FASC Newsletter

April 2019

IYPT events have continued onwards with the 47th IUPAC World Chemistry Congress taking place from 7-12 July 2019, now only a few months off. FASC will be well represented at this event. Also – another young African chemist (Cynthia Ibeto, Nigeria) has been linked to Argon and joined the group of students with an element associated with them (a ‘Young Chemist Element’).

Neil Coville

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- Botswana Chemical Society (BCS), SEANAC and FASC conferences, Gaborone, Botswana
  - 2nd Training workshop for Women Chemists, Lagos, Nigeria.
  - 42nd Annual conference of the Chemical Society of Nigeria, and ACRICE-4 2019, Lagos, Nigeria
- 10th International Symposium on Microscale Chemistry, Potchefstroom SA
- 70th Annual Meeting of the International Society of Electrochemistry, Durban SA
- 6th IUPAC International Conference on Chemistry Education, Cape Town, SA
- Frank Warren Conference 2019, Drakensberg, SA
- IUPAC FOR AFRICA, Postgraduate Summer School on Green Chemistry, Dar es Salaam, Tanzania.
- The 18th Asian Chemical Congress and the 20th General Assembly of the Federation of Asian Chemical Societies, Taipei, Taiwan

Information for the newsletter

Please send all information to either Beth (admin@faschem.org) or to me (neil.coville@wits.ac.za)

Beth will place all newsletters on the FASC website. She will be responsible for sending out the newsletter every month.

Advertising in the FASC newsletter

The newsletter will provide a means of getting messages to our member countries. This newsletter thus provides a means of advertising employment opportunities, conferences and workshops, and even for companies/Universities to promote themselves. We encourage member countries to use the Newsletter for advertising purposes. All conferences and events will be advertised for free; if not a FASC country, related event there could be a small charge. For advertising costs, contact Beth in the FASC office

FASC member countries

We are currently attempting to upgrade our country membership list. There is a small charge associated with membership. Please contact the treasurer, Prof Yonas Chebude for information (yonasc@faschem.org; yonasdb1@yahoo.com)
The dates and venue for the upcoming FASC 2019 event have now been finalised

- The Botswana Chemical Society (BCS) will host their first Chemistry conference from September 25-27, 2019.
- This will take place in Gaborone, Botswana.
- The conference will be hosted by the University of Botswana in their brand new conference centre that has an auditorium for plenary lectures and rooms for parallel sessions.
- A three day SEANAC conference will be held concurrently with the BCS meeting.
- The last day of the event will be dedicated to FASC activities.

The first flyer is given at the end of the newsletter. Please diarize the dates.

Periodic Table (IYPT)

2019 is the Year of the Periodic Table

International Younger Chemists Network (IYCN)

Obituary. Nobel Prize winner: Sydney Brenner

Sydney Brenner, 1927-2019

A scientific giant, Sydney Brenner has died at the age of 92. He was present at the beginning of molecular biology – while in the chemistry department at Oxford, he carpooled with Dorothy Hodgkin, Leslie Orgel, Jack Dunitz and others over to Cambridge to see Watson and Crick’s new model for the structure of DNA back in April 1953. And he never looked back. He and Crick ended up collaborating for many years. He was the first to realize that there needed to be such a thing as messenger RNA, and was crucial in working out the triplet-code system for amino acids.

Brenner began to feel that the major problems of early (“classical”) molecular biology were either solved or on their way to being solved, and looked for a way to extend his research into the downstream effects of genetics. He turned to simple model organisms to work out more details of genetic and cellular function, famously choosing the *C. elegans* nematode ([here’s a copy](#) of his letter requesting the initial batch!) This was an *enormously productive* line of research – when he shared the [Nobel in 2002](#), he cited his choice of organism as one of the best decisions he’d ever made. “*Without doubt the fourth winner of the Nobel prize this year is Caenohabditis elegans; it deserves all of the honour but, of course, it will not be able to share the monetary award.*”

They grow quickly, their bodies are transparent, their self-fertilizing nature makes isogenic populations easy to produce and maintain, they produce a large number of interesting viable mutants – Brenner chose well indeed. He and his co-workers worked out the basic map of the organism’s nervous system and much more – the
organism has a constant number of cells (959 in the common hermaphroditic form, 1031 in the rarer males), and the lineage and fate of every single one has been studied in detail. Hundreds of papers a year continue to appear on nematode work, and the little guys have certainly not yielded all their secrets yet.

