

#### FASC Newsletter 10, October 2022

The end of the year is rapidly approaching, as is the FASC General Assembly and the ABC Chem event. See details below on the FASC Assembly and attendance by Societies, members and others. We are now completing the banking details to set up the ability for Societies/members to pay FASC fees in their home countries electronically to the FASC account. Remember that 2022 fees payment is required to have voting rights at the FASC GA. Cash payments can also be made at the Morocco meeting. The Nobel Prize for Chemistry this year is for 'click chemistry', a well-known methodology used extensively in synthesis these days. Information on the Prize is given below.

Neil Coville

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#### **CONFERENCES/WORKSHOPS**

- i) 5<sup>th</sup> Annual Days of Chemistry of Senegal, Dakar, Senegal.
- ii) ACRISE 2022, 5<sup>th</sup> African Conference on Research in Chemical Education
- iii) 44<sup>th</sup> SACI Convention 2023.
- iv) ABCChem. Marrakech,
- v) CATSA 2022
- vi) African Materials Research Society (AMRS) Dakar, Senegal.
- vii) Tunisia Chemical Society, Monastir, Tunisia

#### **DETAILED CONFERENCE INFORMATION**

See FASC website for data on conferences <a href="https://www.faschem.org/">https://www.faschem.org/</a>

#### ABOUT FASC

#### **FASC** website

The FASC website is now up and functioning. Information on the FASC history/the updated FASC constitution/old copies of the newsletter/copies of the African Journal of Chemistry etc., has been loaded onto the site. https://www.faschem.org/

# FASC membership and invoices

#### Payment of fees

Payment of fees has proven to be an issue for many Societies. Transfer of monies to the FASC account has not been simple for some.

To circumvent this problem it has been suggested that payment can be made at the ABCChem meeting in December. It is suggested that this could be done in US dollars at the FASC GM. This could be paid for the two years (2022/2023).

Importantly payment will be required to VOTE (be a voting member) at the GM.

To make the payment at the GM it is important that Societies apply for membership BEFORE the GM.

Please apply online: <a href="http://www.faschem.org/contact/membership\_application">http://www.faschem.org/contact/membership\_application</a>
Important points

- 1) Invoices to Chemical Societies went out in February. Cost for 2022 will be US\$100 per Society. (A charge of \$50 will be levied for 'Associate Member countries')
- 2) Individual membership will be available at US\$10 pa.
- 3) A new category 'Young affiliate member' will allow for post-graduate membership (at US\$5 pa).
- 4) To be a voting member at the GA, Society dues must be paid for that year

If all goes to plan, it will be possible to pay directly to FASC with no bank charges in November. An update will be given on the process, once achieved.







#### What does FASC do?

FASC has now been in existence for 15 years and encourages African Chemical Societies to join FASC. What does it do?

- 1) FASC currently produces the African Journal of Chemical Education (Editor: Dr Engida, Ethiopia; <a href="mailto:temechegne@faschem.org">temechegne@faschem.org</a>)
- 2) FASC is coordinating the Atlantic Basin Conference (ABC) on Chemistry in Morocco (December 2022; Chair: Prof Mamia el Rhazi, FASC President)
- 3) FASC has a General Assembly every two years that rotates around the African continent. The next one in December 2022 will be held in collaboration with the ABC event (Organisers: Tunisia)
- 4) FASC has a web site (currently being updated) to inform all of FASC activities
- 5) FASC is a member of IUPAC
- 6) FASC produces a monthly newsletter
- 7) FASC, with the financial support of the RSC, supports young African chemists to attend conferences
- 8) FASC members work closely with PACN
- 9) FASC works with the RSC, ACS and IUPAC seeking support for African chemists
- 10) FASC will produce: FRONTIERS IN CHEMISTRY SPECIAL VOLUME ON AFRICA in 2022

#### The future

- 1) To become financially independent
- 2) To grow the number of member countries
- 3) To coordinate workshops/seminars within member countries

#### Information for the newsletter

Please send all information to Laila Smith (<u>fasc@wits.ac.za</u>), Emmanuel C. Ohaekenyem (<u>ec.ohaekenyem@unizik.edu.ng</u>) or to me (<u>neil.coville@wits.ac.za</u>)

Beth has placed all earlier newsletters on the FASC website (http://www.faschem.org/).

