



FASC

Federation of African Societies of Chemistry

FASC Newsletter 7, July 2020

The search for a vaccine or medicines that will control the extent of the effect of the virus continues onwards. Chemists are playing a major role in these activities. There are lots of articles in the scientific journals and the popular press on developments. But it is not always easy to determine, what is fact from what we all would like to see – simple cures! Fortunately science is a self-correcting process and the ‘real’ data will emerge as time goes by. The AJCE has put out a request for articles on how Covid-19 has affected teaching in Africa. See the section below and reply directly to the editor

Neil Coville

Content

- **Information for the newsletter**
- **Advertising in the FASC newsletter**
- **FASC member countries**
- **Corona virus data**
Some useful sites for hard data
- **ABC Chemistry conference 2022/2023**
- **IUPAC**
- i) **IUPAC Periodic Table Challenge 2020**
- **African Journal of Chemical Education (AJCE)**
Chemistry Education during covid-19
AJCE – July edition
- **African Journals of Chemistry**
- **Commonwealth Chemistry**
Meetings
- **RSC news**
- **RSC-PACN news**
- i) **Chemistry against Covid-19**
- ii) **Access to all Royal Society of Chemistry journals**
- iii) **Pan Africa Chemistry Network Analytical training courses**
- iv) **Grants for carers and assistant grants**
- **Commonwealth Chemistry**
Commonwealth Chemistry Congress update
- **Conferences**
43rd Annual international conference of the Chemical Society of Nigeria
VCCA-2020, Mauritius
International Inorganic Chemistry Virtual Conference in Kenya, Nairobi
26th International Conference on Chemistry Education, Cape Town 2021
10th International Conference of the Kenya Chemical Society, Kenya
African Materials Research Society (AMRS 2021) Dakar, Senegal

Information for the newsletter

Please send all information to either Beth (admin@faschem.org), Emmanuel Ohaekenyem (ec.ohaekenyem@unizik.edu.ng) or to me (neil.coville@wits.ac.za)

Beth has placed all earlier newsletters on the FASC website.

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 (yonasc@faschem.org ; yonasdb1@yahoo.com).

Corona virus data

i) Some useful sites for hard data

<https://ourworldindata.org/coronavirus>

<https://www.worldometers.info/coronavirus/>

Stats and Models

<https://peterattiamd.com/covid-19-whats-wrong-with-the-models/>

ABC Chem Conference 2022/2023

The conference date has been moved to late 2022/early 2023. It will be held at the Palais des congrès –Marrakech, Morocco. FASC will be hosting the event.

We are hoping to have an excellent turnout from African member countries at this event. More information will be made available in the months ahead.



Fig 1: ABC Chem conference flyer

IUPAC

i) IUPAC Periodic Table Challenge 2020

Following the tremendous success of the Periodic Table Challenge in 2019, IUPAC is relaunching a whole new PT Challenge! Three levels to play and brand new questions. Let's fill up the world map again with your element Avatars. A new leader board has begun! New Certificates for the 2020 PTChallenge will be given out for successful completions!

Launch the week of June 1, 2020

- Here's where you can play: <https://iupac.org/periodic-table-challenge>
- The new PTChallenge will run all year!
- Follow us on Twitter @iupac #PeriodicTableChallenge
- New! Periodic Table Challenge merchandise will be available on the IUPAC Shop at <https://iupac.org/shop/>

African Journal of Chemical Education (AJCE)

The online version is available at the FASC website: www.faschem.org, under Journal) and the AJOL website (www.ajol.info).

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

I. Chemistry Education during covid-19

It has been over months since schools, colleges and universities have been closed due to the COVID-19 pandemic. The question is to what extent and how we managed to continue chemistry education at all levels.

I understand that some forms of technology-enhanced distance education have been in progress. Schools were using social media like Telegram for sharing assignments and exams; others were using online web-based approaches.

But for the sake of making systematic interventions in Africa, AJCE is calling for papers, short communications and/or letter to the editor highlighting your experiences and reflecting on your successes and challenges.

