



July 26–28/2019
Saint Petersburg

A stylized, high-contrast profile of Dmitri Mendeleev's head and beard, rendered in white with blue, pink, and yellow outlines. The background consists of large, flowing, colorful shapes in shades of blue, pink, and yellow.

150 MENDELEEV

4th International Conference on the Periodic Table
endorsed by IUPAC



Mission

- **To emphasize the importance of chemistry and the advances in research on the Periodic Table of Chemical Elements for sustainable development and the benefit of humankind**
- **To recognize the use of the Periodic Table in such vital sciences as chemistry, physics and biology**
- **To highlight the continuous nature of scientific discovery in different contexts, with a particular emphasis on promoting science education at all levels among youth**

The International Year of the Periodic Table of Chemical Elements in 2019 marks the 150th anniversary of the Periodic Table's creation by the Russian scientist Dmitri Mendeleev, who is regarded as one of the pioneers of modern chemistry.

In 1869 Mendeleev made a breakthrough discovery when he predicted the properties of four elements and their compounds in St. Petersburg. He also left space in the Periodic Table for elements to be discovered in the future.

The year will also be an occasion to pay tribute to the recent discovery & naming of four super-heavy elements of the Periodic Table with atomic numbers 113 (nihonium), 115 (moscovium), 117 (tennessine) & 118 (oganeson) as a result of international collaboration.

Endorsement



IUPAC endorsement means that entry visas will be granted to all bona fide chemists provided application is made no less than six months in advance. If a visa is not granted two months before the conference, the IUPAC Secretariat should be notified immediately by the applicant.

The Organizing Committee provides a customary 10% registration fee reduction for IUPAC Members, Affiliate Members & Fellows.



INTERNATIONAL UNION OF
PURE AND APPLIED CHEMISTRY



United Nations
Educational, Scientific and
Cultural Organization

In support of



• International Year
• of the Periodic Table
• of Chemical Elements



Organizers



Prof. Eric Scerri

a leading philosopher of science, specializing in the history & philosophy of chemistry and especially the Periodic Table. Scerri teaches chemistry as well as history & philosophy of science at UCLA & is an accomplished international public speaker. www.ericscerri.com



Dr. Mikhail Kurushkin

a chemistry education researcher with a focus on the Periodic Table. Employing a variety of learning techniques, Kurushkin teaches fundamental chemistry at ITMO,



Prof. Emer. Philip Stewart

an expert on alternative periodic systems including Janet's Left-Step Table and the author of several influential articles on the periodic systems.

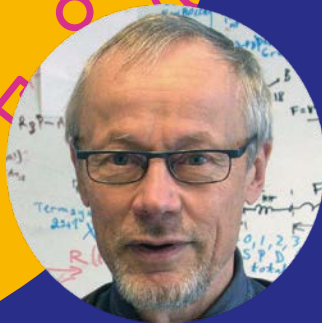


Prof. Eric Scerri

Prof. Emer. Philip Stewart

Dr. Mikhail Kurushkin

Plenary Lectures



Prof. Pekka Pyykkö

University of Helsinki, Finland
The origins, purpose, and inner workings of the Periodic Table



Prof. Peter Atkins

University of Oxford,
the United Kingdom
The Periodic Kingdom



Dr. Viktor Vyatkin

Ekaterinburg, Russia
**Periodic System from the point of view
of synergetic theory of information**

Invited Lectures



Prof. Santiago Alvarez

Universitat de Barcelona, Spain

Periodicity, continuity, discontinuity and the blocks of the Periodic Table



Prof. Enrico Ramirez-Ruiz

University of California, Santa Cruz, the United States

The genesis of elements in the Periodic Table



Prof. Shiv N. Khanna

Virginia Commonwealth University, the United States

Superatoms: extending the Periodic Table to a 3rd dimension

Prof. W. H. Eugen Schwarz

Tsinghua University, China

Physical explanation of horizontal and vertical trends in the Periodic System of elements



Prof. David Avnir

The Hebrew University of Jerusalem, Israel

On left and right: chirality and the Periodic Table



Prof. Artem Oganov

Skolkovo Institute of Science and Technology, Russia

Novel chemical phenomena at extreme conditions



Prof. W. H. Eugen Schwarz

Tsinghua University, China

Physical explanation of horizontal and vertical trends in the Periodic System of elements



Prof. Jun Li

Tsinghua University, China
**Relativistic effects break periodicity
in group 6 diatomic molecules**



Prof. Evamarie Hey-Hawkins

Universität Leipzig, Germany
Phosphorus: the Devil's element?



