



**GRUPPO DEL COLORE**  
ASSOCIAZIONE ITALIANA COLORE



**SIOF**  
Società Italiana  
di Ottica e Fotonica

## WORKSHOP – Optical spectroscopy for food applications: a photonic tasting

In the context of Conferenza del Colore 2015 – Milano, Italy

9 September 2015, 14:30-18:30

Building B8, Dipartimento di Design, Campus Bovisa, Politecnico di Milano  
Via Durando,10 – 20158 Milano, Italy

Optical spectroscopy is currently emerging as a modern and *green* analytical technique for straightforward analysis of the intact food. Indeed, the ultraviolet, visible, and near-infrared spectroscopic bands provide unique fingerprints of food which can be mathematically processed for qualitative and quantitative assessment of quality and safety indicators, as well as for fraud detection. The non-destructive nature of light measurements also enables rapid checks without making use of reagents or chemical treatments, thus avoiding the problem of waste disposal.

The scope of the workshop is to present and discuss the most promising applications of colorimetry, fluorescence spectroscopy, hyperspectral imaging, and computer-screen photoassisted spectroscopy for food analysis. Hands-on demonstrations with commercial instruments and laboratory prototypes will also be included.

The workshop is jointly organized by Gruppo del Colore-Associazione Italiana Colore, and Società Italiana di Ottica e Fotonica. Participation to the event is free of charge.

### Chairs

Alessandro Farini

CNR-Istituto Nazionale di Ottica, Firenze, Italy

Anna Grazia Mignani

CNR-Istituto di Fisica Applicata "Nello Carrara", Sesto F.no (FI), Italy

### Scientific Committee

Francesco Baldini

CNR-Istituto di Fisica Applicata "Nello Carrara", Sesto F.no (FI), Italy

Claudio Oleari

Università degli Studi di Parma, Italy

Angela Piegari

Centro Ricerche ENEA Casaccia-Laboratorio Componenti Ottici, Roma, Italy

Maurizio Rossi

Politecnico di Milano, Italy

### Program

- 14:30-15:00 Registration and welcome
- 15:00-15:20 Giovanni Agati, CNR-Istituto di Fisica Applicata "Nello Carrara", Sesto F.no (FI), Italy  
*Fluorescence spectroscopy for precision agriculture*
- 15:20-15:40 Anna Grazia Mignani, CNR-Istituto di Fisica Applicata "Nello Carrara", Sesto F.no (FI), Italy  
*A compact colorimeter for measuring lycopene in tomatoes*
- 15:40-16:00 Corrado di Natale, Università degli Studi di Roma Tor Vergata, Dip. Ingegneria Elettronica, Italy  
*Computer-screen photoassisted spectroscopy for food applications*
- 16:00-16:30 Coffee break
- 16:30-16:50 Ernestina Casiraghi, Università degli Studi di Milano, Dip. Scienze e Tecnologie Alimentari e Microbiologiche, Italy  
*NIR and MIR spectroscopy for olive oil quality assessment and geographic classification*
- 16.50-17:10 Silvia Serranti, Sapienza-Università di Roma, Dip. Ingegneria Chimica Materiali e Ambiente, Italy  
*Hyperspectral imaging for food analysis*
- 17.10-17.30 Maurizio Messa, Konica Minolta Sensing Europe B.V., Italy Branch Office, Cinisello Balsamo (MI), Italy  
*Color measurements on food specimens*
- 17.30-18:30 Hands-on demonstrations with commercial instruments and laboratory prototypes

Technical co-sponsors



Consiglio Nazionale delle Ricerche



MILANO 2015



INTERNATIONAL  
YEAR OF LIGHT  
2015



CNR X EXPO



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### **REGISTRATION FORM**

Send by email to: [photonic.tasting@ifac.cnr.it](mailto:photonic.tasting@ifac.cnr.it)

participation to the event is free of charge – registration is mandatory for organizational reasons

Given Name

Family Name

Company / Institution and Address

email