

2015 INTERNATIONAL YEAR OF LIGHT AND LIGHT-BASED TECHNOLOGIES



United Nations
Educational, Scientific and
Cultural Organization

Organisation
des Nations Unies
pour l'éducation,
la science et la culture

Organización
de las Naciones Unidas
para la Educación,
la Ciencia y la Cultura

Организация
Объединенных Наций по
вопросам образования,
науки и культуры

منظمة الأمم المتحدة
للتربية والعلم والثقافة

联合国教育、
科学及文化组织



United Nations
Educational, Scientific and
Cultural Organization



International
Year of Light
2015

DRAFT PROGRAMME

**The Islamic Golden Age of Science for today's
knowledge-based society: *The Ibn Al-Haytham example***

14-15 September 2015

UNESCO HQ, Room II, 7 Place de Fontenoy 75352 Paris, France



United Nations
Educational, Scientific and
Cultural Organization

Organisation
des Nations Unies
pour l'éducation,
la science et la culture

Organización
de las Naciones Unidas
para la Educación,
la Ciencia y la Cultura

Организация
Объединенных Наций по
вопросам образования,
науки и культуры

منظمة الأمم المتحدة
للتربية والعلم والثقافة

联合国教育、
科学及文化组织

2015 INTERNATIONAL YEAR OF LIGHT AND LIGHT-BASED TECHNOLOGIES



United Nations
Educational, Scientific and
Cultural Organization



International
Year of Light
2015

DAY 1 | 14 SEPTEMBER 2015

08:00-10:00 | Registration

MORNING SESSION 10:00 – 12:40

10:00-10:45 | Inaugural Session

Moderator: Flavia Schlegel, Assistant Director-General for Natural Sciences

Irina Bokova

Director-General of UNESCO

John Dudley

President of the Steering Committee of the IYL2015

H.E. Mr Mohamed Amr

Ambassador, Chairperson of the Executive Board of UNESCO

H.E. Mr Ziad Aldrees

Ambassador and Permanent Delegate of the Kingdom of Saudi Arabia to UNESCO

H.E. Sheikh Faisal bin Qasim Al-Thani

Founder and Chairman of the Al Faisal Without Borders Foundation

Video presenting ancient manuscripts of scientists of the Islamic Golden Age - (Produced by the Qatar National Library)

10:45-12:40 | Session 1: History guiding the future, example of Ibn Al-Haytham

Moderator: Maciej Nalecz, Director of the Division of Science Policy and Capacity Building

Roshdi Rashed

Ibn Al-Haytham Scientific Program
Director Emeritus of Research at the National Centre for Scientific Research (CNRS) (France)

Mohamad Mrayati

Major Initiatives to revitalize S&T for development in the Arab World
Senior Adviser on Science and Technology for Sustainable Development – UNDESA (Syria)

Josef van Ess

Light and Vision before Ibn Al-Haytham. The Perspective of early Islamic Theology (intellectual and historical context of Ibn Al-Haytham's ideas)
Emeritus Professor of Islamic Studies and Semitic Languages at the University of Tübingen (Germany)

Gihan Kamel

SESAME: The First Synchrotron Light-Source in the Middle-East and Neighbouring Regions
Synchrotron-Light for Experimental Science and Applications in the Middle East (SESAME) (Egypt)

Opening of the Ibn Al-Haytham Exhibition (Hall Room I)

12:40-14:30 | Lunch break



United Nations
Educational, Scientific and
Cultural Organization

Organisation
des Nations Unies
pour l'éducation,
la science et la culture

Organización
de las Naciones Unidas
para la Educación,
la Ciencia y la Cultura

Организация
Объединенных Наций по
вопросам образования,
науки и культуры

منظمة الأمم المتحدة
للترقية والعلم والثقافة

联合国教育、
科学及文化组织

2015 INTERNATIONAL YEAR OF LIGHT AND LIGHT-BASED TECHNOLOGIES



United Nations
Educational, Scientific and



International
Year of Light

AFTERNOON SESSION 14:00 – 18:15

14:30-16:00 | Session 2: Light-based technologies for the future

Moderator: John Dudley, President of the IYL Steering Committee

Harry Verhaar

The relevance of LED lighting for sustainable development

Head of Global Public & Government Affairs Philips Lighting (Netherlands)

Eugene Arthurs

The Global Economic Impact of Photonics

CEO of the International Society of Optics and Photonics (SPIE) (USA)

Osman Benchikh

Renewable Energy: Challenges and Perspectives

Chief of Section "Innovation and Capacity Building in Science and Engineering" at UNESCO (UNESCO Headquarters)

16:00-16:30 | Coffee break

16:30-18:00 | Session 3: Education and Investment in Science & Technology

Moderator: Osman Benchikh, Chief of Section "Innovation and Capacity Building in Science and Engineering"

AbdulAziz Alswailem

Scientific Translation: A Tool from Shadow to Light

Vice President for Scientific Research Support, KACST (Saudi Arabia)

Rolf Landua

CERN and SESAME - beacons of light for education

Head of the Education Group at the European Organization for Nuclear Research (CERN)

**Vasudevan
Lakshminarayanan**

Active Learning, Technology and STEM Education

Professor of Physics and Electrical and Computer Engineering, University of Waterloo (Canada)