Sydney Brenner won basically every major award a biologist can win, and is considered one of the founders of chemical biology and other fields besides. I very much regret never having had the chance to meet him in person – he was famously well-spoken, with a wit that sometimes had to be edited out in interviews because it cut a bit too close for editorial comfort. For many years, he wrote a column in Current Biology entitled “Loose Ends”, which I always looked forward to reading. This ranged rather widely, from thoughts about research strategies all the way to advice on the perfect practical joke. I remember that column vividly, and I cannot resist quoting it:

I was visiting the W—Pharmaceutical Company in Japan and at the end of the tour I was taken to a meeting room where everybody had gathered. This company made a Japanese herbal remedy concocted from fermented garlic, which was widely used. It was called something like Lycopentane, which sounds like lighter fuel for werewolves, and was so vile tasting that it had to be taken in gelatine capsules. The dose was large, however, and the capsules could not be filled and sold without leaking, so a kit was provided with a dropper bottle and empty capsules. I said I would like to try the remedy and with much amusement a kit was brought in. I filled a capsule and swallowed it. As it went down, I gave a strangled cry, followed by a gurgle, rolled off the chair and lay motionless on the floor. Through one half-opened eye I observed the reactions of my hosts. They were thunderstruck; the blood had drained from their faces and in the few seconds that I lay there, I could see running though their minds questions such as how to dispose of the body and what to do about my colleague who had observed the event, also with surprise. The laughter when I rose from the floor was almost hysterical, and, in the end, everybody enjoyed themselves. I am quite famous in Japan for this and every now and then, somebody comes up to me, shaking their head, nudging me and saying “W—Pharmaceutical Company.”

This is a man who will be missed. Here’s to his long, interesting, and productive life!

by Derek Lowe 5 April, 2019

Country news

1) Tunisian Chemical Society

The third Coordination Chemistry Days (JCC-2019) from 26 to 29 September 2019, Laico Hotel, Hammamet, Tunisia.
Organized by the Tunisian Chemical Society Coordination Chemistry Group in collaboration with the RSC Tunisia Local Section (RSCTLS).
For more details please visit:  http://www.sctunisie.org
e-mail: contact@sctunisie.org
2) Mauritanian Chemical Society

The second International Days of Chemistry (JIC-2019) from 14 to 16 November 2019, Nouakchott Mauritania. Organized by the Mauritanian Chemical Society (SCM) in collaboration with University of Nouakchott El Aasriya. For more information please visit: http://www.scmauritania.org; e-mail: contact@scmauritania.org

3) Ghana

A consortium working on a Royal Society/DFID Africa Capacity Building Initiative Project is putting together an international conference on Materials for Renewable and Sustainable Energy from 03 to 05 June 2019 at the Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana. The consortium is made up of the Schools of Chemistry and of Materials, University of Manchester, UK, Departments of Chemistry, KNUST, Kumasi, Ghana, University of Zululand, South Africa and University of Yaounde, Cameroon. The Conference is in memory of Prof Paul O’Brien (CBE, FRS, FRSC) of the University of Manchester who was the Team Leader for the consortium. Unfortunately, Prof O’Brien passed away in October last year. Prof O’Brien was one time Vice President of the RSC (during the time of Prof David Philips). We would be very grateful if you could advertise this event on the FASC website for us. Please find attached a conference poster for that purpose.

Prof Johannes A. M. Awudza, Department of Chemistry, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, Chairman, Local Organising Committee for the Conference

IUPAC news

i) International Younger Chemists Network (IYCN)

For those requiring information on the IYCN:

Contact person: Bianca Davids: bdavids13@gmail.com ; Website: http://iycnglobal.wixsite.com/iycn; Email: IYCN@iupac.org; Facebook: @IYCN.global; Twitter: @IntlYoungerChem

I hope you’re well. I’m getting in touch to let you know about a competition being run by the International Younger Chemists Network (the early career network of IUPAC) that may be of interest to early career scientists across Africa. It’s a fantastic opportunity to showcase some of the excellent research that’s being carried out by African scientists!

ii) Engaging the Next Generation: An IYCN outreach competition, sponsored by CAS
The **International Younger Chemists Network** is proud to announce the launch of the first IYCN outreach competition: Engaging the Next Generation, sponsored by CAS, with the 2019 theme of **Climate Change**! We want to recognise exemplary contributions to chemistry outreach: we want you to submit your favourite Climate Change outreach experiment, project or demonstration before 11:59pm GMT on Wednesday 15 May for a chance to win a prize worth 250USD!


The winning experiment will win a prize worth **250USD** and be translated and shared on [https://www.iycnglobal.com/experiments](https://www.iycnglobal.com/experiments) for use in chemistry outreach by chemistry volunteers around the globe! Remember: You must submit your entry in English – don’t worry, we will judge the science, not the language, and the winning entry will receive a full English language editing service, if necessary.

*Dr Aneesa Ahmed, MRPharmS, Programme Executive, Africa, Royal Society of Chemistry*

**iii) Periodic Table of Younger Chemists Awards**

IUPAC are profiling young chemists and area associating an element with these chosen chemists The Young Chemist Element list can be found on the IUPAC website. The elements are revealed in order of their scientific discovery.