Temechegn Engida

Email: temechegn@gmail.com

The latest version is now available in AJCE, 2020, 10(2)

CONTENTS

EDITORIAL

Chemistry education during COVID-19 1

Temechegn Engida

RESEARCH PAPERS

Innovative school-level quantitative chemistry experimental technique (ii):

An affordable, sensitive, stable and user-friendly colorimeter 2

K.M. Chan

Basics of beer brewing process and related alcohol chemistry – an old beer in a new bottle 17

B.H.S. Thimmappa

Effect of analogy approach on the concepts of rates of chemical reactions on students' achievement and attitude 33

Zelalem Tsegaye, Ayalew Temesgen and Yiheyis Bogale

Nuclear stability: what does chemistry have to do with it? 78

Robson Fernandes de Farias

Analysis of grade 8 chemistry student textbook contents vis-à-vis

Bloom's revised taxonomy 85

Melashu Getie Andargie and Tihitinna Asmellash

African Journals of Chemistry

- **Journal of the Kenya Chemical Society (JKCS)**

This is a peer-reviewed multi-disciplinary chemistry journal published by the Kenya Chemical Society (KCS). JKCS publishes findings from all areas of chemistry including organic, inorganic, physical, analytical, materials chemistry and nanoscience, computational chemistry and environmental chemistry. JKCS also publishes reviews in all areas of chemistry. Published articles are available at <https://kenyachemicalsociety.org/journals>. Manuscripts should be submitted to the Editor-in-Chief at eic.jkcs@gmail.com for processing and peer-review.

- **Chemistry Africa.**

A Journal of the Tunisian Chemical Society

https://www.springer.com/chemistry/journal/42250?utm_source=hybris&utm_medium=email&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: <http://www.scm 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>

- **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**

<http://www.ajol.info/index.php/bcse/index>

- **South African Journal of Chemical Engineering**

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

- **African Journal of Pure and Applied Chemistry**

EditorialOffice: ajpac@academicjournals.org; help desk: helpdesk@academicjournals.org; URL: www.academicjournals.org/journal/AJPAC

- **Scientific African**

Published by the [Next Einstein Forum](http://www.next-einstein-forum.org) in collaboration with Elsevier. <https://www.journals.elsevier.com/scientific-african>

Commonwealth Chemistry



Commonwealth Chemistry is keen to support chemical societies and their members across the Commonwealth at this difficult time. The Executive Board, chaired by Dr Vicki Gardiner, has been looking at different ways of doing this and would like to propose the following:

- **Access to Chemistry World Magazine**

The Royal Society of Chemistry would like to offer unlimited access, free of charge, to its flagship magazine *Chemistry World* until the end of December 2020.

Chemistry World covers science news, research, reviews, features and opinions, providing a wide range of information relevant to chemical scientists globally. It is also provides access to a variety of free webinars through the same site.

This is available to all members of the individual Chemical Societies part of Commonwealth Chemistry and so please do promote to your membership. Gaining access is simple, each individual member just needs to create an account at this link: www.chemistryworld.com/commonwealth-chemistry.

- **Accessing RSC Education Resources**

For Commonwealth Chemistry societies who have members based in the education sector, a variety of resources are available to access at www.edu.rsc.org including the [Chemical Education Research and Practice](#) journal.

Additionally, all [online PD courses](#) are free until the end of August 2020, however please note that the content for these educational resources is focused primarily on the UK curricula.

- **Virtual Poster Competition**

To bridge the gap between now and the rescheduled Congress 2021, the Scientific Organising Committee is arranging a virtual poster competition scheduled for August 2020. This is open to early career chemists selected to attend the 2020 Congress on behalf of your country. The competition will bring together the early career chemists from across the Commonwealth in a virtual format to share their research, network and engage in scientific debate.

We will send a separate communication about this competition shortly. We would ask that you encourage your selected early career chemists to take part in this event as it presents a great opportunity to start networking with people they will meet at the 1st Commonwealth Chemistry Congress that will take place in Trinidad and Tobago in May 2021.