# 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, there could be a small charge. For advertising costs, contact the FASC office in South Africa: laila.smith@saci.cac.za

#### **CHEMISTRY NEWS**

# **FASC General Meeting 2022**







Data for the upcoming FASC General Assembly (AGM) is given below. Minutes and reports will be circulated to all closer to the meeting.

i) Invite



21-10-2022

Dear Sir/Madam,

Re: Invitation to attend the 8 th FASC AGM on Thursday 15 th December 2022, Marrakech, Morocco.

The 8 th FASC AGM will take place on 15 th December, 2022 as part of the ABC Chem conference which is taking place from 13 th -16 th December 2022. Unfortunately, due to financial constraints, FASC is unable to sponsor FASC member societies like it has done in the past. So, this year's FASC AGM will take a hybrid form where those who can be in Marrakech will attend the meeting in person and those who cannot be in Marrakech will participate virtually via zoom.

FASC is by this letter inviting your chemical society to the 8 th FASC AGM. Please indicate who your society's representative will be and also if the representative will attend the AGM in person. A draft agenda for the meeting has been added for your comments and suggestions for additional items. Please submit your suggested additions to agenda by October 27 th so we can finalize the agenda.

Societies who are in areas with their dues are reminded to settle their arears as societies that owe dues may not be allowed to vote during the elections. To assist with currency issues payments can be made (in dollars/euros) in Marrakech to Prof Coville prior to the AGM. These funds will be placed in the FASC account.

We look forward to hearing from you and also to see you at the AGM.

Yours Sincerely,

Professor Mama El Rhazi

FASC President

ii) Agenda









# The 8<sup>th</sup> AGM of FASC will be held at 18.00 h on Thursday, 15<sup>th</sup> December 2022, Marrakech, Morocco

#### AGENDA

- 1. Welcome and apologies.
- 2. Confirmation of Agenda.
- 3. Confirmation of minutes of 7<sup>th</sup> AGM held on 25<sup>th</sup> September 2019 in Gaborone, Tanzania
- 4. Matters arising which do not appear on the Agenda.
- 5 Presidents report (Prof Mama El Rhazi).
- 6. Finance report (Dr Y Chebude).
- 7. Membership report (Dr Y Chebude).
- 8. 2024 and 2026 FASC Congress venues.
- 9. FASC Election.
- 10. General.

#### iii) Minutes 2019

Minutes of the 7<sup>th</sup> Federation of African Societies of Chemistry (FASC) AGM held on Wednesday September 25<sup>th</sup>, 2019 at the University of Botswana Conference Centre, Gaborone Botswana

#### In attendance

- 1. Mama El Rhazi
- 2. Gloria Obuzor
- 3. Yonas Chebude
- 4. Neil Coville
- 5. James Darkwa
- 6. Florence Nareetsile
- 7. Sunday Okeniyi
- 8. Vincent Nyamori
- 9. David Essumang
- 10. Modou Fall
- 11. Clarence Mgina

President FASC

Vice President (FASC)

Treasurer (FASC)

Immediate Past President FASC

Secretary (FASC)

Chemical Society of Botswana CSB)

Chemical Society of Nigeria (CSN)

South African Chemical Institute (SACI)

Ghana Chemical Society (GCS)

Senegalese Committee for Chemistry (SCC)

Tanzania Chemical Society (TSC)