The latest chemist to join the group (element = argon) is:

**Cynthia Nkolika Ibeto**, Senior Lecturer, University of Nigeria Nsukka, Nigeria

Dr Cynthia Nkolika Ibeto is a Senior lecturer at the University of Nigeria Nsukka. She graduated with a BSc. Degree (Industrial Chemistry) from University of Ibadan in 2004. In 2007 and 2010 she obtained her MSc. and PhD. (both in Analytical Chemistry) from University of Nigeria Nsukka (UNN).
She was an Academic Research Fellow of the National Centre for Energy Research and Development, UNN (September, 2008 to April, 2016) and has worked extensively on the optimization of production processes and analysis of biofuels especially biogas and biodiesel. Her research area is in the field of Environmental/Analytical Chemistry. She has assessed a variety of persistent organic pollutants in the environment especially soil and is currently working on adding value to waste materials. Her focus is on the use of these materials (biomass ash and digestate) as soil conditioners specifically for bioremediation. She has received a number of Scholarships/awards/travel grants notably Analytical Chemistry Trust Fund, Developing World Scholarship 2014 and Schlumberger Faculty for the Future Fellowship award 2016/2017, for her research.

Dr. Ibeto is passionate about inspiring and engaging girls and women in chemistry. She has strived to achieve this as the Coordinator of Women in Chemistry (Nigeria) and the Vice-Chairman of Organization for Women in Science for the Developing World (OWSD-UNN Chapter). Her efforts have led to the organization of several training workshops, meetings and seminars for female Chemists in Nigeria.

African Journal of Chemical Education (AJCE)

A PDF version of the first issue of volume 8 AJCE 2019 is available. The online version is available at the FASC website:  
You will find the individual articles in the AJOL website (www.ajol.net.)

Papers on any aspect of Chemistry Education such as teaching organic, analytical, physical, inorganic, polymer, green, climate change/environmental chemistry, ICT in chemistry and chemistry curricula as well as assessment in chemistry are acceptable for publication. We also encourage issues on chemistry and indigenous knowledge/practice, chemical safety, natural products and related areas.

AJCE, 2019, 9(1) ISSN 2227-5835

African Journals of Chemistry

- **Chemistry Africa.**
  A Journal of the Tunisian Chemical Society

- **Journal of the Mauritanian Chemical Society (JMCS)**
  Publishes research articles and conference proceedings in English or French. This is published online at: http://www.sc mauritania.org/journal-scm; M A Sanhoury, JMCS Coordination Editor

- **South African Journal of Chemistry**
  This Journal is published electronically. The webpage is:  
  http://www.saci.co.za/ Details of the journal and the editors can be seen at http://www.journals.co.za/sajchem/. The South African Journal of Chemistry, published by the South African Chemical Institute, has been publishing high quality papers, in all fields of Chemistry for over 100 years. The
Journal went fully electronic in 2000 and is freely available through open access online (http://reference.sabinet.co.za/sa_epublication/chem).

- **African Corrosion Journal** (online). Commenced in 2015 – a peer reviewed corrosion journal. This journal may be of interest to the “practical” chemists amongst the SACI membership. [https://view.publitas.com/icp-1/african-corrosion-journal](https://view.publitas.com/icp-1/african-corrosion-journal)

- **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. Ajce, 2016, 6(1) ISSN 2227-5835. The online version appears in the FASC website (www.faschem.org) and in the AJOL website (www.ajol.info).

- **South African Journal of Science**
  
  TOC@assaf.org.za

- **Journal of the Chemical Society of Nigeria**
  
  csnjournals@gmail.com; csnjournals@yahoo.com; editor@chemsocnigeria.org

- **Bulletin of the Chemical Society of Ethiopia**
  

- **South African Journal of Chemical Engineering**
  

- **African Journal of Pure and Applied Chemistry**
  
  Editorial Office: aipac@academicjournals.org; Helpdesk: helpdesk@academicjournals.org; URL: www.academicjournals.org/journal/AJPAC

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**ACRICE-4 2019**

Africa Conference on Research in Chemical Education

Conference Dates: 8th – 13th September 2019 (CHEMICAL SOCIETY OF NIGERIA)

**Deadlines for ACRICE-4 2019 submissions**

1. Last date for submission of abstract & full papers for oral presentations – Friday, 22nd March, 2019
2. Last date for submission of abstract & full papers for poster presentation: Friday, 29th March, 2019
3. Communication of status of all submitted articles to the corresponding authors shall be on or before the close of business on Friday, 26th April 2019
4. The last date for the submission of all accepted and corrected full length papers for oral presentations with evidence of payments and conference registration would be Friday 17th May 2019
5. The last date for the submission of all accepted and corrected full length papers for poster presentations with evidence of payments and conference registration would be Friday 24th May 2019
6. Payments to be made for accepted articles for publications in the conference book of proceedings after presentation at the conference is N7,500.00 only.
7. Poster presentation session which will be held from Tuesday 24th – Thursday 26th September 2019
The African Academy of Sciences and Royal Society announce the African recipients of £25M FLAIR scheme

04 April 2019
African scientists drawn from across the continent gathered in Naivasha from 4 to 5 April 2019, hosted by The African Academy of Sciences (The AAS), to celebrate the start of their 2-year FLAIR research fellowships. FLAIR (Future Leaders – Africa Independent Research) is a programme of The AAS and Royal Society, with support from the UK’s Global Challenges Research Fund (GCRF). It is designed to help talented early-career researchers, whose science is focused on the needs of the continent, establish independent careers in African institutions and ultimately, their own research groups. Up to 30 FLAIR fellowships will be awarded in 2019.