We hope you will find these offers useful.
Commonwealth Chemistry Secretariat

RSC- NEWS**Building a better chemistry culture**

Chemistry World and the Inclusion and Diversity team at the Royal Society of Chemistry are proud to offer the first of a monthly webinar series *Building a better chemistry culture* to support the chemical sciences community in response to and beyond the COVID-19 pandemic. Throughout the series, we will illuminate the science behind the issues being experienced and provide support tailored to the needs of chemical scientists including sharing coping strategies and reducing stigma around mental health and wellbeing.

Watch past webinar recordings and stay updated on information about upcoming webinars by following the link to our project hub page: <https://www.rsc.org/new-perspectives/talent/inclusion-and-diversity/activities/better-chemistry-culture-webinars/>

This month**August – Tackling bullying and harassment**

Thursday 13 August 2020, 15:30-16:30 BST

The fourth webinar in the *Building a better chemistry culture* series will focus on bullying and harassment in the chemical sciences, including in the context of changing work environments due to COVID-19. The Royal Society of Chemistry reports Breaking the barriers and Exploring the workplace for LGBT+ physical scientists provided evidence of bullying and harassment in the chemical sciences community, alongside a systemic failure of the sector to deal with these issues effectively which may lead to loss of talent.

Our speakers David Richardson (Universities UK taskforce member and Vice-Chancellor, East Anglia University), Carole Mundell (University of Bath and Chief Scientific Adviser to Foreign and Commonwealth Office) and Kevin Coutinho (Chair of the Board of Trustees for Windsor Fellowship and Athena SWAN and Gender Equality Policy Manager, University College London) will discuss:

- What bullying and harassing behaviours look like in professional contexts
- The impact that bullying and harassment can have on individuals and on careers
- The difficulties that people face in struggling to talk to friends and colleagues about their experiences
- How institutions can enact mechanisms to bring about positive culture and behaviour change

BSL interpretation is provided by Rachael Dance, Cambridgeshire Deaf Association.

More info and registration: <https://www.chemistryworld.com/webinars/tackling-bullying->

[and-harassment-building-a-better-chemistry-culture/4012148.article](https://www.chemistryworld.com/webinars/managing-isolation-building-a-better-chemistry-culture/4012148.article)

Building a better chemistry culture is a webinar series by the Royal Society of Chemistry and Chemistry World to support the chemical sciences community in response to and beyond the COVID-19 pandemic. Throughout the themes in the series, we will illuminate the science behind the issues being experienced and provide support tailored to the needs of chemical scientists including sharing coping strategies and reducing stigma around mental health and wellbeing.

Past events

July – managing isolation

Thursday 16 July 2020 at 15:30-16:30 BST

The third webinar in the *Building a better chemistry culture* series will focus on isolation and loneliness, looking beyond COVID-19 lockdowns to explore the context for why someone in the chemical sciences may feel isolated and how building meaningful connections can help create a sense of belonging.

<https://www.chemistryworld.com/webinars/managing-isolation-building-a-better-chemistry-culture/4011984.article>

June – Flexible working – Building a better chemistry culture

Thursday 18 June 2020 at 15:30-16:30 BST

The second webinar in the *Building a better chemistry culture* series focuses on the challenges of a new remote working culture, which is being experienced by many chemists as a result of the COVID-19 pandemic, as well as the opportunities that arise from supporting flexibility in work environments. It is an opportunity to discuss the challenges of working remotely and from home, which may be further emphasised for those with caring responsibilities, laboratory scientists and collaborative and international teams.

Find out more and view recording: <https://www.chemistryworld.com/webinars/flexible-working-building-a-better-chemistry-culture/4011937.article>

May – Kindness

Thursday 21 May 2020, 15:30-16:30 BST

The first in the *Building a better chemistry culture* webinar series coincides with Mental Health Awareness Week (MHAW, 18-24 May) and highlights the MHAW theme of kindness. We explore how to build a better chemistry culture through the incredible impact of kindness.

