HKASME WOV--2023 MAIL PACK

< A charitable institution since 15 May 2010 under the Section 88 of the IR Ordinance. >
< Serving ALL teachers since 1964 ... >



stepping to 60thAnniversary

>> (since 1964).... Check new items in this mail pack leading to 2024 – the Association $60^{
m th}$

Anniversary (*Esp. the "60th Corner")....... → ... whether you are New or Old members – think what you would contribute to the celebration © © ©



> Intn's Year of 2023 :: >>

>>(*)* What are the global problems? Is Food & Health in your category? India's proposal to observe an International Year of Millets in 2023 was approved by the Food and Agriculture Organisation (FAO) in 2018 and the United Nations General Assembly has declared the year 2023 as

the International Year of Millets (IYOM-2023) .!!!

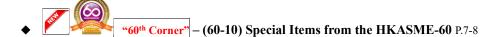
??- Millets? What are they? Why focus on that? How



Check for more at https://twitter.com/IYM2023 ... !!!

could explore and get prepare for your OWN students in 2023 from such activities! >>....

◆ Council News – ② More in the 60th -2024 ... ② P. 3-6



♦ Physics News - P.9

Items in this pack:

- **♦** Autopay for membership fee
- ◆ <u>"STEM Corner"</u> -- (ST-1) Hanoi to host the IT and STEM Festival in 2024

https://hanoitimes.vn/hanoi-to-host-the-it-and-stem-festival-in-2024-324986.html

- ◆ <u>Science News</u> (S-1) PISA 2025 focus on Science with new dimension called "Science Ideintity" (S-2) <u>IYOM-2023</u> ... More...
- ◆ (S-P1) Primary STEM Project Competition 2023-24 <u>(常識百搭)</u> *similar events and processes* <u>for</u>-May,2024 at HK Central Public Library Hall!!! P.11-13
- ◆ Chemistry News (C-1) About the NEW competition "Sustainability & Elements" (Csme60) due by 1/12/2023! (C-2) Scientists Moungi Bawendi, Louis Brus and Aleksey Ekimov won the 2023 Nobel Prize in Chemistry for their discovery of tiny clusters of atoms known as quantum dots, widely used today to create colours in flat screens, light emitting diode (LED) lamps and devices that help surgeons see blood (C-3) HKChO (Chemistry Olympiad) (C-4) Applying microchemistry in Space Exploration the "ICE-CUBE Thruster" P.14-19
- <u>Biology News</u> (B-1) The first Biology Mock Exam for DSE-2024 (B-2) Nobel Prize 2023 of -- ... in Physiology or Medicine jointly to Katalin Karikó and Drew Weissman "for their discoveries concerning nucleoside base modifications that enabled the development of effective mRNA vaccines against COVID-19." P. 20-22
- **◆ ETV News** -- P.23
- Resources Collection -- Stock is LOW! ··· "Element Cubes"! "Element Packs"! New "Periodic Table items" P. 24-26



Are e-Vehicle Green & Sustainable!? What's

the most important "heart" of e-Vehicle?? ...

..... Check relevant details and prepare your students for the forth coming future!

> Living in a pandemic means we have had to accept changes to many aspects of our daily routines



AND ISSUES of COVID19 still lingering... – including learning & teaching!



◎◎◎ More in the 60th -2024 ... **◎◎◎**

With two more months, we'll march in 2024! Though recent health news is not as good as expected (with predicted high impact of flu & COVID-19), we still manage to initiate more activities as previous year into our 60th Anniversary.

Other than the routine activities, some new activities have been drafted to form part of our 60th Anniversary celebration! Yet, whether all could be organized depend on many factors – one of which is the difficulty in finding suitable venues for such activities. Anyway, we will try our best to make that happen.

As usual, we must remind teachers that are keen for certain activities (e.g. the Mock Exams) must check our WWW and be prompt at registering for the required places. most of our application will be handled via online format, please check details online!

With the successful completion of the "Chemical Celebration of HKASME-60", another similar competition "Sustainability and Elements" will continue with similar submission format this year {1st batch due by 1/12/2023}. We hope teachers and students could work alongside the Association for better education in the Science and Maths sectors in another 60 years to come. Please refer to the regulations online and further notes about MailPack / NOV-2023(60-11) / p. 4

the design with "elements" from this mailpack.

The 60th Anniversary (1964 to 2024) Corner in this pack is (60-10) about one special aspect from the past 60 years of Association activity – the support to teachers about teaching references and equipment. See if you still have the well-received products introduced at hand?

Again, we would like to thank our dedicated colleagues in helping and supporting different activities in the hard times and we hope the 60th Anniversary could come with something special in the days to come.

