

#### **FASC Newsletter**

#### October 2019

This newsletter contains information the recent 2019 FASC event, information on the first forthcoming Commonwealth Societies of Chemistry Congress and on the 2019 Nobel Prize winners in Chemistry. It is interesting to see a prize given for an initial discovery made decades ago. This should give all our young chemists hope that discoveries made today may lead to rewards in the future.

#### Neil Coville

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  - vii) The 18<sup>th</sup> Asian Chemical Congress and the 20<sup>th</sup> General Assembly of the Federation of Asian Chemical Societies, Taipei, Taiwan.

#### Information for the newsletter

Please send all information to either Beth (<u>admin@faschem.org</u>), Emmanuel Ohaekenyem (<u>emmaohaekenyem@gmail.com</u>) or to me (<u>neil.coville@wits.ac.za</u>)

Beth has placed all earlier 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, or 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 (<a href="mailto:yonasc@faschem.org">yonasdb1@yahoo.com</a>).

## **Chemical Society news**

#### 1) SENEGAL

Advert for Grand Prix 2020 applications

From

Dr M. Modou FALL,

Département de Chimie, Université Cheikh Anta DIOP de Dakar.





# **GRAND PRIX 2020**

#### **OBJET ET MONTANT**

Le Grand Prix de la Fondation de la Maison de la Chimie est destiné à récompenser une œuvre originale concernant la chimie, au bénéfice de l'homme, de la vie, de la société ou de la nature.

Ce Grand Prix sera décerné pour la dix-septième fois en 2020 à une ou plusieurs personnes physiques, quelle qu'en soit la nationalité. Son montant a été fixé à 35 000 Euros.

#### CANDIDATURES

Les candidatures devront être obligatoirement présentées par une société savante ou par un organisme scientifique national ou international <u>sans lien direct avec le candidat</u>.

Elles seront adressées au Secrétariat du Grand Prix à l'aide du formulaire prévu à cet effet, accompagné d'un argumentaire en français ou en anglais justifiant la candidature. Les dossiers de candidature devront parvenir au Secrétariat pour le 30 avril 2020 au plus tard, par courrier électronique à l'adresse suivante : presidence@maisondelachimie.com.

Les formulaires d'inscription et autres informations se trouvent sur le site de la Fondation : <a href="https://maisondelachimie.com/">https://maisondelachimie.com/</a>, rubrique « Les PRIX DE LA FONDATION ».

#### JURY

Le jury international du Grand Prix est constitué d'un Président, de neuf Membres notoirement compétents dans les différents domaines de la chimie, et des lauréats des deux derniers Grands Prix. Trois au moins parmi ces personnalités ne sont pas de nationalité française. Le jury est assisté d'un Secrétaire scientifique.

Le Président du jury est le Président en exercice de la Fondation de la Maison de la Chimie. Les autres membres sont désignés par le Conseil d'Administration de la Fondation.

#### EXAMEN DES DOSSIERS

Les candidatures seront communiquées à l'ensemble des membres du jury. Après étude des dossiers, le jury choisira le lauréat à la majorité de ses membres.

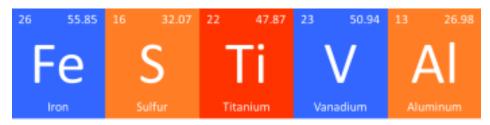
#### REMISE DU GRAND PRIX

La remise du Grand Prix aura lieu à la Maison de la Chimie à Paris, lors d'une séance solennelle qui se déroulera au premier trimestre 2021. A cette occasion, le lauréat fera un exposé sur ses travaux.

#### 2) SOUTH AFRICA

The Organic Division of SACI holds a bi-annual event called the Frank Warren conference. An article Dr Dr Veale in *ChemMedChem* (2019, 14, 1-6) highlights the history of the event and the most recent event held in the Drakensberg Mountain area in KwaZulu Natal. This series of confreences started in 1961.

