OPTICAL EMISSION SPECTROMETRY **ICP-OES**

Presented by Dr Johann Fischer^a and Dr Ljiljana Marjanovic^b * Sasol Technology (Pty) Ltd, Research and Technology; 1 Klasie Havenga Street, Sasolburg, 1947, johann.fischer@sasol.com

^b SGS South Africa (Pty) Ltd, Geochem division, 58 Melvill Street Booysens, 2091

Sunday 7th September 2014, 10:00, Khaya iBhubesi, Parys, RSA. Duration 4 hours.

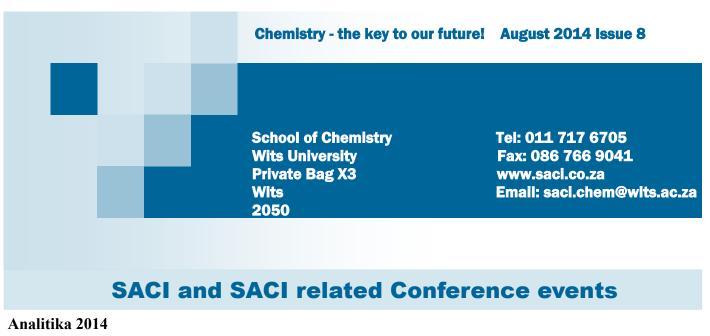
ABSTRACT:

This course aims at giving a quick overview of the basics of ICP-OES as an analytical technique. It will cover all the aspects normally found in and BSc Hons course on ICP-OES but not to the same depth. The focus would be to inform and create awareness with the ICP-OES user on what lies behind the pretty shining plasma. A user who is aware of what is happening to his sample in order to produce a result, is a user who will pay attention to detail and not make silly mistakes in handling his sample or not take shortcuts in preparing his calibration which will only lead to useless information generated on a very expensive piece of equipment. Learner participation will be widely welcomed to ensure that each participant will benefit from a personal and relevant enrichment of his/her knowledge of ICP-OES.

COURSE COST:

- Delegate Registration: R 950 (including VAT, course handouts, light lunch, tea and coffee) Full-time Student Registration (with motivation from promoter): R570 (including VAT, course
- handouts, light lunch, tea and coffee)

Please note that space is limited; your place on the course will only be reserved once payment has been received! The closing date for the registration 15th August!





SHORT COURSE ON SAMPLE PREPARATION FOR ENVIRONMENTAL AND BIOMEDICAL ANALYSIS

Presented by Prof Jan Åke Jönsson Department of Chemistry, Lund University, Sweden 4 to 5 September 2014 Quantum Hall, NMISA CSIR, Pretoria

Abstract:

In analytical chemistry, sample preparation is an important activity. It forms the link between samples from the environment, from biological specimens, from industrial products, etc, and the analytical instruments. In most applications of chemical analysis, unit operations as different types of extraction, enrichment, derivatisation, solvent changes and purification are necessary in order to be able to successfully apply modern and sensitive instruments.

This short course will cover most of the techniques that are used for sample preparation in modern organic analytical practice with some emphasis on miniaturized membrane-based extraction techniques.

Please refer to the detailed course content and abbreviated biography of the presenter below.

Cost: (including course handouts, light lunch, tea and coffee)

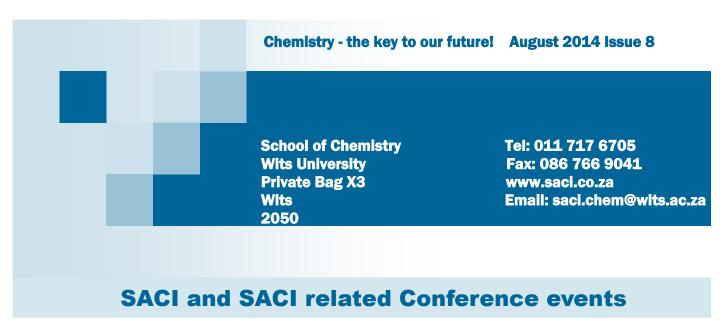
Delegate Registration: R 1 995 (including VAT)

Full-time Student Registration (with motivation from promoter): R1 140 (including VAT) **On-line registration** via the ANALITIKA 2014 conference website (<u>www.analitika2014.co.za</u>)

Please note that space is limited; your place on the course will only be reserved once payment has been received!