Afterall, just to remind teachers about the ordering of references and tools from the Office. We must alert all teachers that delivery time for many orders will be much longer than before due to the global viral impact on logistics. Hence, if you want to place orders for certain materials, please be patient.

For latest updates (including cancellation) of the SME activities, the usual channel is our web: www.hkasme.org or phone the Office (23330096, 23337602) - we still open as usual.

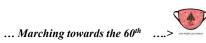


Stay safe and be prepared for further outburst

The Council Oct 2023

< The Office will stay operation EXCEPT for serious incidence! >

Thanks for all donations in the past 59 years that support the Association to this day. Donations are welcome, either for specific event or for general support. The HKASME is a charitable organization under the section 88.









Update News at http://www.icaseonline.net/

(ICASE = "International Council of Associations for Science Education". <u>HKASME is</u> one of the founding member of ICASE.)

- >> NEW:: <u>COVID-19 PHENOMENON-BASED LEARNING (PhBL)</u> ENGINEERING CHALLENGE
- >> NEW resource can be downloaded at ... http://www.icaseonline.net/coronavirus.pdf
 "GUIDANCE on active learning at HOME" !!! <>< Grasp your copy NOW!

** Up-coming Events of HKASME **

HKASME Coming Issues ... due to Impact of Coronavirus Infection ... may be..

>> Always check updated news at www.hkasme.org

Activity / Issue	Current situation	Remarks	
"60th Corner" NEW	(60-10): Special Items	Members could contribute to	
"60" Corner" 3	from the HKASME-60>	this Column with notes, special	
> a NEW Column to recap	{note: past articles (60-1) to	items, blessings, etc Just	
important events in the	(60-9) in Sep-2023 to Oct-	email us:	
Association history leading to	2023 -Pack	enquiry@hkasme.org	
2024 the 60 th Anniversary			
NEW (C)	Check related files at	Check details online and also	
"Sustainability &	www.hkasme.org Download	get reference from Report of	
Elements" – Celebrating	all files for processing.	last similar competition on	
HKASME-60 Batch-1 >		WWW	
another NEW competition to		(with results). Final overall	
celebrate our 60 th Anniversary		report be published in the	
		yearly Sept. SME Journal	
Sales of equipment &	Office still operate within our	Phone (23330096, 23337602)	
references	limits.	++ ONLINE data & order	
Digi Science_Video	TEW S	Due by 8/1/2024.	
Competition 2023/24 -	5/4/2024 (Friday)	Application!	
Theme: Testing Science -			
Sustainability in Daily Life			
Chemistry Olympiad for	29/3/2024 (Friday)	Due by 15/1/2024.	
Sec. Schools - Theme:		Application!	
"Chemistry of			
Fermentation"			

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MailPack / NOV-2023(60-11)			
	>		
TEN A FITH A	Final Exhibition at Central	Ongoing competition for	
25 th Primary	Public .Library (11/5/2023	(2023-24) will be similar	
STEM project (2022-	[THU]) completed. Final	Check online later!	
23) Competition <u>(</u> 常識百	Results online at hkedcity.net		
<u>搭)</u>			
2023-24 HK Science	25/11/2022 (SAT) TEW	Due by 27/10/2023.	
Olympiad for Primary	25/11/2023 (SAT)	Application online!	
Schools (for P5 & P6)			
Mock Exams of Bio,	Across Dec-2023 to Jan-2024	Check details online – must	
Chm & Phy2024	at various Centres	apply online!!!	
ICQ 2023 (previous	ALL tests completed – results	Overall Results - completed by	
ANCQ) by RACI,	<u>distributed.</u>	Sep/Oct -2023!	
Australia.			
Workshop on Scientific Work	TIEW.	Check www.hkasme.org	
of Government Laboratory	25/11/2023 (SAT)		
cum Job Overview			
Hong Kong Biology Literacy	20/4/2024 (2.17)	Due by 1/12/2023.	
Award (2023/2024) (HKBLA)	20/1/2024 (SAT)	Application online!	
Chemistry SBA	Cheung Sha Wan Catholic	28/10/2023	
	Secondary School		
Physics SBA	LKWFSL Lau Wong Fat	4/11/2023	
	Secondary School		
Briefing Session with Science	10 (11 (2002 (G 17)) TEW	Due by 15/1/2023.	
Talk	18/11/2023 (SAT)	Application online!	