# 3) Nigeria



# of Chemistry

- Chemistry, the Key to Sustainable Development: An American Chemical Society (ACS) sponsored South-Eastern Nigeria Chemistry Festival 2019
- The Festival will take place at The Chike Okolie Center for Entrepreneurship studies Nnamdi Azikiwe University Awka Anambra State, Nigeria from 10 to 12<sup>th</sup> December, 2019. 10<sup>th</sup> and 12<sup>th</sup> are arrival and departure date respectively. The Festival will reflect the beauty, fun and problem-solving ability of Chemistry. It's planned to will attract participants from high schools, tertiary institutions and ministries. It will give all participants the opportunity to engage with other scientists, witness practical chemistry and exchange ideas.

#### 7th FASC GA and Conference 2019



#### The event

The 2 ½ day event was divided into different sessions with focus on different aspects of Chemistry. This arose from the range of different groups who attended the meeting.

The Chemical Society of Botswana (CSB) was formed in 1990 but went into 'hibernation' until a few years back. A new group of chemists have now resuscitated the Society and indeed this was the first ever meeting held by the Society. The meeting was combined with SEANAC and FASC. A DFID project meeting on Chem4Energy, held before the conference, allowed for many delegates at that event to also attend the CSB meeting. Delegates to the Commonwealth Chemical Societies meeting also provided some attendees at the CSB meeting. The overall result was the presence of 130 delegates from 20 countries attending the CSB meeting

As expected, many papers focussed on Chemistry pertinent to Botswana. Indeed the first Plenary lecture, given by Prof Masesane from the University of Botswana, related to flavanoid chemicals found in natural products. Other papers from the various Botswana research organisations and Universities covered topics that included water issues, lead found in firing ranges and sisal to make membranes.

The Thursday (FASC) session related to Green Chemistry, the topic that has been the focus of all previous FASC conferences. The second Plenary lecture was given by Prof Tom Welton from Imperial College in London. The importance of sustainability in Chemistry was stressed, a theme that pervaded many talks. A Keynote address by Dr Mary Kirchhoff of the ACS also stressed the issues of the UN Sustainable Development Goals and how they relate to Chemistry

The third Plenary lecture was given by Prof Nora de Leeuw from Cardiff University. Many computational chemists attended the event and Nora's talk described issues relating to materials development, showing the links between computation and experiment.

#### Social and other

Many social events were held during the conference and this allowed for social contacts between the delegates. The event was held in the University of Botswana conference centre which was a good size, given the number of delegates attending. A little warm on occasion but otherwise an excellent venue. All lunches and teas were served at this venue. The evenings were taken up with numerous events. The conference started with a Welcome reception in the evening of Tuesday, 24<sup>th</sup> September. On the same Tuesday the ACS hosted a dinner for the ACS visitors and some ACS members. The Wednesday evening was taken up by the traditional FASC dinner that follows the FASC AGM. The dinner is restricted to FASC member society delegates as well as the local organising committee, RSC and ACS delegates and some invited guests.

The FASC AGM went smoothly and the previous committee was elected to continue on for two more years. More information on the AGM is found elsewhere in the newsletter

One of the highlights of the conference was the Conference Dinner held in a local hotel. This was followed by the guests, young and old, dancing to the local music.

#### **Commonwealth meeting**

This was held after the conference. An article on the meeting appears elsewhere.

Neil Coville

#### **Young Chemists News**

A Chemistry Conference for Young Chemists (CYC) will be held in Belgium (19-21 Feb 2020), Please see the advert and spread the word

### **Nobel Prize in Chemistry - 2019**

The Nobel prize in Chemistry for 2019 has been awarded to three scientists for their work in developing lithium-ion batteries

The Nobel prize in chemistry has been awarded to three scientists for their work in developing lithium-ion batteries.

John B Goodenough of the University of Texas at Austin, M Stanley Whittingham of Binghamton University and Akira Yoshino of Meijo University will receive equal shares of the 9m Swedish kronor (£740,000) prize, which was announced by the Royal Swedish Academy of Sciences in Stockholm on Wednesday.

At 97 years old, Goodenough is the oldest laureate to receive a Nobel Prize in any discipline; Whittingham is the second British-born researcher to win a science Nobel this year.

Lithium-ion batteries have long been tipped for the award, not least since they have proved pivotal in the development of the high-tech world we inhabit.

"Lithium-ion batteries have brought the greatest benefit to humankind," the academy said.

Far lighter and more compact that earlier types of rechargeable battery, they are found in everything from mobile phones to laptops and electric cars.

