# **AgriFoodIndustry Expo**

### May 2021

# **Photonics Israel Association**



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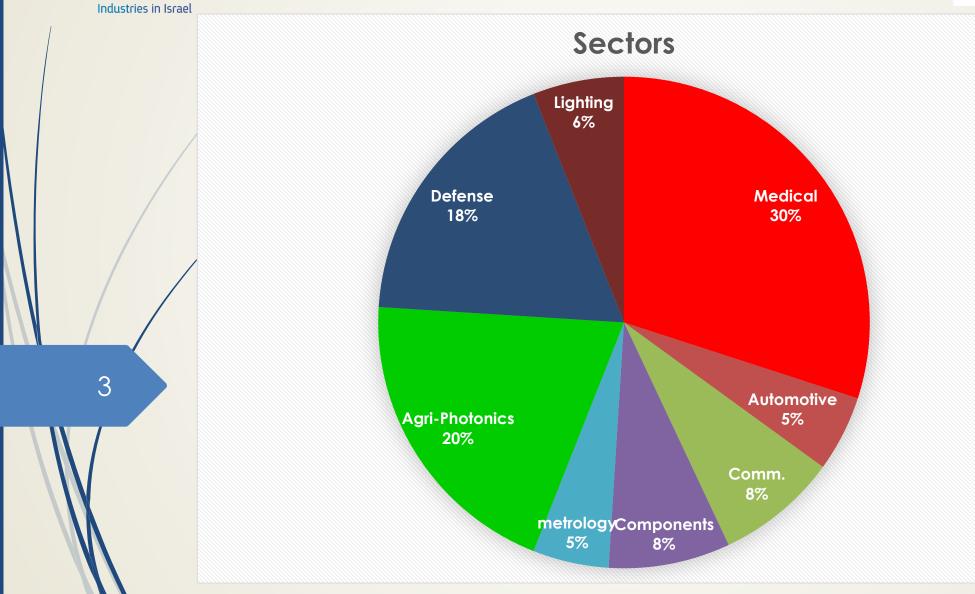
# לשכת המהנדסים האדריכלים והאקדומאים במקצועות הטכנולוגיים



- Strong academic basis more than 500 researches in 7 universities.
- More than 350 Photonics entities.
- More than 20,000 employees (5,000 in R&D).
- About 80% are startups.
- Advanced National Photonics center.
- Strong infrastructure for research, development, production, assembly & testing.
- Total industrial revenues above \$6B (90% export).

# Photonics Entities in Israel





Photonics Israel The Association of Photonics

#### Photonics Israel

The Association of Photonics Industries in Israel

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# Agri-Photonics entities in Israel

About 70 Entities.

#### Academic Institutions:

- Hebrew University.
- Weizmann Institute.
- Technion.

#### Research Institutions:

- Agricultural Research Organization (ARO) Volcani Center.
- MIGAL Galilee Research Institute Ltd.

#### Example of Agri-Photonics branches:

- Detecting disease and pests in crops.
- Monitoring of the growth process.
- Sensing systems for irrigation and fertilization.
- In-field testing laboratory.
- Robotic fruit harvesting.
- Farm management platforms.
- Automated crop monitoring.
- Vertical hydroponic platforms.
- Soil sensor technology for precise irrigation.

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# לשכת המהנדסים האדריכלים והאקדמאים במקצועות הטכנולוגיים



- Photonics Israel is the association of the Photonics entities in Israel.
  - Our mission: Joining forces of all the members in the photonics ecosystem in Israel, in order to enable a significant growth of the photonics entities, the national economy and promote international cooperation.
- We are operating within the AEAi\* The Association of Engineers, Architects and Graduates in Technological Sciences in Israel.

\*Established in 1909.

# How do we operate



- Enhancing cooperation between all Photonics entities in Israel.
- Establishing communication channels with the international photonics community.
  - Promoting the needs of the industry at the national level.



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**Photonics Israel** 

The Association of Photonics Industries in Israel

- Intensifying Photonics education and training at all levels.
- Participating in international committees and forums.



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#### Snapshot on last year activities



### Monthly newsletter.

### Seminars:

- German Israeli on Medical Photonics.
- German Israeli on Agri-Photonics.
- German Israeli on Automotive Photonics.

#### Snap-shot on last year activities-Cont.

# Photonics Israel

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- Weekly webinars, address various Photonics topics.
- □ Conducting a course on "Introduction to EO systems" for engineers.
- Preparing the syllabus of Photonics courses for engineers (as of 2021) on:
  - System Engineering.
  - Lasers.
  - Optics.
  - Sensors.
  - The courses will address the characterization, design considerations, Integration and Testing.
  - Organizing the Photonics Days IL conference To take place on June 7 9, 2021. Topics will cover technologies & applications.
    - Conference site, program & registration: https://photonics.aeai.org.il