- >> Though the spread of Coronovirus is diminishing, no one is sure of anything in the future. In case that the activities have to be cancelled, the most update information will be posted via our webpage: www.hkasme.org.
- >>> For some routine activities, regret that they have to be cancelled or delayed!!! If you have any suggestion that they could be handled safely, please forward to our managers for consideration in coming activities!!!
- → Resources for New Year (2022-23)- "Element cubes", "metal packages", New "Periodic Table" items !!! → Check details at end of this Mailpack. --- Ordering References / Materials -->> phone up the Office for order & enquiries. Check update catalogue at www.
- →→ Some books (Maths & Chem) are on sale about 50% OFF! -->> CHECK at office!



(60-10) Special Items from the HKASME-60

For the past 60 years, the most common activities organized (or co-organized) by the HKASME should be about teachers' professional gathering and activities for students from primary to secondary levels. Amongst all such activities, one side-activity that the Association has helped teachers to achieve their education targets is the promotion of certain teaching / learning resources.

Such resources could broadly be divided as teaching references and equipment. In the old times (e.g. 1970s to 80s), teachers may have difficulties to obtain suitable references from overseas. This may also be troubled by different financial setting in different schools that may hinder teachers from getting the references through secure channels. In those days, the Association could have quite a sum of trading amount of reference order request from teachers each year. Amongst all, the examination papers and related reference of different examination boards overseas were very popular. However, as our local curriculum had been modified (especially from the DSE since 2012), such request dropped a lot. Also, most examination boards arrange their own way of distributing the examination papers through their own channel online. Hence, we don't focus much on this side of activity.

On the other hand, though our teaching and learning has been infiltrated by the impact of IT, the request for some teaching and / practical accessories is still common. Actually, some very traditional "toys" are warmly welcome by teachers at different times of the year. Below are just some very popular items that are still well appreciated by teachers with much bulk trade.

Below are just some to refresh your mind – see if you / your school still retain such items for your daily teaching \dots

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The first very common item is the periodic table. This comes in different size and shape. Teachers may also use this as an award for their own school activities.

The second one is a small toy that helps in explaining some common daily processes – evaporation and condensation of certain liquid (mostly alcohol in the toy) and factors affecting such processes that makes the bird on and off going for a long time. Of course, some teachers also use this as an award for their activities too.





Another very common and welcome

"toy" is the "Air Zooka". This is actually a famous teaching toy – the "air vortex cannon". It releases doughnut-shaped air vortices — similar to smoke rings but larger, stronger and invisible. The vortices are able to ruffle hair, disturb papers or blow out candles after travelling several metres. As the toy is quite attractive and powerful, orders had not been stopped since we introduce this in most fairs in the 1980s.



Another well-received item is the model for structure building showing that teachers find such physical models could not be replaced by the virtual ones!!!

From the above examples, we could still observe that teaching and learning through "actions" and "real models" are still important in creating spaces for their virtual and real actions. Of course, there are still many teachers asking for ordering of different equipment. We will try our best to secure such support within our limits.

{{.. Note: The first article of the "60th Corner" Series is (60-1) "1964? What happened? "-- in the HKASME September-2022 Mailpack.}}

Physics News

(P-1) Physics Mock Exam in Dec-2022 (30th & 31st)— ALL scripts had been handled and results processed.

ALL results and reports had been issued and most collected to stude	ents.
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IMPORTANT NOTICE TO ALL MEMBERS !!!!!

Members who use autopay for membership fee payment are reminded to check for the sufficient fund in the designated bank account. The membership fee will be collected from the accounts for \$150.

around 11st December, 2023 (Monday).

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(ST-1) Hanoi to host the IT and STEM Festival in 2024 https://hanoitimes.vn/hanoi-to-

host-the-it-and-stem-festival-in-2024-324986.html

The event will take place on April 3-4, 2024, at Nguyen Hue Specialized High School, Hanoi.

The IT and STEM Festival 2024, with the theme "Accelerating Digital Transformation and STEM Education in the Education and Training Sector towards Smart Education", will be held for the first time in 2024.

As part of the festival, the Hanoi Department of Education and Training will hold a conference on the direction of digital transformation and STEM education in the city's education sector in the context of the Fourth Industrial Revolution.

In October 2023, organizations and schools will launch promotional activities and organize festivals at the grassroots level. They will also submit electronic lecture entries on the website https://itday.hanoi.edu.vn for the electronic lecture competition.

The festival includes many different activities, including the water rocket shooting competition "Fly into universe"; Mercury STEM challenge activity; HUST Robot Arena Finals; the International STEM Conference with the theme "STEM without borders"; Lab Tour to visit and experience the laboratories and practices of Hanoi University of Science and Technology, among others.



