



KARNIVAL KIMIA JOHOR (K₂J) 2018



22nd September 2018

T02, FACULTY OF SCIENCE, UNIVERSITI TEKNOLOGI MALAYSIA



UTM
UNIVERSITI TEKNOLOGI MALAYSIA



KEMENTERIAN
PENDIDIKAN
MALAYSIA
Jabatan Pendidikan Negeri Johor

1. Introduction

Since 2012, **Malaysia Institute of Chemistry (IKM) Southern Branch** together with **Universiti Teknologi Malaysia (UTM), Johor Department of Chemistry** and **Johor Education Department** have been partnering up to organize the science outreach program '**Karnival Kimia Johor**' (K₂J). Continuing this tradition, this year 2018, **K₂J** was held in **T02, Faculty of Science, UTM** on the **22nd of September 2018**. This one-day saw the participation of **642 students and 82 teachers from 32 secondary schools** all over Johor state. This year, we were very honoured to have invited **YB Tan Hong Pin**, State Local Government, Science and Technology Committee Chairman, to officiate this event. Among other honoured guests were Mr. Soh Song Chaw (Chairman of IKM Southern Branch), Assoc. Prof. Dr. Zaiton Abdul Majid (Deputy Dean, Faculty of Science, UTM), En. Muhamad Khair Mohaidin (Assistant Chairman of Science, Johor Education Department), En. Sidek bin Ahmad (Deputy Chairman, Johor Department of Chemistry), Assoc. Prof. Dr. Shajarahtunur Jamil (Director, Department of Chemistry, Faculty of Science, UTM) and Dr. Sheela Chandren (Chairman of K₂J 2018 Organizing Committee). A huge rise in participations was seen in this year's event as compared to last year. In fact, many schools had to be turned down due to time and space limitation. This event was also covered by several newspapers, such as **The Star (26th of September), Sinar Harian (23rd of September) and bernama.com (22nd of September)**. Various interesting activities were carried, such as chemistry lectures, interactive hands-on chemistry, science show and chemistry competitions such as Chemistry Garden, Periodic Table Game, Crime Scene Investigation, 3 Minutes Chemistry, Chem Demo, STEM Amazing Race and A Day with Water. The main aim of K₂J is to nurture students' interest in science, by enabling science learning through experiences beyond the constraint of classrooms. The activities were arranged as such to stimulate active learning, activate student's minds and enrich experiential learning in discovering science knowledge. The knowledge transfer process was further promoted as the accompanying teachers were keen to replicate similar K₂J activities at their school. Apart from that, the Johor Innovative Chemistry Teacher Award was also given out as a way to show appreciation to teachers who apply innovative techniques in teaching and learning chemistry in schools. The award was given in hope to motivate and encourage the teachers to continuously improve their teaching techniques in order to attract students' interest in chemistry. In addition, a laboratory safety seminar was organized to educate the science teachers and laboratory assistants in preparing for their science practical classes. To summarize, the event has successfully achieved the objectives and has received positive feedbacks from the participants.

22 SEPTEMBER 2018 (SABTU)
 TEMPAT:
 BANGUNAN T02, FAKULTI SAINS, UNIVERSITI TEKNOLOGI MALAYSIA, JOHOR BAHRU, JOHOR

AKTIVITI-AKTIVITI MENARIK
 MENANTI ANDA SEMUA

PERTANDINGAN: WATER THEME LAB
 PERTANDINGAN: CRIME SCENE INVESTIGATION
 PERTANDINGAN: CHEMISTRY IN THE GARDEN
 PERTANDINGAN: 3 MINUTES CHEMISTRY
 PERTANDINGAN: PERIODIC TABLE GAME
 PERTANDINGAN: CHEM DEMO
 "MEET THE SCIENTIST"
 KIMIA INTERAKTIF

PAMERAN STEM
 PERTUNJUKAN SAINS
 ANUGERAH GURU INOVASI KIMIA JOHOR
 LAWATAN & DEMONSTRASI MAKMAL
 SEMINAR KESELAMATAN MAKMAL UNTUK CIKGU
 DEMONSTRASI PENIUPAN KACA

PERTANDINGAN: STEM AMAZING RACE

**Karnival Kimia
 Johor 2018**

www.utm.my/kimiajohor |
 Facebook: Karnival Kimia Johor |
 Email: kimiajohor@gmail.com

2. Project Venue:

T02, Faculty of Science, Universiti Teknologi Malaysia

3. Objectives:

- i- To nurture students' interest in science via interactive learning and attractive experiences.
- ii- To promote chemical scientist as a chosen future career.
- iii- To introduce chemistry as the major driver of innovation and creativity.
- iv- To foster chemistry learning and research knowledge transfer to the stakeholders.
- v- To cultivate science awareness and enculturation across the society.

4. Target Community:

The major target participants were school students, particularly secondary level, in which they have to decide their study and career pathway in the near future. Hence, this event acted as an attractive promotional avenue for science as the chosen study and career. In addition, this event also aimed to encourage interactive chemistry learning and boost knowledge transfer in chemistry, whereby the targeted group of school teachers can learn in-situ and emulate similar activities at their own school. A laboratory safety seminar was also organized for science teachers and laboratory assistants in order to prepare them for the incoming re-introduction of science practical class. This year, a total of 642 students and 82 teachers/lab assistants took part in the event. These participants represented 32 schools from different areas of Johor, including Johor Bahru, Kluang, Pontian and Segamat.