"The [electric car] batteries no longer weigh two tonnes, but 300kg," said Prof Sara Snogerup Linse, a member of the Nobel Committee for Chemistry. "The ability to store energy from renewable sources, the sun, the wind, opens up for sustainable energy consumption," she added.

When asked how it felt to receive the call, Yoshino simply said "Amazing, surprising".

Speaking in an interview earlier Goodenough said he had not appreciated the impact his work would have.

"At the time we developed the battery it was just something to do," he said. "I didn't know what electrical engineers would do with the battery. I really didn't anticipate cellphones, camcorders and everything else."

Wednesday was already expected to be a particularly good day for Goodenough – he is to receive the prestigious Copley medal at the Royal Society in London in the evening.

Prof Mark Miodownik, a materials expert at University College London, said it was right that lithium-ion batteries were celebrated. "They are one of the most influential pieces of materials science that influence the modern life of everyone on the planet," he said.

"It is remarkable too that although 30 years old, they have not been eclipsed by a better battery technology even now, which makes you realise what a remarkable discovery they are."

Batteries work by turning chemical energy into electricity. A typical battery is made up of two electrodes, an anode and a cathode, which are usually separated by a liquid that can carry charged particles.

Both electrodes are connected to an electrical circuit. When the battery is powering an electrical device, electrons travel from the anode to the cathode through the electrical circuit, while positively charge ions move through the electrolyte. In a rechargeable battery, energy can be put into the device to reverse this process.

While rechargeable batteries were around in the 1970s, they had drawbacks, not least in the amount of energy they could store. Lithium, it was thought, could be an answer since it is a very light metal and easily loses an electron. However, lithium's reactivity also made it tricky to harness.

In the 1970s Stanley Whittingham tackled the problem when looking to develop approaches for fossil-free energy in light of the oil crisis. His device, the first functional lithium battery, used lithium metal in the anode and lithium ions tucked into titanium disulphide for the cathode. Unfortunately, when this battery was repeatedly recharged, it ran the risk of exploding – a situation the local fire brigade were, apparently, none too pleased about. To improve safety, Whittingham combined metallic lithium with aluminium in the anode.

Goodenough picked up the baton at the University of Oxford, and replaced the titanium disulphide in the cathode with cobalt oxide – an approach that doubled the voltage produced.

Yoshino used the cathode developed by Goodenough to create the first commercially-viable lithium-ion battery in 1985, with the anode in his battery composed of lithium ions and electrons housed within a carbon material called petroleum coke. This made the battery much safer than those using lithium metal.

The upshot was a lightweight, compact battery that could be recharged many, many times – the bedrock of modern technology. The battery continues to be developed, not least to improve its environmental impact.

Prof Dame Carol Robinson, president of the Royal Society of Chemistry, said battery technology remains an exciting field.

"It's not the end of the journey, as lithium is a finite resource and many scientists around the world are building on the foundations laid by these three brilliant chemists," she said.

#### **African Journal of Chemical Education (AJCE)**

A PDF version of the first issue of volume 2 AJCE 2019 is available. The online version is available at the FASC website: <a href="www.faschem.org">www.faschem.org</a>, under Journal) and the AJOL website (www.ajol.info).

The table of contents is listed below for your overview:

Dr. Temechegn Engida e-mail: temechegne@faschem.org, t.engida@unesco.org;

#### **African Journals of Chemistry**

Published by the <u>Next Einstein Forum</u> in collaboration with Elsevier, <u>Scientific African</u> is ensuring better global recognition for Africa's scientists by providing a low-cost option for publishing open access, peer-reviewed research.

Here's 10 Reasons to publish with <u>Scientific African</u>:

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• Easy submission process

•	Open	access:	APC	200	\$

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•	All		1	fields		of		Science
•	For	African	ı re	esearch	and	scier	ntists	only
•	Hi	gh-quality,		rigorous		editorial		board
•	1000+ s	ubmissions,	100+	publish	ed pap	ers since	Dec	2018
•	Submission	s and	Editors	from	almost	everywher	e in	A frica

- Editors in more than 20 countries from top-quality research institutions
- Top articles with 1400+ downloads worldwide

The journal aims to provide a modern, highly-visible platform for publishing research from across Africa and welcomes <u>submissions from all scientific disciplines</u>.