Find out more and view recording: <https://www.chemistryworld.com/webinars/kindness-building-a-better-chemistry-culture/4011630.article>

RSC-PACN news**i) Chemistry against COVID-19**

The Royal Society of Chemistry is continuing to work hard to provide valuable support to our community which is playing an important role in the global response to COVID-19. We are sharing #ChemVSCovid hero stories to celebrate these vital contributions. Read our first story here: <https://www.rsc.org/news-events/articles/2020/apr/chem-vs-covid-ellie-edf/>

You can help us celebrate the chemists across the world who are making the difference by sharing your stories with us, either [by e-mail](#), or using the hashtag #ChemVSCovid on social media. [Find out more.](#)

ii) Access to all Royal Society of Chemistry journals

During these challenging times, the Royal Society of Chemistry continues to guarantee access free of charge to its Journals and archive through the Research 4life Initiative. Access is available free of charge to universities and research institutions in 99 developing nations. https://www.rsc.org/campaigns/m/v18/co/pacn_research4life/

This means that if you work at a registered institution in one of these countries, you now have access to everything the Royal Society of Chemistry publishes online.. [Check if your institute is registered with Research4Life](#). Or follow this link to register your Institution [register your institute here](#).

We are also providing access to a wide range of information to ensure our chemical science community has access to the latest knowledge on the coronavirus pandemic. All stories related to the coronavirus can be accessed on the Chemistry World website. <https://www.chemistryworld.com/>

iii) PACN Analytical Training Courses

After careful consideration of the rapidly evolving situation due to COVID-19, we have taken the decision alongside GSK to postpone all of our analytical courses planned for 2020.



The courses are very important to us, but the wellbeing of everyone attending any of our events is our number one priority and we believe that postponing is the most sensible approach at the current time. We are grateful for the continued support and commitment of the local organising committees, and we are making plans to reschedule postponed courses in 2021.

Please contact us at events@rsc.org if you have any questions.

GCMS	Kenya	30th March-3rd April	Postponed 2021
GCMS	Nigeria	1-5th June	Postponed 2021
GCMS	Ethiopia	22-26th June	Postponed 2021
GCMS	Kenya	22-26th June	Postponed 2021
LCMS	Kenya	6-10th July	Postponed 2021
GCMS	Ghana	3-7th Aug	Postponed 2021
LCMS	Kenya	10-14th Aug	Postponed 2021
GCMS	Nigeria	16-20th Nov	Postponed 2021

Royal Society of Chemistry: Funding opportunities

<https://www.rsc.org/awards-funding/funding>

iv) Grants for carers and assistant grants

In response to the COVID-19 pandemic and following a consultation with our community we are very pleased to announce that we are extending the purpose of our Grants for Carers and Assistance Grants schemes **for our members only**.

The primary purpose of these schemes is to help you to attend a chemistry-related meeting, conference or workshop or a professional development event by covering the cost of care that you usually provide or specific assistance or support that you require. However, we are now also accepting applications to cover the cost of:

- any extra equipment you may need to work from home and/or home-school those you care for (maximum £500 total cost)
- care that you usually provide whilst you attend an online meeting, conference, workshop, professional development or teaching responsibility.

Please note, where appropriate, it is expected that you have already approached your employer and that other sources for the related funds are not available.

For further information please see our webpage:

<https://www.rsc.org/new-perspectives/talent/assistance-grants/>

<https://www.rsc.org/new-perspectives/talent/grants-for-carers/>

Conferences

1. **43rd Annual international conference of the Chemical Society of Nigeria Abuja, 22-27 November**
2. **VCCA-2020, Mauritius 1-31 Aug 2020** <http://sites.uom.ac.mu/vcca2020>
3. **International Inorganic Chemistry Virtual Conference in Kenya, 1st-2nd October 2020**, at the University of Nairobi, Kenya. <http://chemistry.uonbi.ac.ke/odhiambor@uonbi.ac.ke>
4. **26th International Conference on Chemistry Education, Cape Town 2021 (26-30 January)** icce2021@allevents.co.za.
5. **10th International Conference of the Kenya Chemical Society, 4-7 Aug 2020, Kisumu City, Kenya.**
6. **African Materials Research Society (AMRS 2021) 13-16 Dec 2021, Dakar, Senegal** <https://africanmrs.net>