5. Activities:

- Interactive Chemistry
- Science Show
- Meet the Scientist
- Laboratory safety seminar
- Lab Tour & Demonstration
- Glass Blowing Demonstration
- STEM Exhibition
- Johor Innovative Chemistry Teacher Award
- Competition: Chemistry Garden
- Competition: Periodic Table Game
- Competition: Crime Scene Investigation
- Competition: 3 Minutes Chemistry
- Competition: Chem Demo
- Competition: STEM Amazing Race
- Competition: A Day with Water

Schedule:

Date/Time	Activity
22 September 2018 (Saturday)	
8.30 – 9.00	Registration
9.00 – 10.00	Meet the Scientist Interactive Chemistry (all day) Science Show (all day) Lab Tour & Demonstration (all day) Glass Blowing Demonstration (all day) STEM Exhibition (all day)
10.00 – 12.00	Laboratory Safety Seminar Competition: Periodic Table Game Competition: Crime Scene Investigation Competition: STEM Amazing Race Competition: A Day with Water
10.00 – 13.00	Competition: 3 Minutes Chemistry (1)
12.00 – 13.00	Competition: Chem Demo (1) Competition: Chemistry Garden
14.00 – 15.00	Competition: 3 Minutes Chemistry (2) Competition: Chem Demo (2)
15.00 – 17.00	Prize-Giving and Closing Ceremony

6. Name of collaborative partners and their role:

NO	ORGANIZATION	ROLES
Scientific Professional Body		
1	Institut Kimia Malaysia	Steering Committee Finance Provider
Institutions of Learning		
1	Universiti Teknologi Malaysia	Steering Committee Head of the Committees Student Committee
Government		
1	Johor Department Of Chemistry	Exhibitor
2	Johor Department of Education	Support and Promotion

7. Results and Impact

The number of participants for this event are as follow:

Number of students = 642

Number of teachers and school staff = 82

Number of school = 32

List of schools:

1.	SMK TAMAN SELESA JAYA, JB	17.	SMK ADELA
2.	SMK AMINUDDIN BAKI, JB	18.	SMK MEDINI
3.	SMK SERI PERLING	19.	SM SAINS JOHOR
4.	SMKA MAAHAD MUAR	20.	SM SAINS KOTA TINGGI
5.	SMK TAMAN BUKIT INDAH	21.	SMK DATO JAAFAR
6.	SMK MOHD KHALID, JB	22.	SMK PULAI PERDANA
7.	SM SAINS BATU PAHAT	23.	SMK ULU TIRAM
8.	SMK SERI AMAN KOTA TINGGI	24.	SMK MOUNT AUSTIN
9.	SMK SIMPANG RENGAM	25.	SMK TAMAN DAYA 2
10.	SMK TUN ABDUL RAHMAN PUTRA	26.	SMK SULTAN ISMAIL
11.	SMK SERI ALAM 2	27.	SMK TASEK UTARA
12.	SMK BANDAR MAS, KOTA TINGGI	28.	SMK TAMAN NUSAJAYA
13.	SMK DATO PENGGAWA TIMUR	29.	SMK TAMAN DESA SKUDAI
14.	SMK SERI KOTA PUTERI 2	30.	SMK DATO'ABDUL RAHMAN YASIN
15.	SMK PERMAS JAYA	31.	SMK TAMAN UNIVERSITI
16.	SMK AYER BALOI	32.	SMK KOMPLEKS SULTAN ABU BAKAR

8. Experts involved in the project

Experts from UTM staff are listed below:

1. Dr. Sheela Chandren
2. Assoc. Prof. Dr. Zaiton Abdul Majid
3. Assoc. Prof. Dr. Shajarahtunnur Jamil
4. Prof. Dr. Wan Azelee Wan Abu Bakar
5. Dr. Susilawati Toemen
6. Dr. Siti Ernieyanti Hashim
7. Dr. Norazah Basar
8. Pn. Ramlah Hussin
9. Pn. Zahratul Ain Jalil
10. Dr. See Hong Heng
11. Dr. Rohul Hayat Adnan
12. Dr. Jozaizulfazli Jamalil
13. En. Hashim Baharin
14. En. Dinda Ahmad Khairul Rosdi
15. En. Nazirul Mubin Normansah
16. En. Muhammad Shahril Sazali
17. En. Muhammad Hanif Muhammad Hatta
18. Dr. Khairil Juhanni Abd Karim
19. Dr. Nursyafreena Attan
20. Prof. Madya Dr. Jafariah Jaafar
21. Dr. Fazira Ilyana Abdul Razak
22. Encik Anthony Nyangson Steven @ Mohd Daniel
23. Dr. Mohd Bakri Bakar
24. Dr. Naji Arafat Mahat
25. Dr. Aemi Syazwani Abdul Keyon
26. Dr. Mohamad Afiq Mohamed Huri
27. Prof Madya Dr. Zainoha Zakaria
28. Dr.Siti Aminah Setu
29. Pn. Fariza Shahrom
30. Cik Rohazlin Binti Mohamad
31. En. Mohd Azidy Abdull Aziz
32. Puan Nurul Hajar Sapiren
33. Pn. Noorlyana Mazlan
34. Dr. Mohd Firdaus Abdul Wahab
35. Dr. Mohd Helmi Sani

Other experts involved are students from UTM, IKM Southern Branch members and Johor Department of Chemistry staff.

9. Photos from the event



The Star (26th September 2018)



Sinar Harian (23rd September 2018)



Meet the Scientist



Lab Safety Seminar



Interactive Chemistry



STEM Exhibition



Lab Tour & Demo



Glass Blowing Demo



Competition: A Day with Water



Competition: STEM Amazing Race



Competition: 3 Minutes Chemistry



Competition: Chem Demo



Competition: Chemistry in the Garden



Competition: Crime Scene Investigation



Competition: Periodic Table Game



Booth by Johor Department of Chemistry



Gimmick for Closing Ceremony led by YB Tan Hong Pin



Committee Members of IKM Southern Branch who came to support