Enquiries:

Course content:	Prof Luke Chimuka (<u>Luke.Chimuka@wits.ac.za</u>)
Registration:	Carla de Jager (carla@carlamani.co.za)



SACI Inorg 2015. Sunday 28th June to Thursday 2nd July 2015, Grahamstown. (This is timed so that delegates can stay on for the National Arts Festival 2nd July to 12th July, if they so wish.)

Analitika 2014

Contact Patricia Forbes, <u>Patricia.Forbes@up.ac.za</u> the chair of the scientific committee or <u>Mike Britton</u> <u>Email: mike.britton@necsa.co.za</u> for preliminary information



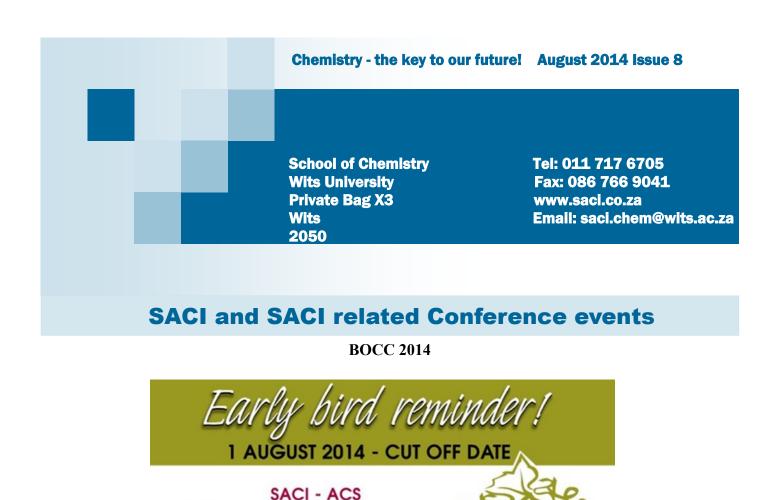
Analitika 2014 will be held from **7 to 11 September 2014** on the banks of the Vaal River at *Khaya iBhubesi* on the outskirts of Parys, only 120 km from Johannesburg.

This Conference, the seventh in a series since 1992, will for the first time be organised jointly by four SACI Divisions (the Analytical Division, ChromSA, SAAMS and ThermSA), as well as the SA Spectroscopic Society (SASS) and will cover all aspects of analytical chemistry.

The theme of the conference, *Milestones in measurements*, will be addressed by several prominent overseas and local scientists who have agreed to participate as invited speakers – see details below.

In addition, more that 50 oral and 55 poster presentations will be delivered during the Conference and all the leading vendors will exhibit their latest analytical equipment. The full programme will be posted on the Conference website by 9 July.

For more information, and to register for *Analitika 2014*, please visit the Conference website (<u>http://www.analitika2014.co.za/</u>).



Please see our **website** for more information: http://academic.sun.ac.za/FrankWarren/index.html Seven confirmed American speakers, as well as a broad selection of South African plenary and invited lecturers

>>> INCORPORATING THE THIRTEENTH FRANK WARREN CONFERENCE

SOUTH AFRICA

Bi-nationa

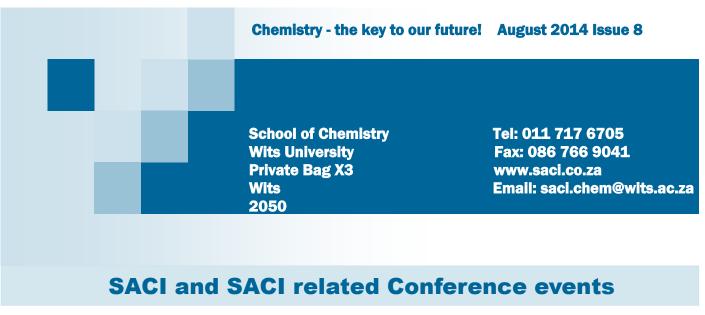
Organic Chem

Time is marching on and the BOCC conference organization is well on its way! The number of people registering is ticking over nicely – and a preliminary <u>timetable</u> is already available on the web!