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FASC Newsletter

12. Adel Megrichie Chemical Society of Tunisia (CST) 13. Onesmus Munyati Chemical Society of Zambia (CSZ) 14. Geoffrey Otieno Kenyan Chemical Society (KCS) 15. Lydia Rhyman Chemical Society of Mauritius (CSM) 16. Jean Pierre Nkurunziza Rwanda Chemical Society (RCS) Royal Society of Chemistry (RSC) 17. Tom Welton American Chemical Society (ACS) 18. Bonnie Carpentier 19. Alejandra Palermo **RSC** 20. Sarah Thomas **RSC** 21. Lee Latimer ACS 22. Lori Brown ACS 23. Bice Martincigh **SACI** 24. Gomotsang Bojase **CSB** 25. Veronica Obuseng **CSB** 26. Johannes Awudza **GCS** 27. Evans Adei **GCS** 28. Genevieve Adupko **GCS** 29. Othman C. Othman **TSC** 30. Théonetse Muhizi **RCS** 

#### 1. Welcome and apologies:

The President of FASC, Professor Mama El Rhazi, welcomed the delegates to the 7<sup>th</sup> FASC General Assembly; especially delegates representing the RSC and the ACS. She thanked Chemical Society of Botswana, in particular the Conference Chair, Dr. Florence Nareetsile and the local conference committee for their hospitality. She subsequently asked delegates attending the AGM to introduce themselves and part of the welcoming to the meeting. Each attendee introduced himself/herself and their organization of association.

The President also indicated receiving an apology from the Sudan Chemical Society.

#### 2. Confirmation of agenda

The President asked for additions to the agenda. There were no additions to the agenda, hence the agenda was confirmed as presented.

# 3. Confirmation of the minutes of the 6<sup>th</sup> FASC General Assembly held on September 12<sup>th</sup>, 2017 in Arusha, Tanzania.

The minutes of the 6<sup>th</sup> FASC General Assembly was confirmed, after minor corrections, as a true reflection of the proceedings of the meeting held on September 12<sup>th</sup> in Arusha Tanzania.

#### 4. Matters arising which do not appear on the agenda

No matters arising that did not appear in the minutes were raised.

#### 5. President's report

The President of FASC, Professor Mama El Rhazi, submitted a written report; a copy of which is attached to the minutes. She highlighted aspects of his report, which included support that FASC received from the Royal Society of Chemistry and the American Chemical Society for the 2017 FASC Congress in Arusha and that the host received for the 2019 FASC Congress. She also highlighted the excellent job being done by the editorial team of the African Journal of Chemical Education is keeping to it twice a year publication schedule and in keeping predominantly to educational issues that affect Africa.







The President brought FASC's attention that both FASC (in Marrakech for January 2021) and EuChem (in Crete for January 2022) have submitted a proposal to host the next Atlantic Basin Chemistry Conference on Chemistry (ABC Chem). The decision on who gets to host the ABC Chem is expected before the end of 2019.

She concluded in presenting her report by expressing her gratitude to the Royal Society of Chemistry, the American Chemical Society, Professor Neil Coville for the support she has received during the reporting period, and for the 2019 FASC congress. She also thanked all for their support during her time in office, especially the Chemical Society of Botswana, the RSC and the ACS.

#### **Finance report**

There was no written Finance report, so the Treasurer, Dr. Yonas Chebude, gave a verbal report. He indicated that the 2017 restriction that was placed on FASC's account by the Ethiopian government had been lifted and that an audited FASC account was being prepared. This was in contrast to what was reported at the FASC Congress in Arusha presented here in italics "Another financial challenge that FASC face was the change in the law in Ethiopia that has affected the way non-profit societies like FASC and PACN were to operate. Even more challenging was the embargo the law placed on such societies on accessing their funds. The President, therefore, placed on the agenda to discuss possibilities of how FASC can address this issue".

In spite of this optimism the perennial challenge of getting money out of Ethiopian remains.

#### 6. Membership report

The membership report was verbally submitted by Dr. Yonas Chebude. He indicated the perennial problem of Societies not paying their dues and displayed as excel file during his presentation showing that only the Ethiopian Chemical Society and the Chemical Society of Nigeria, were up to date with their membership dues. A copy of the excel file showing Societies dues owed/paid is attached. He indicated that some of the 10 member countries have not paid any dues since the inception of FASC and asked the Congress as to what FASC should do about nonpayment of dues by member societies.

