Photonics in Agri & Food: “Beyond Taste and Vision”

Juus Taminiau, director PhotonicsNL

Spectroscopy

AgriFoodTechEvent

14 december 2017 te Den Bosch
History PhotonicsNL association

1956: Nederlandse Vereniging voor Fotonica (NVvF)

Dutch Society for Photonics: Photography

1960: focus on Optics & Photonics

2006: New foundation Photonics Cluster Netherlands (PCN)

2013: Association PhotonicsNL

Vision:

Photonics: Key Enabling Technology for 21st Century (Societal Challenges)

Mission:

National Platform Dutch Photonics Community

Stakeholders:

Industry, Universities, Research Institutes, Engineering Academies & Individuals (90)
Definition of Photonics

“Photonics is the Science & Technology of the harnessing of light

“Harnessing:

Generation…..
Detection…..
Management of Light through Guidance…..
Manipulation & Amplification…..
and its utilization for the benefit of mankind”

Putting light to work
Photonics: “Enabling Technology in Europe”

Roadmap towards 2020
Photonics driving economic growth in Europe

Photonics: Enabling Technology in Europe

- Information & Communication
- Industrial Manufacturing & Quality
- Health & Life Science
- Emerging Lighting, Electronics & Displays
- Security, Metrology & Sensors
- Design and Manufacturing of Components & Systems
- Education, Training & Disruptive Research

Ambition EU-commission:

- Increase Global Competition Rate for Europe
- New Companies and Employment
- New and Challenging Jobs for Younger People

PHOTONICS PUBLIC PRIVATE PARTNERSHIP

PHOTONICS21
Corporate Members & Partners

Our Members:

- admesy
- COBRA
- Fasttree 3D
- Ocean Optics
- Universiteit Twente.
- AVANTES
- TNO innovation for life
- Fontys
- TTD
- fDelft
- Technobis
- ma medical
- RSP
- Laser 2000
- Lionix International
- TechnoBlis
- tft-tos
- PHILIPS
- Phoenix Software
- De Haagse Hogeschool
- SMART Photonics
- Wageningen University & Research
- FOM Institute AMOLF
- Quest Innovations
- VTEC
- Saxon

Our Partners:

- Dutch Optics Centre
- a TNO and TU Delft initiative
- EPIC
- European Photonics Industry Consortium
- PhotonDelta
- Integrated Photonics Ecosystem
- mikrocentrum
- training • events • business
- PHOTONICS21
- EOS
PhotonicsNL Activities

Government Relations

International Trade Shows and Trade Missions

Photonics Magazine (4x per year)

Photon-Xpert Consult & Database Access

EPRIZE: EMPOWERING PHOTONICS
Join our European Projects

Dedicated and tailor-made photonics Trainings

Dutch Photonics Roadmap

International Workshops

Putting light to work
Photonics as Enabler in our Topsectors
Empowering Photonics through Regional Innovation Strategies in Europe

- Coordination and support action (CSA)
- H2020-ICT-2016-1 Photonics Key Enabling Technology 2016
- January 2017 – June 2019
- 9 partners, 8 EU-countries
Regions addressed

Support letters: \(\times 4\)
- Tuscany, North Karelia, Skane, Stockholm

Supportive regional business development agencies: \(\times 4\)
- North East UK, Catalonia (Acció),
- North Brabant (Brainport Development),
- Berlin-Brandenburg (Berlin Partner)

High photonics potential (non-exhaustive): \(\times 20\)
- Västra Götaland, Flandres, Wallonie
- Bade-Wurtemberg, Thuringia, London, Scotland,
- Wales, Provence Alpes Côtes-d’Azur, Bretagne,
- Île de France, Aquitaine, Rhône-Alpes
- Podkarpackie, South Moravia...

And a few others in Italy, NL, Finland and Spain...

4 + 4 + 20
\(\rightarrow\)
> 20 regions
Target Markets

- Agriculture
- Food
- Pharmaceuticals
- Healthcare
Key Objectives

• Raising regional Policy Makers awareness about potential of photonics applications in 4 target markets

• Promoting co-funding initiatives and synergies between regional and European strategies

• Improving Go to Market services for SMEs through expert advice

• Strengthening collaboration along the value chain
Key Actions

- Mapping and highlighting photonics in relation to regional RIS3 in partner countries (WP2)

- Possible co-funding scenarios (WP2)

- European Photonics Roadshow: 7 events to aid SMEs to overcome market barriers and to boost collaboration via Go-to-Market sessions with experts and B2B meetings (WP3, WP4)

- Dissemination/communication activities towards different stakeholders (WP5)
What’s in it for you?

• Join our EU-network (about 1200 Companies & Knowledge Institutes)
• Join our Roadshows (starting May 2018 in Florence, Italy)
• Find new partners in Europe
• Join the EU subsidy programs:
  • RIS3 (`Regional)
  • Horizon 2020 (Research)
• Spare you a lot of time (Go-to-Market, Expertise)

Interested and want more information?

Visit our booth #92
Thanks for your attention!

Guus Taminiau

Petra Wicherink (booth #92)

Bart Snijders, board member (TNO/Dutch Optics Centre)

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