In terms of the "early bird" registration fees, please be reminded that payment must be received by the 1st August. After this date an increased registration fee will be levied (see <u>registration</u> fees).

Please thus register asap (by logging onto the following <u>website</u> to facilitate the invoicing and payment process).

Willem van Otterlo



Others.

• MAM-14, 23-27 November 2014, Emperors Palace, Johannesburg. Enquiries may be directed to the DST/Mintek NIC office at E-mail: secretariat@mam-14.com. Themes covered in previous MAM series will be retained while there is opportunity for new areas to be explored:

2nd International Symposium on Natural Products, 23-25 September, 20114, Cape Town,

2nd International Symposium on Natural Products



23-25 September 2014 Cape Town, South Africa

Registration will close on 5^{th} September – <u>act now</u>

Register now

There are only a few days left to register for the <u>2nd International Symposium on Natural Products</u> - and spaces are filling up fast. Join our speakers which include:

Luiz Dias, UNICAMP, Brazil	Philippe Rasoanaivo , University of Antananarivo, Madagascar
Rebecca Goss, University of St. Andrews, UK	Yu Shi-Shan, Institute of Materia Medica, Chinese Academy of Medical Sciences, China
Charles Midega, ICIPE, Kenya	Shi Zhang-Jie, Peking University, China

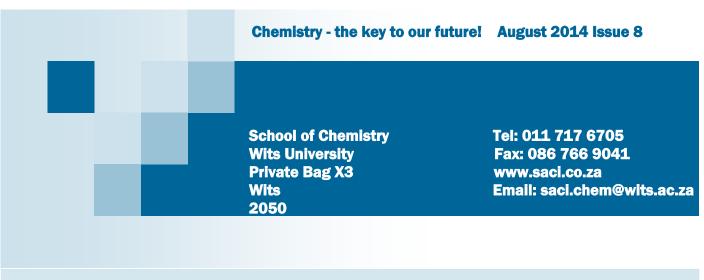
... and a host of distinguished researchers and be part of this exploration of natural product research.

For full details on how to get involved in this event, please visit the conference web page.

We look forward to welcoming you to Cape Town this September.

Royal Society of Chemistry

The 2nd International Symposium on Natural Products is supported by the National Natural Science Foundation of China (NSFC) and the Royal Society of Chemistry.