Benji Gyampoh,

Editor-in-Chief Scientific African

#### • Chemistry Africa.

A Journal of the Tunisian Chemical Society

https://www.springer.com/chemistry/journal/42250?utm\_source=hybris&utm\_medium=e mail&utm\_content=internal&utm\_campaign=JFTT\_2\_aww\_2018newjournals

#### • Journal of the Mauritanian Chemical Society (JMCS)

Publishes research articles and conference proceedings in English or French. This is published online at: <a href="http://www.scmauritania.org/journal-scm;">http://www.scmauritania.org/journal-scm;</a> M A Sanhoury, JMCS Coordination Editor

#### • South African Journal of Chemistry

This Journal is published electronically. The webpage is: <a href="http://www.saci.co.za/">http://www.saci.co.za/</a>, Details of the journal and the editors can be seen at <a href="http://www.journals.co.za/sajchem/">http://www.journals.co.za/sajchem/</a>. 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 (<a href="http://reference.sabinet.co.za/sa\_epublication/chem">http://reference.sabinet.co.za/sa\_epublication/chem</a>).

## • 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. <a href="https://view.publitas.com/icp-1/african-corrosion-journal">https://view.publitas.com/icp-1/african-corrosion-journal</a>

# • African Journal of Chemical Education

Enquiries and manuscripts should be addressed to the Editor-in-Chief: email <u>eic@faschem.org</u>, PO Box 2305, Addis Ababa, Ethiopia. *AJCE*, 2016, 6(1) ISSN 2227-5835 The online version appears in the FASC website (<u>www.faschem.org</u>) and in the AJOL website (<u>www.ajol.info</u>).

- South African Journal of Science <u>TOC@assaf.org.za</u>
- Journal of the Chemical Society of Nigeria csnjournals@gmail.com; csnjournals@yahoo.com; editor@chemsocnigeria.org
- Bulletin of the Chemical Society of Ethiopia <a href="http://www.ajol.info/index.php/bcse/index">http://www.ajol.info/index.php/bcse/index</a>
- South African Journal of Chemical Engineering

A fully open access journal <a href="http://www.journals.elsevier.com/south-african-journal-of-chemical-engineering/">http://www.journals.elsevier.com/south-african-journal-of-chemical-engineering/</a>

• African Journal of Pure and Applied Chemistry

EditorialOffice: ajpac@academicjournals.org; helpdesk: helpdesk@academicjournals.org;

URL: www.academicjournals.org/journal/AJPAC

#### **African Academy of Sciences**

Researcher mobility funds to promote collaboration among African and Indian scientists.

Africa India Mobility Fund

https://www.aasciences.ac.ke/aesa/programmes/mobility-schemes-africa-india-mobility-fund

#### **RSC-PACN** news



i) Pan Africa Chemistry Network Congress 2019 'Riches of the Natural World: Sustainable Use of Africa's Natural Products and Materials'

The Pan Africa Chemistry Network Congress will take place in Ethiopia from 5-7th November.

Registration is now open <a href="http://www.rsc.org/events/detail/40221/">http://www.rsc.org/events/detail/40221/</a>. It is open to all and free to attend (including catering), but you MUST register before the event. Unregistered delegates

will

not

be

admitted.

The Congress will reflect the diversity of science and research that can help overcome challenges of using natural resources in a sustainable manner, with a focus on the chemical sciences. The conference will give all participants the opportunity to engage with other scientists, hear about cutting-edge research and policy and exchange ideas.

Every society requires clean water, energy security, a healthy population and a reliable food supply. Africa's biologically diverse ecosystem is a great source to solve these challenges, and science and engineering are fundamental to meeting these needs in a viable way. Green chemistry and the sustainable management of natural resources is essential if Africa is to preserve its unique biodiversity whilst utilising it for economic growth.

Please can you reach out to your colleagues, friends and students (post-graduate and under-graduate) and invite them to attend this Congress. This is a great opportunity for scientists to attend an international science conference in Africa, and this should not be missed, especially for those in Addis Ababa and Ethiopia.