The academies also announced the opening of the next round of FLAIR applications, closing on 15 May 2019. This year the academies want to encourage more applications from under-represented countries, particularly Francophone and Lusophone countries. Find more details about eligibility and how to apply.

The 2019 FLAIR funded scientists were selected from a competitive pool of more than 700 applicants. Their research is diverse, ranging from providing renewable energy solutions and addressing climate change, to tackling food security and targeting health and environmental problems that are most acute for people living in African countries.

Thanks to the FLAIR scheme, some of the scientists are returning to the continent from countries such as the UK and USA to continue their careers in African institutions. This is an important part of the programme – attracting scientists back from the high income countries where they have completed their postdoctoral training so that they can play a part in building the research infrastructure at home. To keep improving its scientific output, Africa needs to pay urgent attention to growing and retaining its scientific talent and FLAIR is one of a number of initiatives through which the AAS is tackling this issue.

FLAIR continues the Royal Society’s support of science in Africa. Our programmes are synonymous with excellence in science and our grants programmes play an important role in nurturing the next generation of researchers who are the scientific leaders of tomorrow. Professor Felix Dapare Dakora, President of the African Academy of Sciences, says, “The AAS welcomes the exceptional FLAIR grantees to its postdoctoral family. We recognise that well-planned postdoctoral programmes are critical in promoting scientific and research excellence and leadership in Africa and so want to be catalytic in inspiring African institutions to critically think about the role of and defining postdoctoral programmes that suit their needs and purpose and can be instrumental in driving socio-economic development on the continent.”
Dr Judy Omumbo, Programme Manager, Affiliates and Postdoctoral Programmes, says, “We look forward to welcoming the FLAIR grantees to the community of AAS postdoctoral fellows. FLAIR grantees will have access to AAS’ wider programme of support to develop them as independent research leaders including leadership, entrepreneurship and media, science communication and public engagement training, a mentorship scheme with internationally recognized mentors, proposal writing workshops, Open Access Publishing (no fees), via AAS Open Research and networking opportunities both regionally and with the UK and to develop regional and international collaborations.”

Professor Richard Catlow, Foreign Secretary of the Royal Society, says, “I’d like to offer the Royal Society’s warmest congratulations to our first intake of FLAIR fellows. These scientists represent the next generation of leading African scientists, and we are incredibly proud to be part of a programme that is investing in them at such a crucial point in their careers.

“Fostering science and innovation for social benefit and prosperity is key to the wellbeing of any society, and investing in Africa’s scientific talent holds the greatest potential to tackle global challenges and improve quality of life.”

The first confirmed FLAIR fellows, their nationalities and institutions to be announced are:

**Anita Etale**, Rwandan, University of Witwatersrand (South Africa)
Etale is developing nanomaterials to purify drinking water used by low income communities, often contaminated by chemical elements such as mercury and arsenic.

**Gift Mehlana**, Zimbabwean, Midlands State University (Zimbabwe)
Mehlana is working on technology to capture CO2 and convert it to other useful chemicals, such as formic acid and methanol, addressing environmental concerns and providing organic starting materials for the chemical industry in countries devoid of fossil oil resources.

**Christopher Trisos**, South African, University of Cape Town (South Africa)
Africa is projected to have as many as 43 million more people pushed in to extreme poverty due to climate change by 2030. Trisos is working on forecasting climate change in Africa and his research will be shared online as free, interactive maps.

**Dyllon Randall**, South African, University of Cape Town (South Africa)
The sanitation services of many African countries are in a phase of development, which itself is an opportunity to avoid repeating mistakes, curbing the wasteful practices currently facing many developed countries. Heeding this, Randall is working on novel sanitation technologies that would allow for the recovery of valuable resources from human urine.

**Oluwaseyi Shorinola**, Nigerian, International Livestock Research Institute (Kenya)
In less than forty years Africa will have an additional 1.3 billion people to feed, of whom half will be living in urban areas where demands for wheat (already the crop in highest demand) will only increase. Shorinola’s research focuses on using genetics to improve the yield and quality of wheat production in East Africa.