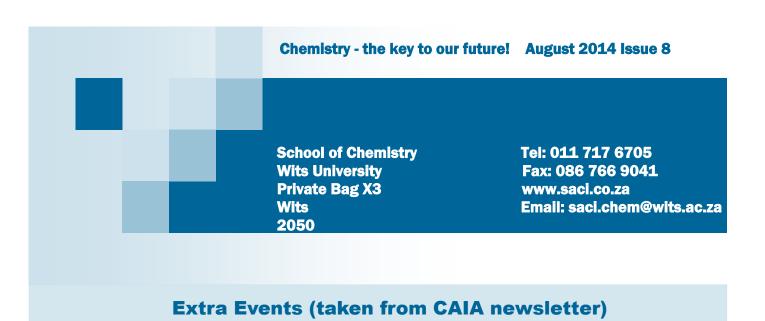
Conference List

- NANOCON 014 on Nanotechnology 14 15 October 2014, Pune, India smart materials, composites, applications and new innovations. (<u>www.bvunanocon.com</u>)
- Test and Measurement 2014: conference and workshop, 29th September 1st October 2014, Misty Hills Conference Hotel, Muldersdrift, Gauteng, South Africa E-mail: <u>steves@nla.org.za</u>, www.nla.org.zaENCE
- **2nd Abuja International Conference on Science, Technology and Engineering;** 13-16 October, 2014, FCT Education Resource Center, Abuja-Nigeria; For more information or clarification on any aspect of the Conference, please contact the secretariat, Professor M.O.N. Obagah, Tel: +2348035128849; email: <u>abujaconference@gmail.com</u>
- Chemical Society of Nigeria (CSN) and the FASC Congress 2015; 21st 25th September 2015; Transcorp Hilton Hotel or New Chelsea Hotel in Abuja, FCT, Nigeria.
- 2nd International Symposium on Natural Products, 23-25 September 2014, Cape Town, South Africa, rsc.li/natural-products-2014
- **IBSA Nano-Workshop 2014: Advanced Materials,** 1-2 Dec. 2014, UNESCO UNISA Africa Chair, South Africa www.amrs-southernafrica2014.com •Info: <u>amrs-southernafrica@tlabs.ac.za</u>
- **Regional AMRS Workshop-2014, 3-4 Dec. 2014, UNESCO UNISA Africa Chair, South Africa** *www.amrs-southernafrica2014.com* •*Info: amrs-southernafrica@tlabs.ac.za*
- Catalysis Symposium of India, CSMCRI Bhavnagar, January 2015. Dr S. Kannan, Organising Secretary. <u>gd.yadav@jctmumbai.edu.in; gdyadav@yahoo.com; gdyadav@gmail.com</u>
- 2nd International Symposium on Natural Products, 23-25 September, 20114, Cape Town, please visit the <u>conference web page</u>



Your partner in electrochemistry represented locally by





- 22nd Annual Polyethylene-Polypropylene Chain Global Technology & Business Forum, 3-4 September 2014, Singapore. Email: <u>chemweek@chembusiness-media.com</u>
- FO Lichts Sugar and Ethanol Africa conference, 9-11 September 2014, Hilton Hotel, Durban, Contact <u>alfstevens@icon.co.za</u> or 082 453 1323.
- NOSHCON 2014, 9-12 September 2014, Champagne Sports Resort, Central Drakensberg, KZN. Contact: Tel: 010 226 4000, Fax: 086 755 8867, E-mail: noshcon@nosa.co.za
- 2014 World SODA Ash Conference, 16-18 September 2014. Shanghai, China. Email: chemweek@chembusiness-media.com
- Global Plastics Summit & Industry Workshops, 30 September- 02 October 2014. Chicago, IL USA. Email: <u>chemweek@chembusiness-media.com</u>
- 32nd Annual World Menthol Conference, 21-23 October 2014, Amsterdam, the Netherlands. Email: <u>chemweek@chembusiness-media.com</u>
- The Global Sustainable Chemistry & Engineering Event, 11-13 November 2014, Congress Center, Basel, Switzerland. Contact: Ecochem, Tel: +44 (0) 20 7492 1774; E-mail: <u>info@ecochemex.com</u>; <u>Www. ecochemex.com</u>
- 9th Southern African Energy Efficiency Convention, "Energy Super Heroes saving the world by saving Energy", 12-13 November 2014, Emperors Palace, Johannesburg. Contact: Christi Bester, Tel: 018 293 1499; E-mail: admin@saee.org.za



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Dear SACI Members,

On behalf of the SMM team, it gives me great pleasure to invite you to attend our Agilent Molecular Spectroscopy Premium Tour to be hosted at the University of Johannesburg, Kingsway Campus, Auckland Park on the 15th of September 2014 (Full details above).

Please note Invitation, Registration form and Map to the venue was emailed to all SACI members. Kindly complete the registration form by 8th of September 2014 and send to<u>viruschkat@smmafrica.com</u> Kindly extend this invite to all your colleges whom may be interested in Molecular Spectroscopy.

We look forward to seeing you there.

Kind Regards, <u>SMM Instruments (Pty) Ltd</u> Viruschka Tewary (Marketing Coordinator)