Ibn Al-Haytham Working Group **White Paper on Optics and Photonics**

18:00-18:15 | Session 4 (Grant scheme): The legacy of the Ibn Al-Haytham Conference



United Nations
Educational, Scientific and
Cultural Organization

Organisation
des Nations Unies
pour l'éducation,
la science et la culture

Organización
de las Naciones Unidas
para la Educación,
la Ciencia y la Cultura

Организация
Объединенных Наций по
вопросам образования,
науки и культуры

منظمة الأمم المتحدة
للتربية والعلم والثقافة

联合国教育、
科学及文化组织

2015 INTERNATIONAL YEAR OF LIGHT AND LIGHT-BASED TECHNOLOGIES



United Nations
Educational, Scientific and
Cultural Organization



International
Year of Light
2015

DAY 2 | 15 SEPTEMBER 2015

08:30-08:55 | Registration

9:00-10:45 | Session 5: History of Optics 1

Moderator: Azzedine Boudrioua, Chair of Ibn Al-Haytham Working Group

Michel Paty

**Des raisons de la lumière aux lumières de la raison
(Remarques sur lumière et rationalité, d'Ibn Al-
Haytham à Albert Einstein).**

*Director Emeritus of Research at the French National
Centre for Scientific Research (CNRS) (France)*

Paul Pietquin

**Translation and studies of Ibn al Haytham optics in
Latin**

*Lecturer at the University of Liege, Editorial Secretary of
the Journal "Les Etudes Classiques" (Belgium)*

Pierre Coulet

The famous problem of Ibn al Haytham

*Director Emeritus of Research at the French National
Centre for Scientific Research (CNRS) (France)*

Vincenzo De Risi

Ibn al Haytham and the history of parallel postulate
*Research Director, Max Planck Institute for the History
of Science (Germany)*

J. V. Field

Perspectiva et perspective à la Renaissance

*Honorary Visiting Research Fellow School of History of
Art and Screen Media, Birkbeck, University of London
(United Kingdom)*

10:45-11:00 | Coffee Break

11:00-12:45 | Session 6: History of Optics 2

Moderator: Vaseduvan Lakshminarayanan, University of Waterloo

Hassan Tahiri

Ibn Al-Haytham: Founder of Scientific Pluralism
(Portugal)

Razaullah Ansari

The Scientific Method of Ibn al Haytham

*National Commission for History of Science Projects
(India)*

Mohamed Baghdadi

A brief story of light

*Former Director of Theoretical Physics, University
Rabat (Morocco)*

Mohamed El-Gomati

**Modern electron optics and the search for more
light: the legacy of Ibn Al-Haytham**

*Chairman of the Foundation of Science, Technology
and Civilisation (United Kingdom)*

Sameen Ahmed Khan

Medieval Arab Achievements in Optics

*Assistant Professor of Physics Engineering Department
Salalah College of Technology (Oman)*

12:45-14:00 | Lunch break



United Nations
Educational, Scientific and
Cultural Organization

Organisation
des Nations Unies
pour l'éducation,
la science et la culture

Organización
de las Naciones Unidas
para la Educación,
la Ciencia y la Cultura

Организация
Объединенных Наций по
вопросам образования,
науки и культуры

منظمة الأمم المتحدة
للتربية والعلم والثقافة

联合国教育、
科学及文化组织

14:00-15:45 | Session 7: Impact of Light Science and Technology Moderator: Mourad Zghal, Chair of the Tunisian Optical Society

Charles Falco

Al Haytham's Influence on the Optics and Culture of Medieval Europe

Chair of Condensed Matter Physics (United States of America)

Noureddine Melikechi

Ibn al Haytham's: From Basra, Earth to the Gale Crater, Mars

NASA Program Member (United States of America)

Bahaa Saleh

Stretching the limits of optics & imaging: Science and technology challenges

Dean of CREOL, the College of Optics and Photonics at the University of Central Florida (United States of America)

Majed Chergui

Atomic-scale time with new light sources

École Polytechnique Fédérale De Lausanne (EPFL) (Switzerland)

15:45-16:00 | Coffee break

16:00-18:00 | Session 8: Optics and photonics in the Arab and Islamic world Moderator: Azzedine Boudrioua, Chair of Ibn Al-Haytham Working Group

Marie Abboud

Optics and Photonics Research in Lebanon: Key figures, Ways forward

Former Head of Physics Department, Saint Joseph University, UNESCO-L'OREAL "For Women In Science" Award 2009 (Lebanon)

Nurdogan Can

Tunable luminescence of rare earth doped some yttrium-based phosphors

Professor at the Department of Physics, University of Jazan (the Kingdom of Saudi Arabia)

Mohammad D. Al-Amri

Overview of optics and photonic research in Saudi Arabia

Associate Professor at the National Centre for Mathematics and Physics (NCMP) at the King Abdul-Aziz City for Science and Technology (the Kingdom of Saudi Arabia)

Selçuk Aktürk

Optics and Photonics in Turkey

Istanbul Technical University (Turkey)

Omar Lamrous

Optics and Photonics in Algeria

Chair of the Algerian Optical and Photonics Society (Algeria)

Mourad Zghal

Ibn Al-Haytham: 1000 years of optics

Chair of the Tunisian Optical Society (Tunisia)

18:00-19:00 | Round table discussion and concluding remarks