**Lenine Liebenberg**, South African, Centre for the AIDS Programme of Research in South Africa (South Africa)
Infection of sexually-transmitted HIV is aided by breaks in the genital mucosal barrier that occur during sex. Liebenberg is researching the genital microbiome and indicators of inflammation of couples having had recent sex.

**Dorit Hockman**, South African, University of Cape Town (South Africa)
As the brain matures, different genes switch on and off to affect developmental change. In developing countries, like South Africa, diseases such as tuberculosis that affect the brain are dependent on these maturity-based genetic changes. Hockman’s research looks at the activation of medically relevant genes over the course of children’s lives.
Joseph Raimondo, South African, University of Cape Town (South Africa)
Multiple disease processes in the brain such as epilepsy are associated with inflammation of the brain and the action of particular ions—with these resulting inflammatory diseases being especially prevalent in Africa. Raimondo aims to use a technique he developed to measure the proportion of ions within brain cells to inform new treatments for epilepsy.

Kanyiva Muindi, Kenyan, African Population and Health Research Centre (Kenya)
For many Kenyan homes, wood is traditionally used as the main fuel source, resulting in deforested areas in Kenya and damage to the health of those mainly exposed: women and young girls. Muindi seeks to introduce ethanol as a cleaner, more sustainable fuel source and introduce this to homes throughout Kenya and other African countries.

Margreth Tadie, Zimbabwean, Stellenbosch University (South Africa)
Mining is important in developing economies, however the wastage and environmental impact is vast. Reckless disposal of mining by-products damages waterways, livestock and human health. Tadie seeks to curb the wastage and polluting capacity of mines, while promoting and supporting mining jobs and economic prosperity.

Marique Aucamp, South African, University of the Western Cape (South Africa)
With over 1.8 million children living with HIV, treatment is vital. Yet, there remains poor adherence to treatments, which can be mainly ascribed to the lack of child-friendly formulations. Though ARVs are extremely bitter, Aucamp plans to tailor microencapsulation techniques to ensure the drugs are palatable, low-cost, and effective.

Banothile Makhubela, South African, University of Johannesburg (South Africa)
To convert non-edible biomass into useable fuel, metal catalysts are required, which at the moment are derived from noble and less than sustainable metals. Makhubela aims to harness cheaper, more available metals such as copper that excel as efficient and sustainable catalysts.

Cecil King’ondu, Kenyan, Botswana International University of Science and Technology (Botswana)
To process biodiesel—a renewable transport fuel—to the standards of Europe and America, large amounts of water are needed, resulting in both wasted water and waste water. King’ondu proposes the use of super capacitors to process the water more efficiently to meet standards and legitimise the use of biodiesel throughout Africa.

Debra Rossouw, South African, Stellenbosch University (South Africa)
In order to take advantage of the unique products of synthetic biology, such as ‘micro-lichens’ for wastewater treatment and ‘yeast-bacteria’ pairs for food production, we need to understand how these organisms interact at a precise mechanistic level, and this is exactly what Rossouw plans to do.

Ezekiel Mugendi Njeru, Kenyan, Kenyatta University (Kenya)
For smallholder farmers in the semi-arid regions of Kenya who are unable to afford vital inorganic fertilisers for their crops, there is an alternative: the microorganisms that increase nutrient uptake in crops. Njeru will map biodiversity patterns of these microorganisms to optimise their introduction to crops to improve yield and drought tolerance.

Elizabeth Ndunda, Kenyan, Machakos University (Kenya)
For developing countries, environmental pollution is an emerging challenge. One such pollutant type is the probable human carcinogens PCBs, which accumulate in animals. Ndunda is developing an accurate, readily deployable sensor for these widespread environmental pollutants.

Francis Wamonje, Kenyan, International Centre of Insect Physiology and Ecology (Kenya)
Combatting crop-destroying aphids in sub-Saharan Africa is expensive and impractical. Fortunately, aphids means of feeding—‘strawing up’ plant innards—leaves them vulnerable
to unique types of viruses that are innocuous to their plant host, but lethal to pest aphids. Wamonje plans to sequence the diversity of these viruses to introduce a strain to reduce aphid populations pesticide-free.

**Justin Komguep Nono**, Cameroonian, University of Cape Town (South Africa)

Schistosomiasis kills vast numbers of people, particularly in Africa, and incapacitates millions—its effects ultimately promoting poverty, and there’s no vaccine. Nono plans to analyse the genomes and microbiomes of those children more resistant to the parasite to potentially identify a mechanistic weak point in transmission to eliminate the disease.

**Leopold Tientcheu Djomkam**, Cameroonian, MRC Unit at LSHTM (The Gambia)

The treatment for tuberculosis (TB) is time-consuming, taking at least six months, and for those in Gambia is often ineffectual, likely because the drug was designed to combat M. tuberculosis opposed to M. africanum—the infectious agent that causes half of TB cases in West Africa. Djomkam aims to stimulate the immunity of those suffering from M. africanum to complement the anti-TB drug and reduce the treatment time altogether.

