Garab Győző

Nationality: Hungarian

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Date of birth: 01/01/1948

Gender: Male

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WORK EXPERIENCE

Professor Emeritus
HUN-REN BRC [2016 – Current]

Visiting Professor
Ostrava University, Ostrava, Czech Republic (part time) [2016 – Current]

CEO, Co-owner
Biofotonika R&D Ltd , Szeged, Hungary [2004 – 2023]

City: Szeged

Country: Hungary

Deputy Director
BRC HAS, Institute of Plant Biology [1999 – 2000]

Scientific Advisor
BRC HAS [1994 – 2016]

Head of Laboratory
Laboratory of Photosynthetic Membranes, BRC HAS [1987 – 2016]

Research Scientist (intermittent status)
Brookhaven National Laboratory, Biology Dept, Upton, NY, USA [1987 – 1995]

Senior Research Associate
BRC HAS [1984 – 1989]

Research Associate
BRC HAS [1975 – 1984]

Junior Research Associate
Biological Research Center (BRC), Hungarian Academy of Sciences (HAS) [1971 – 1975]

EDUCATION AND TRAINING

DSc in biological sciences
HAS [1992]

Candidate of biological sciences
HAS [1982]

Ph.D.
biophysics and plant physiology, BRC, JATE (Szeged University) [1974]

MSc physics
solid state luminophores - JATE (Szeged Univ.), Inst. Techn. Phys., HAS, Budapest [1971]

VISITING ABROAD

Brookhaven National Laboratory, Upton, NY, USA, 4 months

[1990]

Brookhaven Nat. Lab. and Univ. New Mexico, USA 4 months

[1988]

University of New Mexico, Chem. Dept., Albuquerque, NM, USA 3 months

[1987]

Brookhaven National Laboratory, Biology Dept., Upton, NY, 15 months

[1985 – 1986]

University of Illinois, Dept. Plant Biology, Urbana, IL, USA, 15 months

[1984 – 1985]

CEA, Section Bioenergetique, Saclay, France, 3 months

[1981]

Institut de Biologie Physico-Chimique, Paris, France, 4 months

[1978]

Moscow State University, Biophysics Department, Moscow USSR, 3 months

[1976]

Centre d'Etudes Atomiques (CEA), Bioenerg., Saclay, France, 2 months

[1975]

MAIN SERVICES TO SCIENTIFIC COMMUNITIES AND SOCIETIES

International Council of the Ostrava University
[2019 – Current]

Council member

Global Initiative Academy Network, Chloroplast Structure and Function
[2019]
GIAN Course organizer

Structure and Dynamics of Type II Photosynthetic Reaction Centers
[2019]
Workshop organizer

Mini symposium: Neutrons for Biology. New Vistas: Monitoring Water and Hydrogen Bonds, Szeged, Hungary
[2018]

Organizer

Meeting of the Hungarian Photosynthesis Researchers, Mátrafüred, Hungary
[2018]
Co-organizer

Adv. School: Modern light sources and their applications, Szeged, Hungary
[2017]
Co-organizer

ELI ALPS Scientific Advisory Commission
[2017 – 2022]

Member of Committee

SZAB Szeged Region Academy Commission
[2017 – 2021]

Vice-president

VIIth Internat. Conf. Photosynth. Res. for Sustainablility, Pushchino, Russia
[2016]
Advisory Committee

XVIth European Light Michroscopy Initiative Congr. Debrecen, Hungary
[2016]
Organizing Committee

XVIIth Internatl. Congr. on Photosynthesis, Maastricht, The Netherlands
[2016]
Advisory Committee

Intrenat. Workshop on Photosynthetic Proteins, Szeged, Hungary
[2015]

Chairman

Evaluation of institutes and research groups of CZAS, Czech Republic
[2015]
Commission member

Internat. Workshop “Ultrafast Processes in Photosynthesis", Szeged
[2014]

Chairman

Advanced Training School of PHOTOTECH COST TD1102, Szeged
[2014]

Director

OTKA (Hung. Basic Res Fund) Infraindividual Biology
[2013]
Board member

EBSA Biophysics Course on Solar Energy, Szeged
[2011]

Director

EBSA Congress Budapest
[2011]

Member of Committee

Hungarian Biophysical Society
[2008 – 2015]

Secretary gen

FEBS IUBMB Congress, Budapest, Program Committee
[2005]
Member of Committee

Advanced International Summer School on Membrane Biophysics
[2001]

Director

OTKA (Hung. Basic Res. Fund) Infraindividual Biology
[2001 – 2009]

Board member

International Society for Photosynthesis Research
[1998 – 2004]

European representative

XI. International Congress on Photosynthesis, Budapest
[1998]

Chairman

Biophysic, Hungarian Academy of Sciences
[1995 – Current]

Committee member

Biophysics Work Group, Szeged Regional Committee of the HAS
[1995 – 2002]

Founding president

Foundation for Photosynthesis
[1994 – Current]

Founding president

Hungarian Biophysical Society
[1994 – 2002]

Vice president

ESF BIOPHYSICS OF PHOTOSYNTHESIS PROGRAM
[1993 – 2000]

Steering Committee

XIth International (IUPAB) Biophysics Congress, Budapest
[1993]
Secretary General

Spectr. of Energy Converting Membranes; ESF Summer School Szeged
[1993]