** SCIENCE NEWS ** --

(S-1) PISA 2025 – New Focus on Science Education



PISA 2025 will focus on science as the major domain. An interactive version of the framework with links to the full framework document can be found on this website: http://pisa-framework.oecd.org/science-2025/

... You can download the *.pdf of the above framework & get your students ready for PISA-2025. Even if you won't take part in the actual test, you should still find that useful for suggested changes in your science teaching ... !!! There are 8 sections to explore about the "2025 PISA science Framework" --- Overview, What's new? Science competencies, environmental science competencies, scientific knowledge, science identity, contexts and examples. One of the new focus is about the dimension called "Science Identity"...

For details, please check https://www.oecd.org/pisa/publications/PISA-2024-Science-Strategic-Vision-Proposal.pdf



(S-2) IYOM-2023

Enhancement of Production & Productivity of Millets

- -- Strenthening quality seed chain
 - > Fully support to breeder seed procurement
 - > Support foundation and certified seeds
 - > Encourage PPP mode
 - > Seed Hubs
- -- Frontline technology demonstrations/ cluster demonstrations
- -- Demand creation through awareness and increase in consumption
- -- Crop diversification focus in favour of millets
- -- States to take steps for proceurement

For more details, check ... https://agricoop.nic.in/Documents/Crops 0.pdf

Secondary Schools 2023-2024) Regulations

1. Aims

The competition aims at:

- promoting students' interest in learning Science;
- developing students' problem solving, communication and science process skills through demonstrating and explaining interesting experiments;
- encouraging students to communicate scientific ideas to the public in a meaningful and creative way;
 and
- raising students' awareness of testing and certification and its importance to their daily life.

2. Participants' Qualification

Participant must be a secondary student of a whole-day school.

3. Requirement of Entry

(a) Theme:

Testing Science - Sustainability in Daily Life "測試科學 - 日常生活中的可持續性"

(b) Video:

- The duration of the video should be not exceeding 2 minutes.
- The science experimental work should be conducted in the school laboratory using materials obtained at home, schools or any daily products. Risk assessment should be conducted before starting the experiment. Supervision from the teacher should be provided when the students carrying out the experiments.
- The content could be presented in either Chinese or English. Mixed language is not accepted.
- The content should not be promoting any product brands and should not display the brand name or logo of any products;
- The video should be uploaded on YouTube (URL: www.youtube.com) before submitting the Application Form and the report.

(c) Report:

- The video should be accompanied by a report including the experimental principle and the safety-related aspects for the experiment. The coverage of the report should not exceed four single sided A4 papers (including reference sheet). The idea can be illustrated by texts, diagrams or photos, etc.
- The report shall have a cover page with the title of the video. School logo or name should be avoided on any work, otherwise participants may be disqualified.
- The language used in the report should be consistent with that used in the video.

4. Rules

- (a) The competition consists of Junior Secondary Division and Senior Secondary Division:
 - 1. Junior Secondary Division: Students of S1 to S3.
 - 2. Senior Secondary Division: Students of S4 or above.

- (b) Teams, comprising not more than three students in a team, must be nominated by schools. Each school can nominate a maximum of two teams and each team can only submit one entry. A team who submits more than one entry will be disqualified.
- (c) Each entry should include a video and a report.
- (d) Entries must be the participants' original work that have not been published previously, nor submitted for other competitions.
- (e) Entries must not infringe any intellectual property rights or any other rights of any third party.

5. Submission of Entries

- (A) Application (due by Jan 8, 2024 (Monday)): Fill in the Application Form (Appendix I) and email to digisci@hkasme.org.
- **(B)** Submission of Report: The report(s) for the video(s) should be submitted together with the attached Submission Form (Appendix II) via schools **by post** to "Hong Kong Association for Science and Mathematics Education, Rm 114, 1/F., Po On Court, 1 Po On Road, Sham Shui Po, Kowloon". Please mark clearly on the envelope "*Digi-science*". The deadline for the entry submission is **April** 5, 2024 (**Friday**) (the postal chop date will be the date of receipt).

6. Judging

- (a) The judging panel for the competition will comprise representatives from HKCTC and HKASME.
- (b) Entries will be marked according to the following criteria:
 - How the experiment and the report are presented and elaborated;
 - Whether the idea of experiment is creative; and
 - Whether the entry is interesting, original, scientifically accurate and engaging to ordinary audience.

7. Awards

- (a) The competition consists of the following awards for each junior secondary and senior secondary levels:
- One Champion
 One trophy and book coupons worth HK \$1,000
 One first runner-up
 One trophy and book coupons worth HK \$800
 One second runner-up
 One trophy and book coupons worth HK \$600
- Two merit awards : One award certificate and book coupons worth HK \$300 each
- (b) All participants will receive a certificate of participation.
- (c) Winners will be notified of the competition results before May 31, 2024 (Friday) and be invited to receive their awards in a prize-giving ceremony, details of which will be given in due course.