DrEldridge and Porcu Helen Driver, Alison Francesca Royal Society of Chemistry Pan Africa Chemistry Network Royal Society of Chemistry www.rsc.org/pacn<http://www.rsc.org/pacn>

#### ii) Workshop, various locations in Africa

This Pan Africa Chemistry Network training course, supported by GSK, will cover the practical aspects of Gas Chromatography, method development, quantitative analysis and spectral interpretation of GC-MS.

Courses will take place in Nigeria (18 – 22 Nov). To find out more and apply, visit <a href="http://www.rsc.org/events/africa">http://www.rsc.org/events/africa</a> – only 15 spaces available per course.

# iii) 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, <a href="https://www.rsc.org/events/africa">www.rsc.org/events/africa</a>.

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: <a href="https://www.rsc.org/events/submitevent">www.rsc.org/events/submitevent</a>

#### **ACS** news

Applications are now being accepted from **early career chemists** from Central and Southern Africa a to win a travel award to attend Pittcon 2020 in Chicago, Illinois, USA from 1-5 March, 2020. Countries that are eligible are Angola, Botswana, Cameroon, Central African Republic, Chad, Democratic Republic of the Congo, Equatorial Guinea, Eswatini (Swaziland), Gabon, Lesotho, Namibia, Republic of the Congo, São Tomé and Príncipe, South Africa. Applicants do not need to be currently residing in their country of origin to be eligible. Citizens of target countries who are serving as visiting scholars or in other capacities within the U.S. are especially encouraged to apply. Applications are due **4 November 2019**.

For more details and to apply, please visit this website: <a href="https://fs18.formsite.com/acs-oia/3ij1bpdb0f/index.html">https://fs18.formsite.com/acs-oia/3ij1bpdb0f/index.html</a>

Since 1995, the ACS Committee on International Activities (IAC) has worked with the Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon) and its sponsoring organizers to facilitate participation at the conference by early career analytical chemists. Funding from Pittcon and its sponsoring organizations subsidizes the travel costs of attendees and also provides complimentary conference registration and complimentary hotel rooms for the participants.

For more information, please visit the <u>ACS PITTCON Travel Award webpage</u> or contact Stephanie Sonkin at <u>intlacts@acs.org</u>

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#### **Commonwealth Societies of Chemistry**

i) Commonwealth Chemistry Congress



# First Commonwealth Chemistry Congress – Partnerships for the Goals The University of the West Indies, Trinidad and Tobago, 18-21 May 2020

Inspired by the success of the Royal Society's Commonwealth Science Conferences in Bangalore (2014) and Singapore (2017), the Royal Society of Chemistry (RSC) initiated a dialogue with senior chemists in different countries across the Commonwealth aimed at discussing ways to develop closer links between Commonwealth chemical societies and the opportunities that this could bring to our discipline. Throughout 2017, the RSC also held a series of informal meetings where the discussions clearly indicated that there was value in bringing the chemical societies together and focussing on areas of commonality and collaboration, so as to champion chemistry and highlight the major role that it plays in solving global challenges.

The RSC hosted a high-level roundtable event in June 2018 to explore this further with 24 countries representing more than 20 chemical societies, scientific academies and associations from across the Commonwealth.

The unique opportunities for collaboration offered by the Commonwealth were emphasised at the meeting, including the sharing of common values by bringing together the developed and developing regions. The appeal of inclusive meetings at which no one country or group of countries dominate the proceedings was central to the discussion.

The overall conclusion was that there are distinctive and significant opportunities to create a Federation of Commonwealth Chemical Sciences Societies in which all countries are included and to organise a series of Commonwealth Chemistry Congresses featuring the contribution of chemistry to the UN Sustainable Development Goals, policy debates and role models.

The Federation would be distinct from other umbrella organisations by its diversity, worldwide footprint, links to governments and industry, commitment to chemical education and research, and promotion of the interests of smaller countries, especially those that do not have their own chemical societies. Other topics highlighted were policy and lobbying for chemistry, providing access to research infrastructure, and nurturing the next generation of talent.

It was collectively agreed that the Vision and Mission for the Federation are:

- Vision: One community, one voice, catalysing equality for all.
- Mission: To inspire, celebrate and elevate the role and practice of the chemical sciences for the benefit of Commonwealth nations and their people.

With the guiding principles:

- of equal and inclusive representation from all Commonwealth nations,
- and recognition that those with the greater resources will contribute more in order to assist those with fewer resources.