Prof. Elena Ghibaudi

University of Turin, Italy
**Levi's Periodic System vs. Mendeleev's
Periodic System: two engaged visions
of chemistry between science and literature**



Prof. Christopher H. Hendon

University of Oregon, the United States
**Mimicking precious metals with stable
core-shell architectures**



Prof. Eric Scerri

University of California, Los Angeles, the United States
A tale of seven scientists



Prof. Eugene Babaev

Lomonosov Moscow State University, Russia
**Periodic Systems in chemistry
and natural sciences**



Prof. Maria Cieslak-Golonka

Wroclaw University of Science
& Technology, Poland
On the periodicity in the nanoworld



Prof. Mei-Hung Chiu

National Taiwan Normal University, Taiwan
**Promoting chemistry education
via celebrating IYPT activities in Taiwan**

D.Sc. Naum Imyanitov

Saint Petersburg, Russia
**Spiral as the fundamental graphic
representation of the Periodic Law**



Prof. Emer. Philip Stewart

University of Oxford, the United Kingdom
Five representations of the Periodic System

Dr. Mikhail Kurushkin

ITMO University, Russia
**What is a chemical element & the optimal
representation of the Periodic System**



Prof. Peter Hodder

Victoria University of Wellington, New Zealand
**The Periodic Table: revelation by quest rather
than by revolution**

Prof. Igor Dmitriev

Saint Petersburg State University, Russia
**Dmitry Mendeleev: scientist,
citizen & personality**



Prof. Nathan Brooks

New Mexico State University Las Cruces,
the United States
Mendeleev's predictions

International Advisory Board



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Russia



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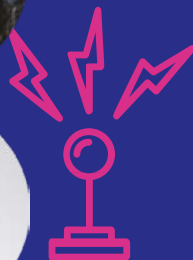
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Ireland

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ITMO University,
Russia

Dr. Dmitry Kolpashchikov
University of Central Florida,
the United States

Dr. Alfio Zambon
Universidad Nacional de la
Patagonia San Juan Bosco,
Argentina

Prof. Sérigne Amadou Ndiaye
Cheikh Anta Diop University,
Senegal



Tentative program

Friday, July 26th

PT in History & Philosophy
of Chemistry

Saturday, July 27th

PT in Chemical Education

Sunday, July 28th

PT in Chemistry

9:00–10:30 Lectures

10:30–11:00 Coffee break

11:00–13:00 Lectures

13:00–14:00 Lunch

14:00–16:00 Lectures

16:00–16:30 Coffee break

16:30–18:00 Lectures

(26th) 18:00–21:00 Conference dinner

(27th) 18:00–21:00 Mendeleev tour

(28th) 18:00–21:00 Poster session / Workshops



Abstract submission

We invite you to submit your abstracts (oral presentations and poster sessions) to Prof. Eric R. Scerri, Conference Editor, via scerri@chem.ucla.edu

The abstract should be **300** words or less with minimal formatting. The scope includes chemistry, chemical education, history & philosophy of chemistry and all questions related to the Periodic Table and chemical elements.

Important dates

December 26th, 2018 — registration opens

January 26th, 2019 — abstract submission deadline

January 26th, 2019 — deadline for Russian visa application

March 26th, 2019 — early registration deadline

About ITMO



ITMO UNIVERSITY



SCAMT

Venue: ITMO University Congress Area

Faces:



Dr. Alexander Vinogradov
Director of
Biochemistry Cluster



Dr. Daria Kozlova
First Vice Rector



Anna Veklich
Head of Strategic
Communications Department

Facts:

1,810

*Foreign students
from 71 countries*

3rd-4th

*Place in Russia
in chemistry*

3rd

*Place in Russia
in chemical
engineering*

170+

*Partner universities
around the world*



mendelev150@scamt-itmo.ru

**9 Lomonosova Street,
Saint Petersburg, 191002**