**Robert Skelton**, South African, South African Environmental Observation Network (South Africa)

Sub-Saharan Africa is one of the areas most vulnerable to drought and incremental warming, and yet little is known about the capacity for flora to cope. Skelton will perform a quantitative assessment on the fundamentals of ecosystems: plant performance, health, and tolerance under drought conditions, helping to inform climate-change resilience.

**Sarah Fawcett**, South African, University of Cape Town (South Africa)

For every benefit provided by urbanised, coastal regions—fishing, seafood harvesting, tourism—is a suite of damaging corollaries including sewage and pesticide run-off, Fawcett will track the sources of pollution by using an immense model system: False Bay, South Africa’s largest natural bay, with the aims of informing government on where to place Marine Protected Areas.

**Veron Ramsuran**, South African, University of KwaZulu-Natal (South Africa)

HIV develops more or less rapidly depending on individuals, specifically the immune genes responsible for setting off a response. Ramsuran’s work will analyse the factors affecting expression in pertinent immune-modulating genes.

**Wade Petersen**, South African, University of Cape Town (South Africa)

A recurring and chemically useful structure ‘spirocyclic oxindoles’ can be used as the backbone for many, potentially disease-quashing, drugs however when it is produced, its mirrored, less functional form is often the result. Petersen aims to use new chemistry, including the manipulation of light, to selectively produce the desirable version of the molecule. His research will be applied to drugs treating malaria, TB and HIV.

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**ACS news**

The Younger Chemists Committee (YCC) advocates for and provides resources to early-career chemists and professionals in the chemical sciences and related fields. The YCC addresses specific issues facing younger chemists within the ACS and serves as a voice to the Society on behalf of younger chemists.

The Younger Chemists Committee (YCC) of the American Chemical Society (ACS) recognizes that chemistry is a global endeavour that serves chemistry professionals across the globe. Successful programs and collaborations require dedicated volunteers and coordination amongst scientific societies to make a lasting impact on our esteemed profession.
Dr Sadhna Mathura is a representative from Africa

**RSC news**

1) **The Royal Society of Chemistry – Royal Society International Exchanges Award.**
   *Application deadline is 30 May 2019*
   Grants are available for new collaborations between researchers in the UK and Sub Saharan Africa (excluding South Africa) for chemistry projects. These are for two-year projects and up to £12,000 is available for travel, including a maximum of £3,000 for research costs. For more information go to: [https://royalsociety.org/grants-schemes-awards/grants/international-exchanges/](https://royalsociety.org/grants-schemes-awards/grants/international-exchanges/). The main applicant must be the UK researcher.

   *Next deadline is 6th June 2019 for the course in Ethiopia*
   Applications are open for the above Pan Africa Chemistry Network workshop, supported by GSK, to enhance the capabilities of African scientists in modern analytical techniques. The training course will cover the practical aspects of Gas Chromatography, method development, quantitative analysis and spectral interpretation of GC-MS.
   The remaining 2019 courses will take place in Ethiopia (30 Sep – 4 Oct) and Nigeria (18 – 22 Nov). To find out more and apply, visit [http://www.rsc.org/events/africa](http://www.rsc.org/events/africa). There are only 15 spaces available per course, so don’t miss out.

3) **Royal Society of Chemistry Events Website**
   Our website can be used to advertise events from across the world – not just those organised by the Royal Society of Chemistry, [www.rsc.org/events/africa](http://www.rsc.org/events/africa).
   So, if you need a simple website for your event, or want to reach a wider audience, then please submit your event to our website. Simply click on this link and follow the instructions: [www.rsc.org/events/submitevent](http://www.rsc.org/events/submitevent)

**Conferences**

1) **The third Coordination Chemistry Days (JCC-2019)**, 26 to 29 September 2019, Laico Hotel, Hammamet, Tunisia. [http://www.sctunisie.org; e-mail: contact@sctunisie.org](http://www.sctunisie.org; e-mail: contact@sctunisie.org)

2) **The second International Days of Chemistry (JIC-2019)**, 14 to 16 November 2019, Nouakchott Mauritania. [http://www.scmauritania.org; contact@scmauritania.org](http://www.scmauritania.org; contact@scmauritania.org)

3) **International conference on Materials for Renewable and Sustainable Energy**, 03 to 05 June 2019, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana materialsconference2019@yahoo.com

4) **Botswana Chemical Society (BCS), SEANAC and FASC conferences**, Gaborone, Botswana 25th – 27th September 2019 Dr Florence Nareetsile nareetsilef@UB.AC.BW
5) **2nd Training workshop for Women Chemists**, 17th-20th June, 2019, Lagos Nigeria. [Coord_women@chemsociety.org.ng](mailto:Coord_women@chemsociety.org.ng) ; [Cynthia.ibeto@unn.edu.ng](mailto:Cynthia.ibeto@unn.edu.ng) 10th International Symposium on Microscale Chemistry, Potchefstroom SA 26th -28th June, [https://chemistrysymposium2019.registerevents.co.za](https://chemistrysymposium2019.registerevents.co.za)