The planning for the first Commonwealth Chemistry Congress is progressing very well. The venue, dates and programme have been confirmed and we can all look forward to this unique opportunity to bring together chemical scientists from across the Commonwealth to share our knowledge and experience. <a href="http://www.rsc.org/events/detail/40292/first-commonwealth-chemistry-congress">http://www.rsc.org/events/detail/40292/first-commonwealth-chemistry-congress</a>

As agreed the Congress has as its underlying principle equal representation for all Commonwealth countries and a unique focus on creating an enabling environment for early career chemists. Therefore, every Commonwealth nation will be represented by up to three early career chemists who will be fully funded to attend. Participation in this event will bring considerable benefits including opportunities to:

- network within their peer group
- form connections with others who are further ahead in their career
- present and discuss their own work
- participate in topical panel discussions
- hear inspiring keynote lectures from leading practitioners

In addition, the Presidents of the Commonwealth chemical societies or, where a chemical society does not exist, a senior representative from a university or organisation will be invited to join the Congress.

Each country is responsible for managing the application and evaluation process leading to the selection of their three early career chemist delegates either through their chemical society or designated university where a chemical society does not exist.

To manage this process each society or university should assemble a small panel of reviewers to score the applications against the criteria that candidates are asked to address in their application.

In selecting the three successful candidates the panel must consider diversity and inclusion and in particular the target for the Congress of 40% female participants and ensure that at least one of their candidates is female.

Attached is a document with more information that you should use to promote this valuable opportunity to your early career chemist community. We have also attached an application form that you may wish to use to aid in the evaluation of the applications. You must complete the evaluation and selection of the three delegates and provide their details to the Secretariat by 30 November.

We expect that, wherever possible, the funding to cover the flights, accommodation and conference package of meals, local transport, social events and Congress materials for the three successful candidates will be sourced by the chemical societies or universities. Where it is not possible to secure some or all of the funding to cover these costs, the Congress will be able to subsidise this to ensure their participation. However, each society or university requesting additional funding should provide details of how they have tried to source the funding locally. Accommodation for the Congress will be at the Hilton Trinidad and Conference Centre. The cost for the accommodation and conference package is in the region of USD670.00 per participant.

The Secretariat will be very happy to arrange a time to talk on the phone if you wish to discuss this further or require additional information.

We look forward to hearing from you and welcoming your delegation to Trinidad and Tobago in May 2020.

Yours sincerely

Commonwealth Chemistry Secretariat

#### **Conferences**

- 1) 4<sup>th</sup> International Symposium on Halogen Bonding, 23-27 March 2020, Stellenbosch, SA
- 2) **Chem CYS meeting**, 19-21 February, Belgium, www.chemcys.be

- 3) Fourth symposium on analytical chemistry for sustainable development (ACSD 2020). March 25-27, 2020, Morocco, www.amcadd.org.ma
- 4) Nanoafrica 2020 19-22 April 2020, Johannesburg SA admin@nic.ac.za
- 5) The Second International Days of Chemistry (JIC-2019),14 to 16 November 2019, Nouakchott Mauritania. <a href="http://www.scmauritania.org">http://www.scmauritania.org</a>; contact@scmauritania.org
- 6) **26**<sup>th</sup> **IUPAC International Conference on Chemistry Education** Cape Town 13-17 July 2020; https://www.icce2020.org.za/
- 7) The 10<sup>th</sup> International Conference of the African Materials Research Society (AMRS2019) Arusha, Tanzania, 11-14 December 2019. Contact: amrstanzania@gmail.com
- 8) The 18<sup>th</sup> Asian Chemical Congress and the 20<sup>th</sup> General Assembly of the Federation of Asian Chemical Societies, Taipei, Taiwan December 8-12, 2019, www.acc2019.tw

<b>Detailed Conference Information</b>	

1) 4th International Symposium on Halogen Bonding

# 37H INTERNATIONAL SYMPOSIUM ON HALOGEN BONDING





We are pleased to invite you to attend the 4<sup>th</sup> International Symposium on Halogen Bonding (ISXB-4) to be held in Stellenbosch, South Africa, 23-27 March 2020.