Copyright The organisers reserve the right to publish in full or part of the entries. All entries will not be returned to schools.

For details, please visit our website: www.hkasme.org
Download Forms: Appendix I: Application Form

Appendix II: Submission Form

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** CHEMISTRY NEWS **



(C-1) About "Sustainability & Elements" Competition for Hong Kong Secondary Schools



(2023-24) due date: 1/12/2023

This <u>NEW</u> competition is similar to the series of competition since IYPT-2019 and Csme60 in previous years. Check for details by downloading the regulation and related reference files from www.hkasme.org
For enquiries, please phone 2333-0096 / 2333-7602 or email: csme60@hkasme.org

More about the competition:

- One must note that this competition focus on "sustainability" and "element(s)" and there is no restriction on how the design should be presented. It could be a drawing, a poem, a 3D object, cartoons, story,_so as the format could bring out the message you want to convey. In this regard, there are winner awards as examples with different types of design in the past years' competition. You could check for the results and reports about the previous competition.
- Another very important detail that the designer should hand-in is the supplementary file that explain how your design could link up "sustainability" and "the element(s) you choose" in the article.
- ➤ Afterall, we hope this competition could arouse your students' awareness of sustainability and how it could be achieved. As framed in the PISA 2025, environmental aspect and sustainability sense should be areas that students be addressed in the coming future.

"Sustainability & Elements" Competition

for Hong Kong Secondary Schools (2023-2024)

celebrating "HKASME-60" (慶祝 HKASME 60 年 [2024])... | Due Date: 01-12-2023

香港數理教育 60年

The "Sustainability & Elements" is a competition to celebrate the "60th Anniversary of the Hong Kong Association of Science and Maths. Education" (established since 1964). It aims to promote the interest of students in learning Chemistry, with elements and their special link to sustainability, and developing students' communication and science process skills through article design with various presentation skills.

Details of the competition are given below: (Submission Form & this regulation can be downloaded from www.hkasme.org}

Participants All secondary school students (F.2 to F.6) are welcome. Each student can choose element(s) for their article design that is(are) linked with different aspects of sustainability.

- Rules for (a) The article could be in either Chinese or English.
 - (b) Each article design should be within TWO A4 pages. Text and / or graphics could be included. There is no restriction to the format of presentation in the article design.

(Check notes (c) in another file).

competition

- Students should choose element(s) with special features linking to sustainability. Focus of the competition is to call for students' science-related knowledge and skills, communication skills and creativity in relation to chemical elements. The link with sustainability should be given in another file: Supplement Document File [check "Reference Note file" and download SuppDoc file].
- (d) No school logo or name should appear in the article.
- (e) Student name+element-No. should be used as submit-filename (e.g. ChanTM 12(C)).
- (f) Students' data should be stated on the Submission Form (available from WWW).
- (g) The maximum number of participants from EACH school is 8 for EACH batch.
- (h) Submission of all files should be via email csme60@hkasme.org with specific filenames (see examples in "Reference Note file")

Submission

Submission due date for Batch-1 is 01/12/2023. All participants should hand in their articles & SuppFile, together with "Submission form"(^^), to csme60@hkasme.org on or before the deadline through one responsible teacher. Check details in "Ref Note File".

- Awards > ONE <u>best winner</u> will be awarded for EACH batch as "Best Sustainable Elemental Celebration of HKASME-60". The winning article will be posted online in our news and Journal. The best winner will have a certificate and \$400 coupons.
 - > Two other outstanding articles may be awarded for each batch. Each outstanding article will have a certificate and \$200 coupons.
 - > Up to a maximum of 10 *merit articles(^)* will be awarded for each batch. Each merit article will have a merit certificate and a periodic-table-related souvenir.
 - ALL other participants will receive a certificate of participation for the Competition and their names will appear in the final overall "Anniversary Celebration" [published in the Final Report] as a token of being a participant for this special event [continual professional development of HKASME].(^)

Enquiries Enquiries may contact HKASME at Tel: 2333 0096 / 23337602 or email csme60@hkasme.org

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Copyright The Association reserves the right to publish in full or part of the entries. All entries will not be

- (^) No. of merits depends on quality of presentations & sponsorship. (^^)Files can be downloaded at WWW.
- >> References: Check the attached "Note file" and Students may find the IYPT-2019(HK) competition useful – details could be found at www.hkasme.org > Chemistry > IYPT

Download Files:

- 1. Reference Note File
- 2. Sample Supplementary File
- 3. Submission Form to be completed by ONE responsible teacher.



(C-2) Nobel Prize for Chemistry 2023



"Ouantum Dots" win the 2023 Chem Nobel!!!