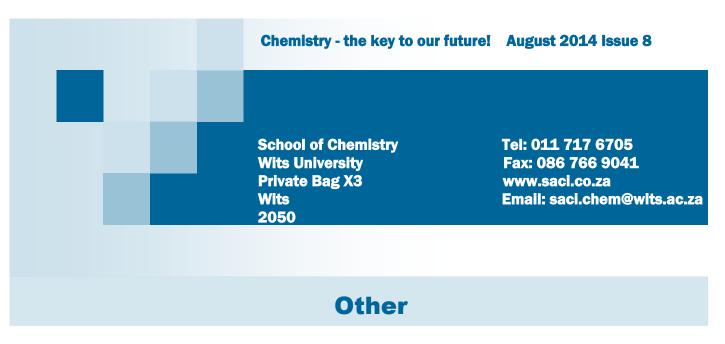
> **Tel:** +27 (0)11 540 6000 **Fax:** +27 (0)86 402 6112 Cell: +27 (0)79 829 5888 **E-mail:** <u>viruschkat@smmafrica.com</u> **Website:** <u>www.smmafrica.com</u>

SMM Instruments in association with Agilent Technologies, Invites you to attend The Agilent Molecular Spectroscopy Premium Tour, to be hosted at The University of Johannesburg, Kingsways Campus, Physics Department, C1 LAB, 1st Floor. Monday the 15th of September 2014

The Agilent Cary 7000 UMS will satisfy all your solid sampling needs. Measure virtually any sample; measure absolute reflectance and transmission at any angle; and measure them all unattended.

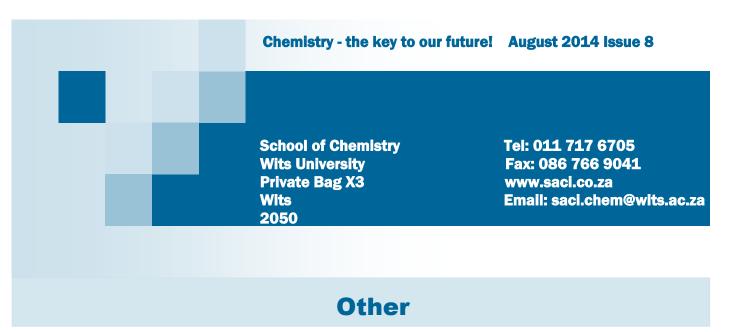
The Agilent Cary 5000 combines PbSmart detector technology with the unparalleled optical design and performance of all Cary UV-Vis-NIR instruments.

The Agilent Cary 620 FTIR Imaging Microscope provides the widest field of view, with the highest spatial resolution in the fastest time. Multi-measurement modes and extend traditional imaging measurement to new boundaries.



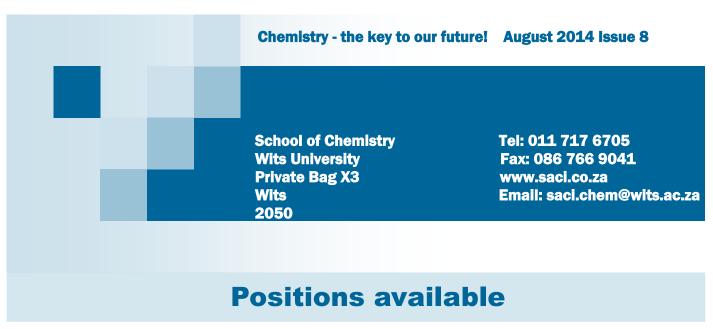
MAM-14 conference





CATSA conference





POST-DOCTORAL FELLOWSHIP IN THE CENTRE FOR SUPRAMOLECULAR CHEMISTRY RESEARCH (CSCR) AT THE UNIVERSITY OF CAPE TOWN

The CSCR invites applications for a Postdoctoral Research Fellowship for a period of one year starting in 2015, with the possibility of renewal for a further year. The fellowship is funded by UCT's University Research Committee and is a post-review incentive award for URC-accredited research groupings, the CSCR being one such grouping. The CSCR was constituted in 1997 and focuses on the physical chemistry of supramolecular systems. Research projects include the synthesis and characterisation of open framework transition metal structures and large metal-containing supramolecular assemblies that have potential for guest uptake (gas storage, molecular sensing), the study of selectivity in organic host-guest systems, and the beneficiation of pharmaceutically relevant materials through the investigation of their polymorphs, solvates, cyclodextrin inclusion complexes and co-crystals. Solid phases are studied using powder and single crystal X-ray diffraction, thermal analysis, and spectroscopic methods.