During the discussion on this report, it became clear that for some of the member societies the contacts that FASC has are no longer valid and that invoices sent to these contacts never reach the member societies. Another issue that was raised was the need for FASC to modernize its mode of payment and move away from societies having only to pay their dues by cash at a FASC Congress.

It was also raised that indeed some societies that had paid their dues were not reflected in the data shown (e.g. SACI)

The Congress, therefore, proposed that the South African Chemical Institute hosts the FASC membership fee account in order to enable member societies to pay their dues by EFT.

# 7. Report on the 7th FASC General Assembly

The Chair of the 1<sup>st</sup> CSB conference and the 7<sup>th</sup> FASC Congress gave an update on how the conference had gone thus far. This included information on the support that had been received from the Royal Society of Chemistry, the American Chemical Society, the FASC president and the FASC executive, in making the FASC general assembly a success. She expressed her gratitude to Dr. Alejandra Palermo, the RSC link, Ms. Lori Brown, the ACS link, for all the travel arrangements for FASC delegates; and Professor Neil Coville, the immediate FASC President, Professor Mama El Rhazi, and the current FASC President, for advice and being the links between the organizing committee and the RSC and the ACS.







#### **8. 2021 and 2023 FASC Congress**

It was confirmed that based on FASC's rotational system of hosting Congresses that the 8<sup>th</sup> FASC would be hosted by a North African country. The President indicated that the North African countries have nominated Tunisia to be the host of the 8<sup>th</sup> FASC Congress. This nomination was unanimously supported the FASC General Assembly and the Tunisian Chemical Society was affirmed as the host of the 8<sup>th</sup> FASC Congress.

The Congress was also requested to nominate member societies in West Africa for the 9<sup>th</sup> FASC Congress, as West Africa will be the region that will host the 9<sup>th</sup> FASC Congress. The floor was thus opened for nominations and the Ghana Chemical Society (GCS) and the Senegalese Committee for Chemistry (SCC) were duly nominated. This was put to a vote. The SCC received 7 votes and the GCS 3 votes. The SCC was thus approved as the host of the 9<sup>th</sup> FASC Congress in 2023.

#### 9. FASC Elections

A proposal to retain the FASC executive for another two years was unanimously accepted.

(i) President: Professor Mama El Rhazi
 (ii) Vice-President: Professor Gloria Obuzor
 (iii) Treasurer: Dr. Yonas Chebude
 (iv) Immediate past President: Professor Neil Coville

FASC does not have an elected position of Secretary. The Secretary is appointed by the President. So, after the election of President requested the outgoing Secretary to continue assisting FASC. The outgoing Secretary, Professor James Darkwa, agreed and this was accepted by the General Assembly.

#### 10. General

The following items were discussed under general:

- (i) **2019 IUPAC General Assembly report**: Professor Gloria Obuzor reported that only a few African countries were represented at the 2019 IUPAC General Assembly in Paris. She informed the FASC Congress that Professor Javier Garcia-Martinez was elected Vice President of IUPAC, which puts him in line to be IUPAC President in 2022, when the term of office for the incoming President, Professor Christopher Brett comes to an end. Professor Obuzor further indicated that Presidents of all the IUPAC Division were also made members of the 2020-2021 IUPAC bureau.
- (ii) Atlantic Basin Conference on Chemistry (ABC Chem): The FASC President informed the FASC Congress about FASC's application to host the next ABC Chem conference and used the opportunity to solicit the support of the ACS for FASC's hosting application.
- (iii) **AOB**: No other matters were brought up for discussion.

The President thanked everyone present for attending the FASC AGM and once again expressed her sincere gratitude to our host before bringing the meeting to a close.

Prof James Darkwa

#### **African Chemical Societies and Other News**

#### iv) Senegal

The Senegalese Committee For Chemistry (<a href="https://csc.ucad.sn">https://csc.ucad.sn</a>) will be organizing their 5th Annual Days of Chemistry of Senegal on November 22-23, 2022, in Dakar.







The general theme is: Developing Energy And Mining Resources Through Chemistry. "Water, Environment, Health" and "Mining and Energy" are the main topics. Non-theme communications are also welcome.

