

An Invitation to be a Guest Scientist in our Scientist For A Day Exhibition



Science Centre Singapore (SCS) opened an exhibition on the *Scientific Method* in August 2010. The exhibition is entitled <u>Scientist For A Day</u> (SFAD). Its purpose is not only to engage the visiting public and students with interactive exhibits, but to expose them to the "workings" of science and scientists, and scientific thinking.

As part of our Youth Science Movement efforts, SFAD is different from the Centre's other exhibitions. A ring of interactive exhibits explaining the aspects of the scientific method, surrounds a central area called the *Discover-It-Yourself Laboratory* or *DIY Lab*, consisting 4 workstations and a demonstration counter. Visitors, after first trying out the exhibits, are invited to work on various short, simple experiments set up in the DIY Lab. An example is the simple pendulum. In this way, their exposure to the scientific method is reinforced with hands-on learning.

The DIY Lab is staffed by 2 Science Educators (SCS staff) who invite visitors to try the experiments, using "inquiry-based" guidance, emphasising the various steps of the scientific method as they do the tests. This permanent floor presence of SCS personnel is also new and intended to enhance visitor interaction and learning.

To date, in addition to daily visitors, SFAD has handled several classes of students from local and international schools. A DIY Lab session takes on groups of around 5 students at each of the 4 workstations, *ie* some 20 students in total. Thus far, the feedback has been very positive – especially as to the relevance of the facilities (*ie* the exhibition), the subject (*ie* the scientific method) and the programmes (*ie* the DIY Lab experiments). SFAD is thus in synch with the needs of the current school curricula and syllabi. Schools are expected to use it throughout the year.

Augmenting the above is another approach introduced through SFAD: that of "guest" scientists, specialists, ... who make appearances at SFAD as "consultants-advisors". The public, students, teachers, parents ... who have questions on scientific matters, science projects, science education, current state of research, ... can then come and seek "advice" during such pre-arranged sessions. These "Meet The (Science) Practitioner" sessions will also promote science and science learning, and provide the opportunity for the public and students to ask, "What do scientists and engineers actually do when they do science or R&D?", "What is it like being a scientist?", to learn about the advancements of the specific fields of research of the attending consultant-advisor, and perhaps to inspire the next generation of scientists and engineers!

Some of the students who eagerly look towards your support will be our Singapore Academy of Young Engineers and Scientists (SAYES) whose clubhouse is in our Centre. Your involvement will certainly spur their interest in science and engineering and add value to their time here.



We most cordially invite you to volunteer sessions at your convenience. An outline is given below for your consideration. Dr PANG Kian Tiong, Manager of SFAD, will be happy to clarify any query you may have and he can be contacted at <u>kt_pang@science.edu.sg</u> or 64252576.

Thank you for your partnership in promoting science and engineering!

Yours sincerely,

TM Lim CE, Science Centre

PS

The Science Centre is also instigating other programmes similar to the abovementioned for SFAD, *ie* requiring practising scientists, engineers, ... to mentor students, provide advice and guidance, ... to be a resource in the promotion of science and science learning. Please inquire.



Current Setup @ Scientist For A Day

- 1) SFAD is open during SCS regular hours (and sometimes, for special after-hours events).
- 2) Minimally, one DIY Lab facilitator our Science Educator is present at SFAD in the following daily sessions: AM ~1030-1230; PM ~ 1430-1640. Weekends times are slightly longer.
 a) Two facilitators can be present when needed; *eg* during classes. (See below).
- 3) The DIY Lab is available to all visitors during SCS regular hours when the facilitator is present.
 - a) It is also open for schools bookings "on demand", *ie* when requested. Schools are advised that SFAD can handle a class of ~20 students. Bigger classes must be divided into groups of ~20 students rotated sequentially in ~90-minute sessions through the DIY Lab.

Guest Scientist-Consultant-Advisor Volunteer

Thank you for volunteering your time.

- You may volunteer for any session or time-of-day of your choosing.
 - As you will be at the Scientist For A Day Exhibition, your sessions may preferably be during the DIY Lab facilitator's presence. (See #2 above.)
 - > Note that this may coincide with pre-booked classes (which are usually in the afternoons).
 - You are most welcome to participate in interacting with the students.
- Please provide a minimum of 2 weeks' advanced notice for your session(s) so that SCS webpages (<u>http://www.science.edu.sg/exhibitions/Pages/SfaDVisitingScientists.aspx</u>) can be updated and announcements can be made to schools.
 - Presumably, a longer advanced notice will allow schools to book their classes to coincide with your presence – as they will surely seek to optimise their learning opportunity.
- Submissions
 - > Please provide the date(s) and time(s), *ie* session(s) for which you wish to volunteer.
 - Please include a 1-paragraph, 150-word_{max} biography which includes your educational qualifications, experiences <u>relevant to the aims of these SFAD sessions</u> and a 1-to-2-paragraph write-up on the scientific research you are involved in.
 - > A photograph may also be included if you wish.
 - Please send the above information (or any queries you have) to Dr PANG KT: <u>kt_pang@science.edu.sg</u>.
- Roles & Expectations
 - Your presence is to simply provide the opportunity for all SFAD visitors to learn about science in general, the scientific method, and the science you practise.
 - As visitors may also be seeking advice on their personal/school science projects, or answers to science questions, your role is then to provide such advice to the best of your knowledge, perhaps directing the inquirers to relevant sources/resources, *etc*.
 - The Science Centre does not expect or in any way, oblige you to have any additional contacts with visitors you encounter at SFAD, other than at your session(s) at SFAD. eg inviting them to visit your lab, etc is at your own discretion.
 - We hope you will allow us to advertise and publicise your presence in our programme, including where applicable, your profile and photograph. We will respect your wish if you prefer otherwise.