The successful candidate will be expected to participate in projects in the field of supramolecular chemistry, in the current niche areas, namely host-guest chemistry, crystal polymorphism, crystal engineering of coordination polymers, metal-organic frameworks, co-crystals, inclusion complexes and large supramolecular assemblies. Synthesis of new supramolecular compounds in these focus areas and their complete characterization using physicochemical techniques will be the successful candidate's primary activities.

During tenure of the fellowship, the fellow will be directly responsible to the designated principal investigators (Prof M R Caira, Prof S A Bourne and Dr C L Oliver). As a postdoctoral research fellow in the Department of Chemistry at the University of Cape Town, the fellow is also responsible to the Head of Department and to the Dean of Science.

roficiency and recent documented experience in the use of the following techniques is essential:

X-ray diffraction (on single crystals and powders)

Thermal analysis (HSM, DSC, TGA)

Spectroscopic techniques (NMR, FTIR, UV-vis)

Value and tenure:

The value of the Fellowship is fixed at R185 000 per annum and is tenable for one year. Renewal of the award for a second-year is dependent on satisfactory academic progress. No relocation expenses are available. An additional R15 000 will be available annually for conference attendance and/or travel costs. The Fellowship carries no benefits and a directive for tax exemption will be applied for by UCT on behalf of the successful candidate.

Conditions and Eligibility:

Both South African and foreign candidates are eligible.

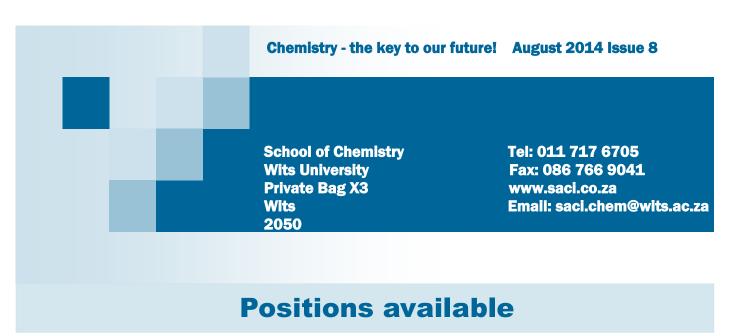
Applicants must have completed their doctoral study in the last five years.

Applicants may not previously have held full-time professional or academic posts.

The successful candidate will be expected to contribute substantially to the publication of at least two peer reviewed journal articles in the first year of the fellowship.

• The successful candidate will be required to enter into a Memorandum of Agreement with the University of Cape Town and a Memorandum of Understanding with his/her Principal Investigator.

The successful candidate will be required to comply with the University of Cape Town's approved policies, procedures and practices for the postdoctoral sector.



Application requirements:

Applications must include the following:

A covering letter explaining the candidate's suitability and experience, as well as his/her availability.

The applicant's full curriculum vitae and a **full list** of publications.

The names (and contact details) of at least two academics who have taught, supervised or worked alongside the applicant.

Certified copies of all academic transcripts (undergraduate, Honours (if applicable), Masters (if applicable) and PhD). *Please do not include copies of certificates.*

Applicants who have not yet graduated with a PhD must provide proof that the PhD thesis has been submitted and such proof must be accompanied by a statement by the supervisor that the degree is likely to be awarded. All South African and foreign candidates who meet the above conditions are eligible.

Selection process:

•Eligible and complete applications will be considered by a committee which will be chaired by the Director of the CSCR and which will include the senior academic members of the Centre.

The fellowship is based on academic merit. The number and quality of the applicant's peer-reviewed publications in a field relevant to the proposed research will be taken into account.

All applicants are subject to the policies, procedures and rules surrounding the postdoctoral sector at the University of Cape Town.