More information can be found in our website, especially in the flyer: https://csc.ucad.sn/images/CSC/FLYER\_JACS\_2022\_VF\_19072022.pdf .

Prof. Modou Fall, UCAD, Dakar

#### v) Nigeria: OWSD Nigeria National Chapter event

The OWSD Nigeria National Chapter - Port Harcourt branch invites interested OWSD members to participate in the 6th Biennial International Conference on Diversity and Innovation in Science for Sustainable Development.

This conference will take place from 19-23 March 2023 at the University of Port Harcourt, Rivers State, Nigeria.

**OWSD** Secretariat

#### vi) Egypt – ACRISE conference

A reminder of the event (Cairo, Egypt); 2-9 December 2022 (<a href="http://acrise.online">http://acrise.online</a>)

#### vii) ABC Chem event



# **Emerging Chemists' News**







#### i) Report: Making Global Green Connections: The Importance of Green Chemistry Summer School for Sustainable Development

Parts of the report are given below. The contributors of this report were all attendees in the 2022 Summer School. The reports of three African chemist attendees is also taken form the article

"This year, the 14th GCPSS was held again in Venice, from 3-8 July 2022. Besides the resonance of this event witnessed by all participants that joined from all over the world, this edition felt special because it counted with overwhelming onsite attendance after lockdown. The founder of the GSSDF, Pietro Tundo, expressed many times his deep joy in seeing all the people gathered there to exchange ideas and share knowledge on Green Chemistry for Sustainable Development. Moreover, Prof. Tundo, together with the organizing committee consisting of Fabio Aricò, Aurelia Visa, and Mirabbos Hojamberdiev, decided to also maintain the online platform, to maximize students' attendance and participation, particularly to those from Global South. The event had 161 student participants (50 in-person and 111 online), from 45 different countries with 5 % from South America, 1 % from North America, 46 % from Africa, 19 % from Europe, 28 % from Asia, and 1 % from Oceania, as shown in Figure 1. Insightful lectures at the 14th edition of the GCPSS were delivered by 24 outstanding teachers (11 online and 13 in-person), from diverse backgrounds with one goal in mind: to emphasize the importance of green chemistry and cutting-edge topics in this regard to the younger generation. Some of the hot topics discussed include continuous-flow reactions to produce pharmaceutical products, synthesis of biopolymers from waste, computational chemistry to develop greener chemical solutions, photochemistry, catalysis in carbon dioxide for biomass conversion, supramolecular dynamic chemistry, metal-organic frameworks, green process for green hydrogen production, and many others."

#### Gizelle Roque van Niekerk (South Africa)

"As a 1st-year MSc student from the developing country of South Africa, I am grateful to Pietro Tundo for seeing potential in me as a young scientist by selecting me to attend the in-person event on scholarship. The 14th Green Chemistry Summer School was a life-changing experience and instrumental to my future career as a chemist. It was an honor to present my research at such a prestigious international summer school. The opportunity reinforced my belief that green chemistry solutions are a fundamental course of action for sustainable development in the Global South. It was a privilege to engage with postgraduate students from a broad spectrum of countries and I found the talks given by highly influential scientists very inspiring. Networking with people who share the same common goal encouraged me to fervently continue my pursuits in the ground-taking field of green chemistry."

#### Akwaowo Imoh Inyangudoh (Nigeria)

"The week-long 14th GCPSS was intriguing and impactful! It has shaped my thinking about my future research to always consider a greener approach. Towards a sustainable future, this program has achieved three interesting things: (a) diversity and inclusion; it helps to level up the science around green chemistry, especially that of low economies; (b) targeting and recognition of young scientists from all over the world as the driving force and future impact makers; and (c) putting the principles of green chemistry on our minds and making us see their relevance in achieving the UN Sustainable Development Goals. Furthermore, the social event created an excellent atmosphere for networking and future collaborations. Our special thanks go to the organizing team and the Summer School sponsors.