The 2023 Chemistry Nobel Prize is awarded to 3 scientists: Moungi G. Bawendi, Louis E. Brus, and Alexei I. Ekimoy for the discovery and synthesis of quantum dots. They planted an important seed for nanotechnology.

Check for more at .. https://www.nobelprize.org/prizes/chemistry/2023/press-release/

(C-3) Most Chemistry events resume -- Hong Kong Chemistry Olympiad & Digi-Science ...

Check www for details later.

Details will be updated on WWW. Check the due dates online!!!

(C-4) Applying microchemistry in Space Exploration – the "ICE-CUBE Thruster"



< the actual instrument ...

The Iridium Catalysed Electrolysis CubeSat Thruster (ICE-Cube Thruster) is a micro-scale rocket engine which is being developed at Imperial College London under ESA's General Support Technology Program (GSTP).

The thruster utilises the propellants of hydrogen and oxygen produced by the electrolysis of water and is designed to produce a thrust of only 4.5mN. Designing a thruster to function at this scale is a unique challenge and requires a very different approach compared to the typical rocket engines most people are accustomed to - to put it into perspective the space shuttle main engine (RS-25) has approximately half a billion times more thrust than ICE-Cube.

• For more, check at https://www.imperial.ac.uk/aeronautics/research/facilities/spacelab/ice-cube-thruster/

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(C-4) Hong Kong Chemistry Olympiad for Secondary Schools (2023 - 2024) Information Sheet

The Hong Kong Chemistry Olympiad for Secondary Schools is a project learning competition jointly organized by the Hong Kong Association for Science and Mathematics Education (HKASME), the Hong Kong Chemical Society and the Royal Society of Chemistry. It aims at promoting the interest of students in learning Chemistry and developing students' problem solving, communication and science process skills through project learning. Details of the Olympiad are given below:

Theme Chemistry of Fermentation (發酵的化學)

Participants Each team comprises three to five Secondary 3-6 students and each school can present a maximum of two teams of students to compete in the Olympiad.

competition

- Rules for the (i) Students will design and work on their own project in school. The project should include experimental work.
 - Each team of students should write up a report to give a concise and well-ordered account of their project including the objectives, an abstract of not more than 200 words, principles, experimental methods, presentation and interpretation of results, discussions, conclusions and references.
 - (k) No school logo or name should appear on any works, otherwise participants will be disqualified.
 - (1) The Competition consists of two rounds. A preliminary screening based on the written reports and all presentation materials will be conducted. The best 6-10 teams (approximate) will be invited to attend the Final Round Competition.
 - (m) During the Final Round Competition, each team is allowed to give a 10-minute presentation, including a maximum of 7 minutes to report their project and 3 minutes to play the video showing their experiment. After each presentation, there will be 7 minutes for the team to respond to questions raised by the panel of judges and the audience. The softcopies of PowerPoint, video, report, abstract and summary should be stored in a CD-R and submit to the HKASME before the Final Round Competition.
 - (n) If finalist teams participate in other competitions, they should notify the organizing committee as soon as possible so that proper arrangement could be made.
 - (o) Students can only use either Chinese or English in their project report/website and presentation. Mixed mode of both languages is not allowed.
 - (p) Schools will be responsible for the production costs of their projects.

Adjudication The panel of judges comprises representatives from the organizers. All projects will be judged according to the following criteria:

- whether the project is relevant to the theme of the Olympiad.
- whether the chemical principles described are sound and whether the methods used are reliable,
- whether the project describes a novel but significant experience and can be used or applied in other (c)
- whether the presentation is clear and convincing, and
- other criteria as deemed appropriate by the panel of judges.

The preliminary screening will focus on the quality of projects. The final adjudication will focus on the overall performance of the team on the day of the final round competition.

15 January, 2024 (Mon) before 5:00 p.m.

Submission (to the HKASME office)

- Gold, silver and bronze medals will be presented to members of the first three winning teams.
- A trophy will be presented to the school of the champion team for its retention for one year.
- Certificates and souvenirs will also be given to all members of the finalist and commendable teams.

Enquiries Enquiries regarding the Olympiad may be directed to Miss CHU of HKASME at 2333 0096, For more details, please visit our website: www.hkasme.org.

Copyright The organizers reserve the right to publish in full or part of the entries. All entries will not be returned to schools.

Safety All participating schools should take all necessary safety precautions and obey laws announced by Matter Education Bureau and other authorities.