The symposium will cover both experimental and theoretical aspects of a broad range of fields such as medicinal chemistry, chemical biology, materials science and industrial applications through plenary addresses, contributed presentations and posters.

We look forward to welcoming you to Stellenbosch in 2020!

#### Important dates:

Bursary application deadline Oral abstract submission Early bird registration Poster abstract submission 15 November 2019

30 November 2019 15 December 2019

1 February 2019



23-27 March 2020 Stellenbosch, South Africa



https://isxb42020.net/



# 1. ChemCYS 2020 Chemistry Conference for Younger Scientists.

ChemCYS' 15<sup>th</sup> edition will take place from 19 to 21 February 2020 in Blankenberge (Belgium).

This conference promises to give young attendees the opportunity to present early results of their research. Topics are focussed on the typical research domains in chemistry. The best oral and poster presentation of each session will be awarded.

We accept presentations and posters in the following subjects:

- Analytical Chemistry
- Biochemistry and Biotechnology
- Computational Chemistry
- Environmental Chemistry
- Food Chemistry
- Green and Sustainable Chemistry
- Inorganic Chemistry
- Macromolecular Chemistry
- Materials Chemistry
- Medicinal Chemistry

- Nuclear and Radiochemistry
- Organic Chemistry
- Organometallic Chemistry
- Physical Chemistry
- Solid State Chemistry

Since 2010, this conference has received an increasing international interest and a growing number of participants. Due to this international appreciation, ChemCYS is since 2014 officially endorsed by the International Union of Pure and Applied Chemistry (IUPAC) and the European Chemical Society (EuChemS) .

# SAVE THE DATE!

# 8th International Conference on Nanoscience and Nanotechnology in Africa

Enabling the Commercialisation of Nanotechnological Innovation





www.sani.org.za





Fig 1: NanoAfrica 2020 conference flyer



# **December 10-13, 2019**

A Conference NOT to be missed by those interested in Material Research, Development and Business in Africa!



Click here to see the video invitation of the President

In collaboration with





Register NOW at AMRS 2019 Registrations

Prof.

Hulda

Shaidi

Swai

**AMRS President** 

#### ABOUT THE CONGRESS

The 10th International Conference of the Materials Research African (AMRS2019) will be held in Arusha, Tanzania from 10 to 13 December 2019. The Tanzania AMRS2019 will draw participants from around the world, with an anticipated attendance of approximately 800. 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.

#### **2019 CONFERENCE THEMES:**

- . Materials for health
- 2. Materials for sustainable buildings & construction materials
- 3. Materials for water & environmental mitigation technologies
- 4. Materials for nanoscience/nanotechnology
- 5. Materials for mining & mineral processing
- 6. Materials for agriculture/environment
- 7. Materials education/networking in materials science & engineering
- 8. Materials for energy
- 9. Computational materials science
- 10. Manufacturing & structural material

The Conference, is expected to draw some **700 participants** is a unique opportunity to showcase your products as Exhibitor, or Sponsor, and participate as Attendee to find out what is going on about the latest developments in Material Research in Africa and the world.

To be a Sponsor see the Sponsoring packages Here

To be an Exhibitor see the condition Here

or contact the Congress Secretariat below

# HOTEL ACCOMMODATION

A **limited** number of rooms has been secured in a good selection of hotels near the conference Centre AICC including 5, 4, and 3-star hotels, at affordable rates. Reservations can be made via the Conference Registration Portal. After your registration, Rooms will be available of **fist comes, first served basis** 

Click here to see our Hotel selection

East	African	Comn	nunity	Road,	AICC	C	Complex,	
Ngorongoro	Buildi	ing,	06th	Floor	P.O.	Box	12554,	
Arusha,							Tanzania	
Phone:	+255	27	2050	0081,	+255	27	2050082	
Fax:		+255			27		2050083	
Email:				ican	nrs2019@gree	<u>ninspirati</u>	onsdmc.com	
Congress web site: http://africanmrs.net/tanzania-2019/								

EARLY BIRD REGISTRATIONS CLOSE ON JUNE 30, 2019

Fig 2: AMRS 2019 conference flyer

 $26^{th}$  IUPAC International Conference on Chemistry Education Fig. 3:  $26^{th}$  IUPAC International Conference on Chemistry Education flye