#### Zikhona Tywabi-Ngeva (South Africa)

"I found the 14th GCPSS to have been amazing and enlightening. I started working on nanotechnology/nanomaterial research since 2015, but I was not really clued up on how to go about applying innovative solutions to the different industries through nanotechnology. I found the lecturers and their journeys in nanotechnology to be very inspiring and I'm feeling delighted to have been able to be a part of the 14th GCPSS. The content shared by the various lecturers was interesting and







thought-provoking in a positive way. The 14th GCPSS also afforded the potential for nanotech research project collaborations, start-up collaborations, and postgraduate student supervision."

by Akwaowo Inyangudoh, Beatriz Chícharo, Giovanna Mazzi, Seyyed Emad Hooshmand, Gizelle van Niekerk, Lyvia Menezes, Fábio G. Delolo, Amy Naylor Randles, Fabrizio Politano, María Luz Tibaldi Bollati, Zikhona Tywabi-Ngeva, and Zikhona Tshemese

Chemistry International October-December 2022 p48

#### ii) African Young Chemists Network (AYCN)

The African Younger Chemists Network (AYCN) seeks to display the unique talents of young researchers on the continent and to provide a platform for constructive career development and engagements across the globe.

Contact email: aycn.chemists@gmail.com; Contact people: Ms Bianca Davids, Dr Sadhna Mathura

## iii) International Young Chemists Network (IYCN)

The International Younger Chemists Network (IYCN; <a href="https://www.iycnglobal.com/">https://www.iycnglobal.com/</a>), affiliated organization of the International Union of Pure and Applied Chemistry (IUPAC) is organizing a series of FREE live workshops devoted to support and empower early-career chemists with professional development skills to advance their careers.

Stephen O Aderinto: soaderinto1@sheffield.ac.uk

#### The 2022 Nobel Prizes

This year the Noble prizes in Medicine and Physics also had a bearing on chemistry.

#### i) Nobel Prize in Chemistry

The 2022 Noble prize in Chemistry was won by Carolyn R. Bertozzi, Morten Meldal, and K. Barry Sharpless for their work on click chemistry and bioorthogonal reactions.



Carolyn R. Bertozzi (left), Morten Meldal (center), K. Barry Sharpless (right)

"Click chemistry involves reactions that unite two synthetic molecules quickly and irreversibly. Some of these reactions can be carried out inside living cells without disrupting biochemical processes, making them "bioorthogonal.""

"The scientists will each share one-third of the 10 million Swedish kronor (approximately \$900,000) prize. Sharpless and Meldal independently developed the first click reaction about 20 years ago. The copper-catalyzed reaction between an azide and an alkyne produces a highly stable triazole as the single product.







$$R_1$$
,  $R_2$  = various  $R_1$ ,  $R_2$  = various  $R_1$ ,  $R_2$  =  $R_2$ 

The copper-catalyzed azide-alkyne cycloaddition is click chemistry's premier reaction.

"Chemists had long used this kind of cycloaddition reaction, but the copper catalyst was the key to making it rapid and selective. By incorporating clickable azides into polymers, for example, researchers can subsequently decorate the polymer with chemical groups that give the material useful properties, such as electrical conductivity or protection from ultraviolet degradation. Bertozzi wondered if click chemistry could offer a faster alternative. However, the copper ions used in the classic click reaction are toxic to living cells, limiting the application of this particular reaction in biology. In 2004, Bertozzi came up with a solution: a click reaction between an azide and a strained cyclooctyne that did not need a catalyst and therefore did not interfere with the biochemistry of a living cell."

Mark Peplow, special to C&EN; October 5, 2022; Additional reporting from Bethany Halford

#### ii) Nobel Prize in Medicine

The Nobel prize in physiology or medicine for 2022 has been awarded to Svante Pääbo from the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany, "for his discoveries concerning the genomes of extinct hominins and human evolution". The basis of his work is chemistry. An easy to read on the topic is: Svante Pääbo's ancient DNA discoveries offer clues as to what makes us human Published: October 3, 2022 9.09pm SAST

 $\underline{\text{https://theconversation.com/nobel-prize-svante-paabos-ancient-dna-discoveries-offer-clues-as-to-what-makes-us-human-}$ 