Schedule for Hong Kong Chemistry Olympiad for

Secondary School 2023-2024

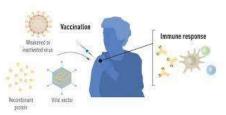
Date	Detail	
Nov. 18, 2023 (Sat)	CS.	Briefing Session with Science Talk Venue: Newman Catholic College, 1/F., School Hall, 2 Cliff Road, Yaumatei, Kowloon. Time: 9:30 a.m.– 11:00 a.m.
Jan 15, 2024 (Mon) Before 5:00pm	લ્લ	Deadline for submission of application forms for the Olympiad. An application form (Appendix I) is attached.
Mar 29, 2024 (Fri) Before 5:00pm	લ્સ	Deadline for submission of written reports and any supporting materials (for website report, please store in a flash drive). All materials should be submitted through the Responsible Teacher to: Mr. Ricky Yeung Room 114, 1/F, Po On Court 1-15 Po On Road, Sham Shui Po, Kowloon.
Apr. 26, 2024 (Fri)	CS.	Announcement of result for entering (around 6-10 teams)
End of June, 2024 (Sat)	લ્લ	Final Competition and Award Ceremony Time: 9:00 a.m. – 1:00 p.m. Venue: To be confirmed

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Biology News

(B-1) Nobel Prize 2023 – Medical & Phsiology





The 2023 Nobel Prize in Physiology or Medicine is jointly to

Katalin Karikó and Drew Weissman

for their discoveries concerning nucleoside base modifications that enabled the development of effective mRNA vaccines against COVID-19

The discoveries by the two Nobel Laureates were critical for developing effective mRNA vaccines against COVID-19 during the pandemic that began in early 2020. Through their groundbreaking findings, which have fundamentally changed our understanding of how mRNA interacts with our immune system, the laureates contributed to the unprecedented rate of vaccine development during one of the greatest threats to human health in modern times.

Reference site:: https://www.nobelprize.org/prizes/medicine/2023/press-release/

" Protecting Biodiversity, Protecting Life"

(B-2) Hong Kong Biology Literacy Award (2023/2024) (HKBLA)







In order to further promote the learning morals among ALL secondary school Biology students, the Hong Kong Association for Science and Mathematics Education (HKASME), together with Hong Kong Society of Biology, The Education University of Hong Kong and The University of Hong Kong will organize the above captioned event. Students of your school are now strongly encouraged to participate.

Details are described as follows:

<u>Aims</u>	(a) To stimulate students' active interest in Biology			
	(b) To challenge and expand their talents; and			
	(c) To enhance their scientific literacy; and			
	(d) To widen their exposure in cutting-edge biological knowledge and innovation.			
Regulations and	(a) Students MUST be in S3 to S6 in the academic year 2023-2024.			
Eligibility	(b) Students SHOULD form a group with 4 students. (Students who fail to form			
	group will NOT be eligible for taking part in the presentation contest			
	regardless of their scores)			
	(c) Number of teams nominated by each school is 2 teams, however, if the quot			
	are exceeded in the first round of enrolment, places will be allocated			
	automatically to FIRST team of each school ONLY.			
Fee	\$600 per team (Include administration, marking, analysis report and certificates)			
Academic	Dr. YIP, Valerie Wing-yan (Deputy Director, Committee on Double Degree			
Advisor	Curriculum, Faculty of Education, The University of Hong Kong)			
Application	01 December 2023 (Friday)			
<u>Deadline</u>				

This competition includes the (I) Heat and (II) 5-minute presentation contest cum Prize Presentation Ceremony. <u>8 TEAMS</u> with <u>HIGHEST AVERAGE SCORES</u> in the Heat will enter the

5-minute presentation.

(I) Details of the Heat:

Date:	20 January 2024 (Saturday)
Session:	To be confirmed
Venue:	Kit Sam Lam Bing Yim Secondary School OR Cheung Chuk Shan College
Assessment:	Individual 1-hour test with 60 multiple-choice questions
Scope:	Questions are set in 4 areas: (1) Scientific inquiry; (2) Nature of science; (3) STEM Education; and (4) Science, technology, social & environment connection.
Awards:	Note 1: The areas covered are NOT limited to HKDSE Biology curriculum. Note 2: The test paper is set in bilingual format. Individual: First, Second and Third Class Awards. Best School Awards (schools with the average scores of the students ranked in the top eight among all participating schools.)