6) **70th Annual Meeting of the International Society of Electrochemistry**, Durban SA, 4th -9th August, [https://annual70.ise-online.org/index.php](https://annual70.ise-online.org/index.php)


9) **The 10th International Conference of the African Materials Research Society (AMRS2019)** Arusha, Tanzania, 11-14 December 2019. Contact: amrstanzania@gmail.com


12) **ACRICE-4 2019 BY CHEMICAL SOCIETY OF NIGERIA**; Lagos, 8th – 13th September 2019. Articles for oral presentation [acrice4.csn2019oralp@chemsociety.org.ng](mailto:acrice4.csn2019oralp@chemsociety.org.ng); Articles for poster presentation is [acrice4.csn2019posterp@chemsociety.org.ng](mailto:acrice4.csn2019posterp@chemsociety.org.ng)

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**Detailed Conference information**

- Botswana Chemical Society (BCS), SEANAC and FASC conferences, Gaborone, Botswana
CONFERENCE SYNOPSIS

The Chemical Society of Botswana will hold its first ever Chemistry conference in the Botswana capital, Gaborone, in September 2019. This meeting will be co-hosted with two other African chemistry organizations namely SEANAC and FASC. To accommodate the diverse interests of the chemistry community both in Botswana and in the African continent a wide range of topics will be included in the conference program (see below). However, the SEANAC programme will be focused on Analytical Chemistry while the FASC programme will be focused on Green Chemistry.

MAJOR TOPICS TO BE DISCUSSED

- The conference encourages abstracts from all disciplines related to chemistry, including:
  - Agro-Chemistry
  - Analytical Chemistry
  - Biochemistry
  - Bioinorganic & Inorganic Chemist
  - Chemical Engineering
  - Cheminformatics
  - Computational Chemistry
  - Environmental Chemistry
  - Food Chemistry
  - Forensic Chemistry
  - Catalysis
  - Green Chemistry
  - Physical & polymer Chemistry
  - Phytochemistry & Organic Chemistry
  - Materials chemistry & Nanotechnology
  - Medicinal & Pharmaceutical Chemistry
2nd Training workshop for Women Chemists, Lagos, Nigeria.

Chemical Society of Nigeria
Women in Chemistry (Nigeria)
in collaboration with
Federal Institute of Industrial Research, Oshodi
announces her
2nd
TRAINING WORKSHOP FOR WOMEN CHEMISTS

Theme:
CRystallizing the synergy in Chemical sciences between Academia and Industry

Date: 17th – 20th June, 2019

Venue:
Federal Institute of Industrial Research Oshodi
3, FITRO Road, Near Cappa Bus Stop
Off Agege Motor Road, Oshodi
P.M.B 21023, Ikeja, Lagos

Special Guest
Prof Gloria U. Obuzor
Vice President of the Federation of African Society of Chemists (FASC)

Speakers:
Prof Gloria Elemo
A keynote address on
Bridging the gap between Women Chemists in Academia and Industry

Prof Kehinde O. Olayinka
Influencing policy with research

Prof Maimuna Waziri
Time Management Strategies

Prof Esther U. Ikhouria
Communication Skills for the Chemical Sciences

The focus of the training workshops are as follows:
- Enhancing the synergy between Women Chemists in Academia and Industry.
- Empowerment of female chemists with communication skills to influence policy with research.
- Fortifying Women Chemists with technical skills and expertise on selected scientific equipment.
- Sensitization of the girl child on the prospects of a career in chemistry.

Workshop registration fee is
Fifteen Thousand Naira (₦15,000.00) Only

Bank details:
Account Name: Chemical Society of Nigeria
Bank: United Bank for Africa (UBA) PLC, Hilton Branch, Abuja
Account No: 100 562 7962

Please confirm your attendance on or before 10th May, 2019 by sending an email with your full name, phone number and date of payment to coord_women.chem@chemsociety.org.ng and/or cynthia.ibeto@unn.edu.ng

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tylofemi@yahoo.com
• 42nd Annual conference of the Chemical Society of Nigeria, and ACRICE-4 2019, Lagos, Nigeria

• 10th International Symposium on Microscale Chemistry, Potchefstroom SA
The 10th International Symposium on Microscale Chemistry is held in the new Engineering Building at the North-West University, Potchefstroom, South Africa, on 26 to 28 June 2019.

All Microscale Chemistry enthusiasts are welcome to attend (teachers and university academics)!

The vision of the 10th International Symposium on Microscale Chemistry (ISMC) is to stimulate the practical development and use of microscale chemistry approaches world-wide.