Detailed Conference Information

- i) **43rd Annual international conference of the Chemical Society of Nigeria**

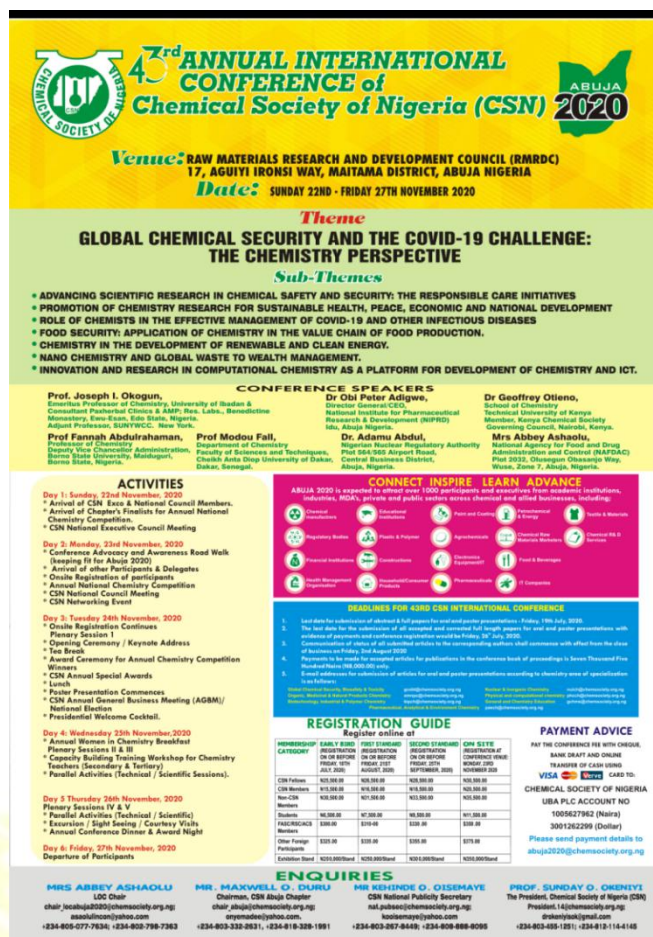


Fig 4: CSN International Conference Flyer

ii) **VCCA-2020**

During this unique situation, we came up with the idea of organising a Virtual Conference on Chemistry and its Applications (VCCA-2020) from 1-31 August 2020. VCCA-2020 has been endorsed by IUPAC.

The website of the conference is: <http://sites.uom.ac.mu/vcca2020>

There will not be live presentations and thus one does not have to be always online.

There will be Nobel Prize presentations including;

Prof Robert Huber (1988 Nobel Prize Winner in Chemistry)

Sir (Prof) Richard Roberts (1993 Nobel Prize Winner in Physiology or Medicine)

Prof Ada Yonath (2009 Nobel Prize Winner in Chemistry)

Prof Jean-Pierre Sauvage (2016 Nobel Prize Winner in Chemistry)



Virtual Conference on Chemistry and its Applications

Research and Innovations in Chemical Sciences. Paving the Way Forward
1st to 31st August 2020

BACKGROUND

A Virtual Conference on Chemistry and its Applications (VCCA-2020) will be held from 1st to 31st August 2020. The Organising Committee has adopted the theme "Research and Innovations in Chemical Sciences: Paving the Way Forward" for this virtual event.

This virtual conference will provide an online platform for participants to present, share and discuss recent findings of their research covering all topics related to Chemistry and interdisciplinary Sciences.

This virtual conference will also provide the opportunity for scientists to interact in the current situation the World is facing due COVID-19 and there are several travel restrictions.