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(II) Details of the 5-minute presentation contest:			
Date: Mid-February 2024 (Saturday)			
Format:	8 TEAMS with HIGHEST AVERAGE SCORES in the Heat.		
	5-minute presentation & 1.5-minute Q&A session after 30-minute preparation		
	time.		
	The scoring will be based on:		
	(1) Students' understanding of the selected topic (60%);		
	(2) Students' presentation and communication skills (20%); and		
	(3) Team spirit (20%)		
	The presentation may be delivered in either Chinese or English.		
Awards:	For participating teams:		
	1) Champion cup;		
	2) First, Second and Third runners-up and 2 merit awards;		
	3) The Best Question Award.		
(III) Enquiri	es		
Enquiries	For any enquiry, please contact Ms. Chu		
	Tel.: 2333 0096, Fax: 2333 3355, Email: hkbla@hkasme.org		
(IV) Submission of Entries			
Submission	(On School Basis)		
of Entries	The information of Applicants should be submitted ONLINE (www.hkasme.org).		
	(Please use CHROME BROWSER for online registration).		
	Application Link: https://alt.jotfor.ms/232944246850460		
	Grateful if it is completed, returned together with a cheque of an appropriate amount,		
	crossed and payable to "HKASME LTD", to us by 1 December 2023. (Room 114, 1/F, Po		
	On Court, 1-15 Po On Road, Sham Shui Po, Kowloon.)		
	On Court,1-13 10 On Road, Shain Shui 10, Kowioon.)		

Further Note about the Application of HKBLA:

Due to the impact of pandemic, we have difficulties in finding suitable venues for this year's HKBLA. So, we need to amend the application of HKBLA this year as follows:

For schools applying for two teams, the first team will be accepted on the first-come-first-serve basis.

The allocation of the second team will be determined by lucky draw and will notify the successful school later.

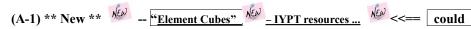
Hence, schools need to pay for the application in 2 separate batch – pay the first team to secure the place first. Payment for the Second team will follow after successful notification.

ETV News



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Resources Collection ——— CONTINUE CELEBRATING THE IYPT-2019 (INTERNATIONAL YEAR OF PERIODIC TABLE) -



ALSO be used as tools for your students to plan their "Experience Package" for the NEW competition "My experience with the Periodic Table" for IYPT-2019(HK). --- check Chem News (C1) above....

Element CUBES of (1 cm x 1 cm x 1 cm) – 4 elements available





Element / Symbol (At.No.)	<u>Purity</u>	Density	Price (Member / Non-member)
Carbon / C (6)	999 (= 99.9 %)	1.82	\$ 30 / 40
Nickel / Ni (27)	995 (= 99.5%)	8.9	\$ 50 / 60
Titanium / Ti (22)	995 (= 99.5%)	4.506	\$ 30 / 40
Molybdenum/ Mo (42)	9995 (= 99.95%)	10.22	\$ 60 / 70
Gold / Au (79) in tube	999	19.3	\$ 30 / 40

"More" How to use the "Element Cubes" ?? -- check April mailpack for different uses ... and ...use your imagination & creativity for the followings: ...

- 1/ Use waste cardboard and papers to make "paper element cubes" with element info on the 6 sides.
- 2/ How to use the above depend on your imagination ... e.g. as a gift, as detective chess, .. as a conversational tool to inspire students
- 3/ Using the "real cubes" (bought as above) and the "paper cubes" together for different activities ...

(A-2) Sets of elemental package for comparison / metallic investigations...



various metal combination packs are available with metals

Mn, Bi, W, Zn, Ti, Cr, Sb, Pb, Mo, ... Some mixed packs with 5 random metals at (\$30) and 3 metals at (\$20).

.... \rightarrow Ask for more updates at the Office (2333-0096)!

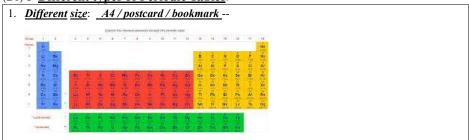
(B) Periodic Table items for IYPT-2019 >> & Still extending into 2021! ...

>> YES, check Chem News Section!

** The IYPT-2019 (International Year of Periodic Table) will have global and local activities until the end of the year. Hence, it is not late for you to initiate activities for your school or class or students to join the grand celebration around the World. For updates and our new competition ("My Experience with the Periodic Table" – a continuation of the 2018-19 competition "Element of the Month"), please go to www.hkasme.org Subject Comm > Chemistry > IYPT or email your questions or message to iypt2019@hkasme.org

For details of the competition "Element of the Month for IYPT-2019(HK)", please refer to the final report in this Journal or check at www.hkasme.org > Chemistry > iypt2019.

(B1)→ <u>Different types of Periodic Tables</u>:



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2. 3D periodic table, large size (\$40) --



3. Heat sensitive periodic table --



4. Heat sensitive Cup with periodic table --

(change colour with cold water).

(B2) Periodic Table Mugs:

Periodic Table Mug (classical)	\$60
Periodic Table Mug (yellow)	\$60
Periodic Table Mug (coloured)	\$60

- Ask Office for updates at 2333-0096.

Check for more at the SME Office ... ← → <u>STEM nourishment needs experiential learning !!!</u>