The closing date for receipt of applications is 30 September 2014

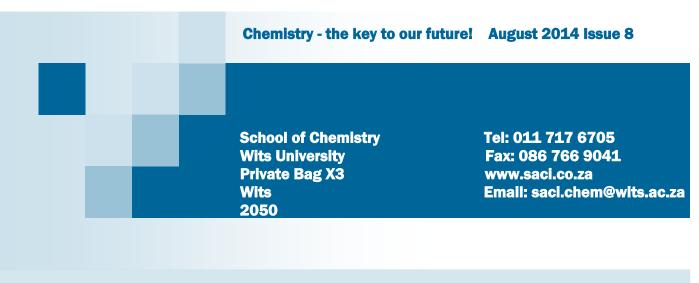
Enquiries and completed applications should be sent via email to the Administrative Officer for the CSCR, Mrs Karin Badenhorst :

Karin (Karin.Badenhorst@uct.ac.za)

Please note that late and/or incomplete applications will be disqualified

The University of Cape Town reserves the right to make no awards at all, to cancel the award if the conditions are not met, and to effect changes to the conditions of the award. The University of Cape Town reserves the right to disqualify ineligible, incomplete and/or inappropriate applications.

C/:Conditionsofaward/CSCRPDRFApprvdJuly2014



Positions available

Scholarship Opportunities for MSc and PhD studies in 2014/2015

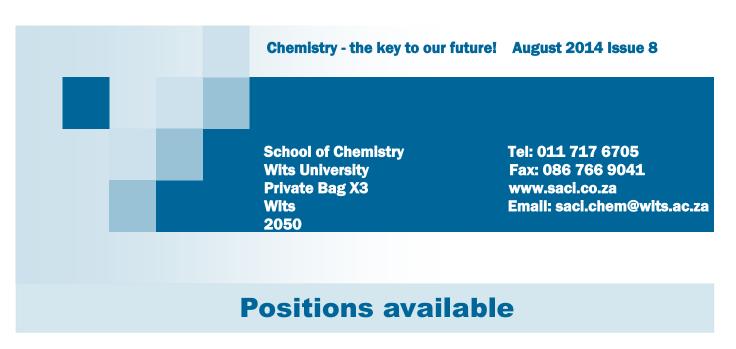


Scholarship Opportunities for MSc and PhD studies in 2014/2015

Continuous flow chemistry in drug discovery and process chemistry

The Organic Chemistry group at the University of Pretoria is offering three scholarships (1 MSc and 2 PhD) in Organic Chemistry. The successful candidates will be afforded the opportunity to be involved in either a drug-discovery or process development program. The drug-discovery program involves the targeting of Alzheimer's disease through the development of cholinesterase and beta-secretase inhibitors. The process development program looks at utilizing cutting edge flow technology to develop more efficient and cost effective syntheses of existing drugs and synthetically important molecules.

Interested candidates should send a brief CV, transcripts and list of references to Dr Darren Riley at <u>darren.riley@up.ac.za</u>. For further information please contact Dr Riley on 012 420 3097



Post-doctoral positions in Renewable Polymers

The Ferrier Research Institute of Victoria University of Wellington is a leader in Carbohydrate Chemistry research and development, with programs in drug discovery and renewable polymers. Our team of 25 professional scientists is located in well-equipped laboratories at the Gracefield Research Centre in Lower Hutt, New Zealand.

We are looking to recruit two PhD graduates to two-year fixed-term postdoctoral positions to work in our renewable polymers program. There are two roles, focused on (a) the synthesis of cellulose-derived materials, and (b) liposome and micelle formulations.

We want motivated individuals who can contribute to intellectual property generation and then to publications in leading journals. You will work on new product development and formulation in a program with strong industry engagement. Your skills in organic chemistry, chemo-mechanical processing, chemical analysis and formulation science will be valued. We will provide an environment in which creativity, experimental research and client focus merge to generate industry-ready solutions for rapid commercialisation.

The ideal candidate would have expertise in the chemistry of biomaterials, particularly cellulose, and / or emulsification and dispersion processes suitable for direct industrial application. Minimum requirements

- PhD in chemistry or chemical engineering (a) polymers or materials; (b) formulation technologies
- Evidence of research outputs
- Computer literacy

Preferred experience

- 1-2 years of post-PhD industrial-type work experience
- Good understanding of organic synthesis techniques and principles
- Expertise in formulation technologies associated with polymers

Contact: Rachael Odlin, Institute Manager, Ferrier Research Institute Rachael.odlin@vuw.ac.nz www.victoria.ac.nz/ferrier Reference Vacancy# 236