DEADLINES

Abstract Submission	15 th June 2020
Notification of Acceptance	30 th June 2020
Early Registration	10 th July 2020
Presentation Submission	15 th July 2020
Full Paper (Optional)	1 st November 2020

TOPICS

Agricultural Chemistry
Analytical Chemistry
Biophysical Chemistry
Chemical Biology
Chemical Education
Chemical Engineering
Chemical Physics
Chemical Safety
Cheminformatics & Bioinformatics
Chemistry of Natural Products
Computational/Theoretical Chemistry
Cosmetics Chemistry
Environmental Chemistry
Food Chemistry
Forensic Science
Industrial Chemistry
Inorganic Chemistry
Material Science & Nanotechnology
Medicinal Chemistry
Organic Chemistry
Petroleum Chemistry
Pharmaceutical Chemistry
Physical Chemistry
Polymer Chemistry
Interdisciplinary Chemistry Fields

The virtual conference will be held online and there will not be the need to travel.
There is no need to be always online as there will not be live presentations.

We look forward to welcoming you, academicians and researchers,
to participate in this virtual conference.

For more information about the conference, registration, and submission of abstract, please visit:

<https://sites.uom.ac.mu/vcca2020/>

Computational Chemistry Group, Department of Chemistry, Faculty of Science, University of Mauritius, Réduit
80837, Mauritius

+230 4037507 vccamru@uom.ac.mu [cchemuom](https://sites.uom.ac.mu/vcca2020/)

Dr Lydia Rhyman

iii) INTERNATIONAL INORGANIC CHEMISTRY VIRTUAL CONFERENCE IN KENYA; THEME: Inorganic Chemistry for Social Development

Following the success of the First International Inorganic Chemistry Conference in 2018, we hereby announce the Second International Inorganic Chemistry Conference, that will be held virtually on 1st– 2nd October 2020, at the University of Nairobi, Kenya. The Conference is jointly being organized by the Department of Chemistry, University of Nairobi and the International Science Programme of Uppsala University, Sweden.

The conference's objective is to discuss trends of Inorganic chemistry in social development through research, industry and academia in view of the pandemic. The conference will bring together practicing chemists in industry, academia, researchers, entrepreneurs and policy makers to discuss the trends and wider application of Inorganic Chemistry in social development and

environmental management in Africa in general.

On behalf of the organizing committee, we cordially invite you to participate in the Conference by submitting an abstract, for consideration of virtual oral presentation. Upon acceptance of abstract and subsequent presentation of your work, participants will be required to submit full manuscripts to the conference organizers for consideration of publication in the African Journal of Physical Sciences.

2. CALL FOR PAPERS

Abstracts must be in English, typed in 12 point Times Roman, single line spacing and with the title presented in 14 point. The abstract should not be more than 300 words and must be a Microsoft Office Word file (.doc, .docx). Abstracts should be submitted to odhiambor@uonbi.ac.ke.

3. THE CONFERENCE WILL COVER THE FOLLOWING THEMATIC AREAS:

- 1) Trends in syntheses and applications of Inorganic chemistry
- 2) Computational/Combinatorial chemistry
- 3) Nanochemistry and application of nanomaterials
- 4) Environmental Pollution Management
- 5) Advances in mineral extractive technologies
- 6) Information Technology application in Theoretical Chemistry teaching
- 7) E-learning of Inorganic Chemistry

4. IMPORTANT DATES:

- 1) Deadline for abstract – 30th August 2020
- 2) Deadline for notification of acceptance – 15th September 2020
- 3) Deadline for registration – 1st September 2020
- 4) Deadline for submission of full papers – 30th October 2020
- 5) Conference venue: University of Nairobi, Nairobi
- 6) CONFERENCE REGISTRATION FEES

Participants: US\$ 75.00

Students : US\$ 50.00

- 7) Exhibitors Companies, organizations or individuals interested in exhibiting merchandize or in holding vendor demonstrations are welcome. Registration fee for exhibition is US\$ 100.00 for space.