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%202421024192+CID 025cab942257c6e1b6a5e5cf38904daf&utm source=campaign monitor africa&utm\_term=Nobel%20prize%20Svante%20Pbos%20ancient%20DNA%20discoveries%20offer%20clues%20as%20to%20what%20makes%20us%20human

#### iii) Nobel Prize in Physics

Alain Aspect, John Clauser and Anton Zeilinger were awarded the 2022 Physics Nobel prize for their experiments using entangled quantum states, where two particles behave like a single unit even when they are separated. Their prize was "for experiments with entangled photons, establishing the violation of Bell inequalities and pioneering quantum information science". Their results have cleared the way for new technology based upon quantum information. This will have implications for quantum cryptography

# The IUPAC Top Ten Emerging Technologies in Chemistry 2022

The innovations that will transform energy, health, and materials science, to tackle the most urgent societal challenges and catalyse sustainable development.







Every year IUPAC lists the top 10 emerging technologies in chemistry. It will be interesting to see which indeed will lead the profession in future years. The list for 2022:

- > Sodium-ion batteries An abundant, affordable alternative to lithium
- ➤ *Nanozymes* Combining the power of natural and artificial catalysis
- > Aerogels The lightest materials for thermal insulation
- Film-based fluorescent sensors A tuneable, versatile alternative for miniaturised detectors
- Nanoparticle megalibraries High-throughput synthesis and screening arrive to the nanoworld
- Fibre batteries A new form of energy storage, ready for wearables
- Liquid solar fuels A strategy to "bottle renewables" and make greener chemicals
- **Textile displays** Fibre-based light-emitting diodes for flexible screens
- > Rational vaccines with SNA Spherical nucleic acids to reshape and restructure vaccine technology
- > VR-enabled interactive modelling Computational chemistry connects in the metaverse

Chemistry International October-December 2022 p4-14

Fernando Gomollón-Bel

#### The International Year of Glass - 2022

This event may have been missed by many.

As chemists, we would all have worked with items made of glass in the chemistry laboratory – beakers, pipettes, burettes and so on. Glassware is an important component in the world of chemistry. The UN has made 2022 the International Year of Glass, dedicated to exploring the ways glass is helping us achieve a more equitable and sustainable world.





#### THE OBJECTIVES OF THE EVENTS HELD THIS YEAR:

Demonstrate the role of glass in advancing civilization throughout recorded history. Organize international glass science and art festivals, with workshops to excite and inform the public of this rich history, and highlight links between glass, art and culture. Stimulate research on glass amongst organizations in education, industry, research and the public domain, including museums, to address the great challenges the world faces: achieving sustainable and equitable growth, and improving the quality of life everywhere. Build worldwide alliances focused on science and engineering for young people, while addressing gender balance and the needs of developing countries/emerging economies.

Taken from C&EN (04 Aug 2022)

"The United Nations declared that 2022 is the International Year of Glass, and Newscripts would like to take this opportunity to celebrate the crucial contributions of scientific glassware to chemistry. With items as varied as Pyrex flasks and cell phone screens, glass gear has long been a







mainstay for researchers around the globe. Chemists in particular owe a debt of gratitude to vitreous accoutrements and the glassblowers who craft them, says Catherine M. Jackson, a chemist and historian of science at the University of Oxford."

"Specialized glassware enabled scientists to observe chemical worlds enclosed in transparent vessels. People skilled in manipulating molten silica mixtures crafted each precious piece." Indeed "...... Triangular piece of glassware, .... is enshrined in the American Chemical Society's logo," and "Glass has remained the medium of modern chemistry ever since" and "The aesthetics of graduated cylinders filled with colorful liquids, the looping coils of reflux condensers, and the elegance of a humble round-bottom flask make laboratory glassware iconic for both its scientific function and its artistic sensibility....."

newscripts@acs.org.

# **Royal Society of Chemistry News**



#### i) Pan Africa Chemistry Network

The Pan Africa Chemistry Network (PACN) has a LinkedIn group where members share information related to PACN activities, news, and events from across Africa. You can apply to join this group here <a href="https://www.linkedin.com/groups/1900756/">https://www.linkedin.com/groups/1900756/</a>

# Commonwealth Chemistry – poster awards



The Commonwealth Chemistry Posters virtual event was held on Tuesday Wednesday September, 2022.