The ISMC desires to develop relationships for working collaboratively with other microscale chemistry communities globally. Furthermore, the ISMC supports on-going initiatives to raise awareness and understanding of issues related to microscale and green chemistry. Additionally, the ISMC advocates networking to promote chemistry education for capacity building in developing countries. The ISMC recognizes the importance of using evidence-based practice and metacognitive approaches in teaching and learning of microscale chemistry.

The some of the aims of ISMC are to develop strategic partnerships with other microscale chemistry communities in other countries and to increase opportunities and greater participation by colleagues from developing countries. We want to develop microscale chemistry instructional techniques and support scientific inquiry and independent thought through performing microscale chemistry experiments. We want students to develop the necessary skills and provide them with the apparatus to improve their hands-on and minds-on knowledge of science and chemistry.

Contact person: Marié du Toit (email: marie.dutoit@nwu.ac.za) (cell number: 082-392-0883)

Registration via Website: https://chemistrysymposium2019.registerevents.co.za

The plenary speakers will be Prof. Jorge Ibanez (Mexico), Dr. Angela Koehler (Germany), and Prof. Abdul-Aziz Alnajjar (Kuwait).

The keynote speakers will be Prof. John Bradley (RSA), Prof. Dr. Michael Tausch (Germany), Mr. Bob Worley (UK) and Prof. David Katz (USA).

The workshop presenters will be Mr. Bob Worley (UK) and Prof. David Katz (USA).
This year the **Annual Meeting of the International Society of Electrochemistry** (ISE) will be hosted in **Durban, Republic of South Africa**

( [https://annual70.ise-online.org/index.php](https://annual70.ise-online.org/index.php) ).
AMRS2019

The 10th International Conference of the African Materials Research Society (AMRS2019) will be held in Arusha, Tanzania from 11-14 December 2019. The Tanzania AMRS2019 will draw participants from around the world, with an anticipated attendance of approximately 600. At its heart, the AMRS series of conferences allows the scientific and research communities to build knowledge, foster relationships and promote action for further understanding and collaborations in the broad fields associated with materials science and technology. The themes of AMRS2019 reflect both the needs of the global research community for Africa development. The themes of AMRS2019 reflect both the needs of the global research community such as energy and health, as well as the needs that are specific to Africa.


Contact: amrstanzania@gmail.com
IUPAC for Africa

IUPAC FOR AFRICA
Postgraduate Summer School on Green Chemistry
Inscribed by IUPAC. Centenary and the International Year of the Periodic Table Celebrations
17th-19th May 2019, Dar es Salaam, Tanzania

INTRODUCTION
Green chemistry, also known as sustainable chemistry, is the design of chemical products and processes that reduce or eliminate the use or generation of hazardous substances. Green chemistry applies the cycle of a chemical product, including its design, manufacture and use.

The 2019 IUPAC Summer School on Green Chemistry will be held in Tanzania. This is the first time this event is being held in Africa managed by the IUPAC International Committee on Green Chemistry for Sustainable Development (IGCSD). The Summer School will be hosted by the University of Dar es Salaam (UDSM), University of Dodoma (UDOD), the Tanzania Bureau of Standards (TBS) and Dr. George Chuma Research Laboratory Authority (GCLA) in collaboration with the Tanzania Chemistry Society (TCS).

The 2019 Summer school is special in that it will be held during the 100th Anniversary of IUPAC. Further to that, 2019 is the International Year of the Periodic Table is declared by United Nations, coinciding with the 150th Anniversary of Dmitry Mendeleev’s discovery of the periodic system. The event will provide the participants with an understanding of the latest developments of the concepts and management of green/sustainable chemistry.

DAR ES SALAAM, HAVEN OF PEACE
The summer school will be held at the University of Dar es Salaam.

Dar es Salaam is a commercial center of Tanzania and one of the biggest cities in East Africa, nestled along a natural harbor on the Indian Ocean.

Frank Warren Conference

Frank Warren Conference 2019
Drakensberg - South Africa

First call for abstracts

The organising committee, on behalf of The Organic Division of the South African Chemical Institute is proud to announce the first call for abstracts for the 2019 Frank Warren Conference to be held in the Drakensburg, from the 7th – 11th July.

Planning is well underway to ensure that the Frank Warren follows in the best traditions of this important event in the South African chemistry calendar.

For conference details please visit our website

26th IUPAC International Conference on Chemistry Education
SAVE THE DATE

26th IUPAC International Conference on Chemistry Education

“Education is the most powerful weapon which you can use to change the world.” by Nelson Mandela

ICCE 2020 PROGRAMME THEMES
- Curriculum and Systems Thinking in Chemistry Education
- Cognition
- Context and Diversity in Chemistry Education
- Teacher Education, Development and Learning Communities
- Teacher Knowledge
- Assessment
- Practical Work in Chemistry
- Linking Chemistry to Industry
- Chemistry and the Environment
- Modelling in the Teaching of Chemistry

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Email: icce@eventmanagementsolutions.co.za