8. Contact Details

For additional details, visit the Department of Chemistry website at <http://chemistry.uonbi.ac.ke/> or contact odhiambor@uonbi.ac.ke

iv) 26th International Conference on Chemistry Education NEW DATES

The Local Organising Committee in consultation with the IUPAC Committee for Chemistry Education has decided to postpone the 26th International Conference on Chemistry Education to January 2021. The name of the conference will change to **ICCE 2021**. Preliminary information about ICCE 2021 is given below.

Dates

26-30 January 2021.

Venue

Lagoon Beach Hotel and Conference Venue.

Abstracts

The call for abstracts will be repeated later this year. If you have already submitted an abstract, you will be invited to resubmit your abstract when the submission process re-opens. The Local Organising Committee for ICCE 2021

For registration queries: +27 (0)21 910 1913 • email: icce2021@allevents.co.za

Event Organiser office: +27 (0)21 712 0571 • email: icce@eventmanagementsolutions.co.za

iv) 10th International Conference of the Kenya Chemical Society



KCS
KENYA CHEMICAL SOCIETY

**FIRST CALL FOR
THE 10TH INTERNATIONAL
CONFERENCE OF THE
KENYA CHEMICAL
SOCIETY**

Date: 4th - 19th August 2020

Theme: Sustainable Development through Green Chemistry Innovation, Chemical Safety and Security

Venue: Maseno University, Kisumu Hotel, Kisumu City-Kenya

Introduction
The 10th International Conference of the Kenya Chemical Society (KCS) brings together Local, regional and International Chemical Scientists and stakeholders from Government, Academia, Research, and Industry to deliberate on *Sustainable Development through Green Chemistry, Chemical Safety and Security*. The society associates with the Government Chemist, NEMA, OPCW, PACN, CSP, CDRF, AAS, KNAS, University of München, Germany, Bioenergy Consulting Services, Germany, Kwa-Zulu Natal University, South Africa, ICIPE, KAM among others.

Vision: A world class professional chemical sciences society

Mission: To advance chemical sciences and disseminate its values for sustainable national development

Objectives

1. To share research ideas, methodologies and outcomes in Green Chemistry.
2. To discuss issues of chemical safety and security alongside occupational health safety.
3. To initiate Responsible Care in Chemical Management.
4. To address the challenges at the energy, materials, food, water nexus through green chemistry.

Thematic Areas:

1. Green Chemistry in Research and Development.
2. Innovative technologies and policies for Sustainable Development.
3. Sustainable resources exploitation and biodiversity conservation.
4. Chemical Safety Management and Security.
5. Sustainable Agriculture, Water, Food Safety and Security.
6. Climate Change, Environmental Pollution and Mitigation.

Modes of presentation:

1. Key Note speech
2. Plenary Lectures
3. Oral Presentations
4. Posters
5. Exhibition

IMPORTANT DATES
Submission of abstract Early Bird: 30th March 2020
Final: 15th April 2020 Notification of abstract acceptance: 22nd April 2020 Submission of full papers: 30th April 2020
Confirmation of attendance: 30th June 2020
Abstracts to be submitted to: kcs_western@yahoo.com

FIELD EXCURSION
An excursion at Ndere Island National Park an Island of Serenity and Beauty at the Lakeside City in Western Kenya

ACCOMMODATION
There is vast accommodation in Kisumu City at additional Costs.

Category	Early Bird	Late Registration
KCS Members	30	35
Resident Non-Members	70	75
Resident Students	10	15
Non Residents	100	150
Exhibitors	300	350

OTHER FEES	
Advertisement in book of abstracts:	
quarter page	USD 300
half a page	USD 350
Full page	USD 500
Corporate Partners for inclusion of logos	USD 1000

PAYMENTS	
Account Name:	The Kenya Chemical Society
Bank:	National Bank of Kenya
Branch:	Karunya University
Account Number:	01242059302300
Swift Code:	KNKEKENXXXXX
MPESA Pay Bill:	Business number: 625625
Account number:	01242059302300