There were 25 poster prizewinners across the six themes. The winners' names and posters have been published on our website at commonwealthchemistry.org/2022-winners-of-commonwealthchemistry-posters, and they will each receive certificates and a financial award to support their personal and professional development. The winners per theme can be found on the website and social media posts on <u>Facebook</u> and <u>Twitter</u>.

We are delighted to see an excellent geographical distribution among the winners, with prizes going to 17 Commonwealth countries across all five regions. We are also encouraged to see the excellent gender balance among presenters and winners







Dr Ale Palermo, Dr Andrew Shore, and Dr Aurora Walshe
Commonwealth Chemistry Secretariat
Secretariat@CommonwealthChemistry.org;
commonwealthchemistry.org | facebook.com/FedCommChem/ | twitter.com/FedCommChem/

View the online poster gallery

#### AFRICAN JOURNALS OF CHEMISTRY

#### iv) African Journal of Chemical Education

The online version is to be found on the FASC website (<u>www.faschem.org</u>, under Journal) and the AJOL website (<u>www.ajol.info</u>).

AJCE, 2022, 12(2) ISSN 2227 is available on line

Enquiries and manuscripts should be addressed to the Editor-in-Chief: email <u>eic@faschem.org</u>, PO Box 2305, Addis Ababa, Ethiopia.

Dr. Temechegn Engida e-mail: temechegne@faschem.org

#### v) Other African Journals of Chemistry

See the FASC website for a list

#### CONFERENCES/WORKSHOPS

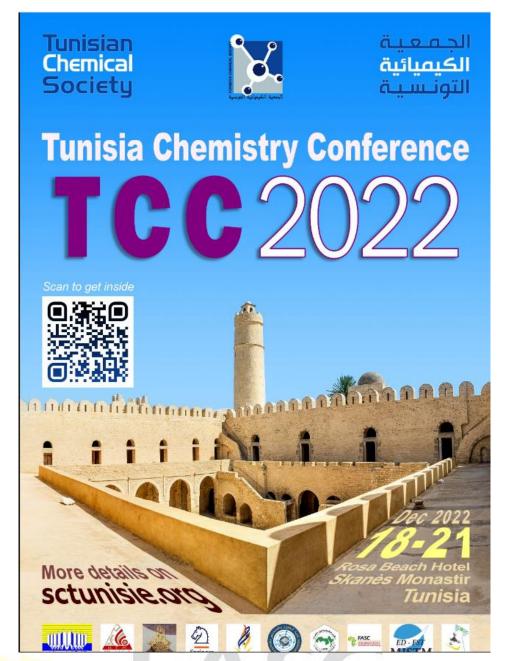
# **Upcoming events**

- vi) **5th Annual Days of Chemistry of Senegal** on 22-23, November, 2022, Dakar, Senegal. https://csc.ucad.sn/images/CSC/FLYER\_JACS\_2022\_VF\_19072022.pdf
- ii) ACRISE 2022, 5<sup>th</sup> African Conference on Research in Chemical Education, 7<sup>th</sup>-9<sup>th</sup> December 2022, Cairo, Egypt. https://arice.online
- iii) 44<sup>th</sup> SACI Convention 2023. Stellenbosch, SA, 9-13 January 2023
- iv) ABCChem. Marrakech, Morocco, 13-16 Dec 2022, (www.faschem.org)
- v) CATSA 2022. Drakensberg South Africa 13-16 Nov 2022 <u>www.catsa.org</u> (see FASC website www.faschem.org)
- vi) African Materials Research Society (AMRS 2021). 12-15 Dec 2022, Dakar, Senegal www.africanmrs.net (see FASC website www.faschem.org)
- vii) Tunisia Chemical Society. 18-21 Dec 2022, Monastir, Tunisia. http://sctunisie.org/









# Federation of African Societies of Chemistry





