



Società Chimica Italiana



INTERNATIONAL  
YEAR OF LIGHT  
2015

# AVOGADRO

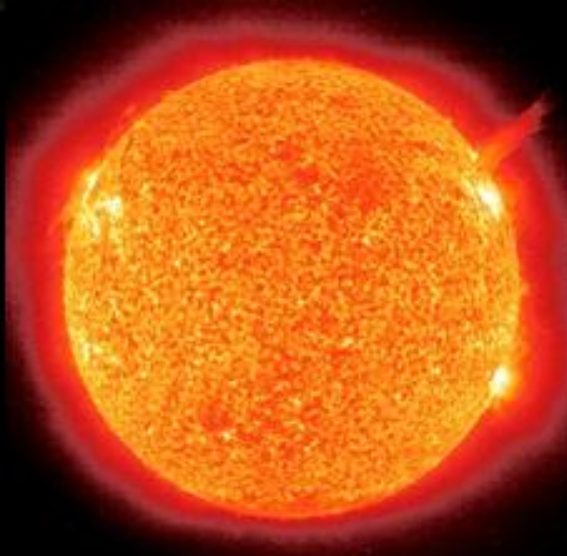
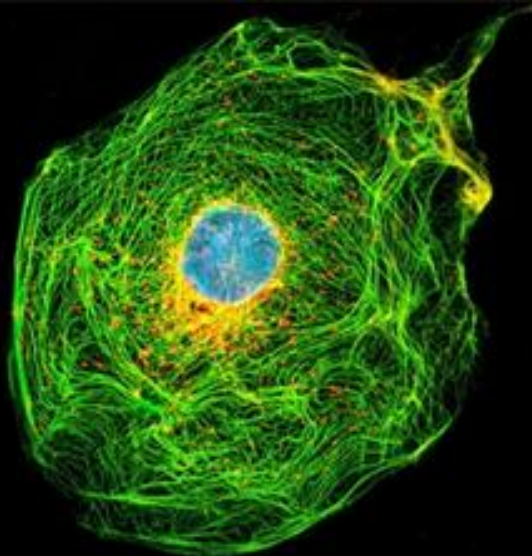
# COLLOQUIA

## *Chemistry and Light*

May

22<sup>nd</sup>

2015



Consiglio Nazionale delle Ricerche

Piazzale Aldo Moro 7 - Roma

Aula Convegni

**Medicine**  
**Environment**

**Energy**  
**Cultural Heritage**



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# AVOGADRO COLLOQUIA 2015

## Chemistry and Light

May 22, 2015  
Consiglio Nazionale delle Ricerche  
Piazzale Aldo Moro 7, Roma



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The Scientific Committee of the Italian Chemical Society (SCI) is proud to announce the 2015 edition of the *Avogadro Colloquia*.

*Avogadro Colloquia* were for the first time issued by the Italian Chemical Society in 2011 and offer a discussion forum on research themes of high interest, novelty, and inspiration flourishing in different areas of Chemistry. The meeting is based on invited lectures delivered by speakers of international level, and is open to the participation of all the SCI members. *Avogadro Colloquia* also comprise round tables to foster discussion among invited speakers and participants on topics of high interest for the chemical community.

The 2015 edition of the *Avogadro Colloquia* will be held in **Rome on May 22<sup>nd</sup>**, and, in the framework of the International Year of Light, the theme of the meeting will be "**Chemistry and Light**".

The speakers, among the most expert in the field worldwide, will present and discuss the major challenges in the context of Chemistry and Light, with particular focus on different application areas of remarkable societal impact, including *medicine*, *energy*, and *environment*. In addition, in view of the central role of cultural heritage for the Italian society, the closing talk will focus on *chemistry, light and cultural heritage*.

We are confident that the state of the art and the future directions on the role of Chemistry and Light in facing scientific challenges of remarkable societal impact will clearly emerge from the 2015 edition of the *Avogadro Colloquia*.

### Programme

9.00 *Opening Ceremony*

**Chemistry, Light and Medicine** (Chair *Andrea Cavalli, Liberato Manna, Alberto Credi*)

9.30 *Luisa De Cola (Univ. Strasbourg)* Light to see, understand and control chemical processes

10.00 *Liberato Manna (IIT Genova)* Colloidal Nanocrystals for photonics, plasmonics and biomedical applications

10.10 *Alberto Credi (Univ. Bologna)* Light on molecular machines

10.20 *Serena Silvi (Univ. Bologna)* Modulation of the solubility of luminescent semiconductor nanocrystals

10.30 *Discussion, round table*

11.00 *Coffee Break*

**Chemistry, Light and Energy** (Chair *Elisabetta Collini, Alessandro Abboto*)

11.30 *Michele Muccini (ISMN CNR Bologna)* Chemistry as backbone for innovation in lighting and energy production

12.00 *Thomas Brown (University of Rome - Tor Vergata)* Metal halide perovskite photovoltaics and its development on flexible substrates

12.10 *Marcella Bonchio (Univ. Padova)* Artificial Photosynthesis: Such Stuff as Dreams are Made On

12.20 *Paolo Fornasiero (Univ. Trieste)* Photocatalytic nanomaterials: Lights and shadows of sustainable world

12.30 *Discussion, round table*

13.00 *Lunch*

**Chemistry, Light and Environment** (Chair *Fabrizio Cavani, Fabrizio Passarini, Reinhard Niessner*)

14.30 *Leonardo Palmisano (Univ. Palermo)* Heterogeneous photocatalysis: a promising tool for green organic syntheses

15.00 *Davide Ravelli (Univ. Pavia)* A touch of light in green chemistry? The role of organic photochemistry

15.10 *Davide Vione (Univ. Torino)* Photochemical Processes in Sunlight Surface Waters

15.20 *Reinhard Niessner (TU München)* Interaction of Colloidal Matter with Light

15.30 *Discussion, round table*

**Chemistry, Light and Cultural Heritage** (Chair *Maria Perla Colombini*)

16.00 *Ulderico Santamaria (Univ. Tuscia, Musei Vaticani)* Studies of light interaction with pictorial layer of Work of Art for assessment of suitability of Nd: YAG LASER for cleaning and LED for indoor lighting

17.00 *Closing remarks*

18.30 *Visita Cappella Sistina*