**Department of Chemistry and Earth Sciences, Qatar University, Celebrates International Year of Periodic Table (IYPT 2019)**

United Nations General Assembly and UNESCO have proclaimed 2019 as the International Year of the Periodic Table of Elements. **IYPT 2019** also commemorates with 150th anniversary of the establishment of Periodic Table of Elements by Dmitri Mendeleev.

In this context, the Department of Chemistry and Earth Sciences, College of Arts and Sciences, Qatar University, in collaboration with Qatar University American Chemical Society Student Chapter organized an event to celebrate IYPT 2019 on, Monday, 9th September.

Daylong event was held in Research complex, Qatar University.

The event was attended by faculty members, researchers and students from various departments and research centers of Qatar University and other organizations as well as students and teachers of secondary independent schools in Qatar. Below is a brief description of the event.

**Dr. Khalid Al-Saad Al-Kuwari**, Head of the Department of Chemistry and Earth Sciences, welcomed the participants and further highlighted the importance of periodic table and the great impact it has on advances in the field of Chemistry, Physics, Biology and Material Sciences. Dr. Khalid mentioned role and significance of the periodic table as a crucial pillar for scientific knowledge.

**Dr. Leena Abdulrahman Al-Sulaiti**, Associate Dean for Science and Applied Sciences, College of Arts and Sciences, Qatar University, in her opening remarks gave a brief overview of the Academic Programs at the College of Arts and Sciences. Dr. Leena Al-Sulaiti emphasized the role of Dmitry Mendleev for one of the most influential achievement in science, Periodic Table of Chemical Elements. Dr. Al-Sulaiti further highlighted the importance of periodic table in various science disciplines.

World Authority on History and Philosophy of the Periodic Table, **Dr. Eric Scerri** from University of California, Los Angeles, USA, was the Keynote speaker for the event. Dr. Scerri spoke on “**Periodic Table: Its Story and Significance**” and briefed the audience regarding important steps in the evolution of the periodic table beginning with the recognition of triads of elements and Prout’s hypothesis, progressing through the early attempts to develop a consistent periodic system.  The work of Dmitri Mendeleev, who published the first fully successful periodic table 150 years ago, in 1869, was highlighted, including his predictions of new elements.

**Prof. Yousef Hijji** , Professor of Organic Chemistry, Department of Chemistry and Earth Sciences, Qatar University, presented a lecture entitled “**Silicon and Derivatives: Their Properties and Application in Life”.** Dr. Hijji enumerated importance of Silicon, the second must abundant element on Earth’s crust and apprised the audience of versatile applications of silicon and silicon-based products in electronics, computers, solar panels, automobile industry. He also detailed the uses of silicon in the preparation of organic compounds for use in the pharmaceutical industry.

**Prof. Mohammad Mahroof-Tahir,** Professor of Inorganic Chemistry, Department of Chemistry and Earth Sciences, Qatar University, presented a talk on” **Vanadium: History, Present Status and a Metal for the Future”.** Dr. Mahroof enlightened the audience with interesting story related to the discovery of the vanadium element and the potential of its use for the treatment of several diseases including diabetes, and cancer. He also gave a detailed account of the current applications of this element especially in catalysis for the manufacture of several important chemicals and talked about future perspectives of its use in Vanadium Redox Flow Batteries for grid level storage of energy using renewable energy sources

**Dr. Abou Bakr Abdullah**, Hydro/QATALUM Chair Professor at the Center for Advanced Materials (CAM), Qatar University, delivered the last lecture entitled, **“Aluminum Production in Qatar and the Strategic Importance of Aluminum in Sustainability”.** Dr. Abdullah’s lecture focused on the strategic importance of Aluminum industry for the State of Qatar and its contribution to the sustainability of economy. Dr. Aboubakr gave a detailed explanation on extraction of raw material for the manufacture of Aluminum and the applications of Aluminum in diverse fields such as manufacture of automobile engines, aircraft industry and in the building material. Lastly, he mentioned the recycling of aluminum as pivotal to the continued growth of aluminum industry, being economically and environmentally viable.

This event also included hands-on demonstrations, interactive periodic table games and exhibition of posters on “Role of the Elements in Our Life” by students of Qatar University American Chemical Society (QUACS) Student Chapter supervised by the Faculty Advisor, **Prof. Siham Y. Al-Qaradawi**.

To engage the audience especially High School students, QUACS Student Chapter members carried out hands-on demonstrations displaying chemical characteristics of different groups in the periodic table like reactivity of halogens, noble gases, the role of elements of group 1, group 2 and transition metals in fireworks. History of elements in the seventh row of the periodic table, which are named to honor scientists who made important contributions to the understanding of periodic table, was displayed. Achievements of Nobel Prize winner Marie Curie who had conducted pioneering research on radioactivity were conveyed to the participants.

 Interactive games on periodic table helped students consolidate understanding of the periodic table.

Three-dimensional presentation on the composition of some chemical elements prepared by the Virtual Reality Lab for Research and Education in Qatar University mesmerized High School students.

Overall, IYPT 2019 was a great platform to exchange knowledge and experiences in the field of science.

Towards the end, student Elkhansa Elbashier acknowledged College of Arts & Science for the support, Ministry of Education and Higher Education for facilitating School students visit for IYPT 2019 and thanked the speakers, organizers and participants for making the event a great success.