LOCAL ORGANIZING COMMITTEE

Dr. Lisenani Oluo	Chairman, KCS
Dr. Dorcas Shuma	Vice Chairman
Dr. Aisha O. Aliyari	Secretary, KCS
Dr. Charles Ochieng	Asst. Secretary
Dr. Geoffrey Ochieng	Treasurer, KCS
Dr. Patrick S. Mwangi	Editor in Chief
Dr. Malinda Njoroti	Org. Secretary
Dr. Fredrick Kengara	Chairman, KCS Western Chapter
Dr. Solomon Omwoma	Secretary, KCS Western Chapter
Dr. Regina Buri	Treasurer, KCS Western Chapter
Dr. Fredrick Oryia	COD Chemistry, Maseno U
Prof. Chrispin Kowari	COD Chemistry, Maseno U

SECRETARIAT Contact: Dr. Kengara Fredrick of Maseno University kcs_western@yahoo.com;
Cell: +254 705 681 121 Cc. Dr. Solomon Omwoma Department of Chemistry Jaramogi Oginga Odinga University of Science and Technology (DOUST) solomwoma@yahoo.com Cell: +254-705681121 and Paul Gathara: secretariat@kenyachemicalsociety.org

Fig 5: KCS conference flyer

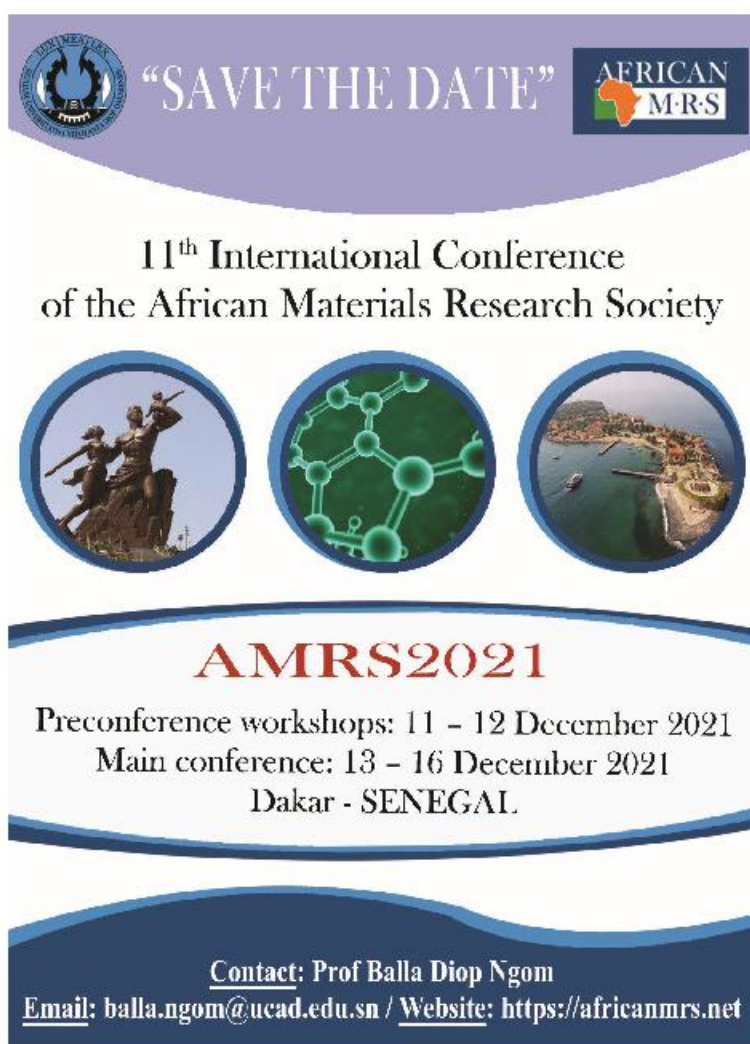
v) **AMRS 2021**

Fig 6: AMRS2020 conference flyer