Director

III. European Photobiology Congress, Budapest
[1989]

Program Committee member

OKKFT T/t (Hungary) Molecular Biology Program
[1988 – 1989]

Board member

REFEREEING

> 50 Journals

Biochemistry; Biochim Biophys Acta – Bioenergetics; Biomembranes; Biophys Chem; Bioelectrochemistry; Biophys J; Cells (Editorial Board member) Cellulose, Chem Phys; FASEB J, FEBS J; FEBS Lett; Frontiers Plant Sci (Assoc Editor), IUBMB Life; JACS; J Exp Bot; J Mol Struct; J Photochem Photobiol B: Biol (Editorial Board member); J Phys Chem B; J. Plant Physiol; JQRST, Molecular Plants, Nat Sci Rep; Photochem Photobiol; Photosynth Res; Photosyntetica (Assoc Editor); Physiol Plantarum; Phys Chem Chem Phys; Plant Cell; Plant J; Plant Physiol; PLOS One; PNAS; TIPS

Grant Agencies

Chinese Acad. Sci. (SPRP), ERC –Synergy, Euro-BioImaging, Human Frontiers Program; ISF (Israel); Fonds pour la Formation de Chercherurs et l'Aide a la Recherche); Hung. Acad. Sci. (Bolyai, Momentum, Res. Groups, Postdocs), NCN (Poland); NSERC/CRSNG (Canada); NWO Chemische Watenschappen (The Netherlands); USDA Photosynthesis and Respiration

ADDITIONAL INFORMATION

Teaching activities and experience

- Supervising 20 PhD students (incl. univ. doct, and cand deg in earlier syst)
- Member of 3 doctoral schools in Hungary
- Lectures and practicals on Photosynthesis, Spectroscopy, Membrane
- Biophysics and Alternative Biological Energy (undergrad and postgrad levels)
- Photosynthesis, Membrane Biophysics, Polarization Spectroscopy
- Laser spectroscopy, Laserscanning Microscopy, Neutron Scattering

HONOURS AND AWARDS

J. Ernst award
Hungarian Biophysical Society [1994]

Straub Medal
Biological Research Centre [2001]

Knight
Internat. Order of Merit of Inventors [2009]

Farkas Gábor Medal
Hungarian Society of Plant Biologists [2014]

MBFT Medal
Hungarian Biophysical Society [2015]

Damjanovich Medal
Debrecen University [2019]

SZAB Medal
Szeged Regional Commission of the HAS [2020]

Order of Merit of the Hungarian Republic
President of Hungary [2022]

Outstanding Achievment Award
XIth Internatl Conf Phtosynthesis and Sustainability [2023]

Silk Road Academy
Elected member [2023]

LANGUAGE SKILLS

Mother tongue(s):

Hungarian

English

LISTENING: C2 **READING:** C2 **WRITING:** C2

SPOKEN PRODUCTION: C2

SPOKEN INTERACTION: C2

Russian

LISTENING: B1 **READING:** B1 **WRITING:** A2

SPOKEN PRODUCTION: B1

SPOKEN INTERACTION: B1

PUBLICATIONS

Scientometric data

MTMT data:

- Total number of publications: 300
- Peer-reviewed publications in extenso cumulative impact factor: >650 (no updated info available)
- Total citations: 7294
- Independent citations: 5230
- Hirsch index: 47

From Google Scholar:

- Citations: 9735
- h-index: 56
- i10-index: 172

5 MOST IMPORTANT ANNOUNCEMENTS

1. Mustárdy L, Buttle K, Steinbach G, Garab G (2008) The three-dimensional network of the thylakoid membranes in plants: quasihelical model of the granum-stroma assembly. The Plant Cell 20: 2552-2557.
2. Mustárdy L, Garab G (2003) Granum revisited. A three-dimensional model–where things fall into place. Trends in Plant Science 8: 117-122.
3. Garab G, Lohner K, Laggner P, Farkas T (2000) Self-regulation of the lipid content of membranes by non-bilayer lipids: a hypothesis. Trends in Plant Science 5: 489-494.
4. Simidjiev I, Stoylova S, Amenitsch H, Jávorfi T, Mustárdy L, Laggner P, Holzenburg A, Garab G (2000) Self-assembly of large, ordered lamellae from non-bilayer lipids and integral membrane proteins in vitro. Proceeding of the National Academy of Sciences USA 97: 1473-1476.
5. Garab G (ed.) (1998) Photosynthesis: Mechanisms and Effects. Kluwer Academic Publishers. Volumes I-V.

5 MOST IMPORTANT ANNOUNCEMENTSFROM THE PAST 5YEARS

1. Garab G, Magyar M, Sipka G, Lambrev PH (2023) New foundations for the physical mechanism of variable chlorophyll *a* fluorescence. Quantum efficiency versus the light-adapted state of photosystem II. Journal of Experimental Botany. doi.org/10.1093/jxb/erad252
2. Sipka G, Nagy L, Magyar M, Akhtar P, Shen J-R, Holzwarth AR, Lambrev PH, Garab G (2022) Light-induced reversible reorganizations in closed Type II reaction centre complexes: physiological roles and physical mechanisms. Open Biology. doi.org/10.1098/rsob.220297
3. Garab G, Yaguzhinsky LS, Dlouhý O, Nesterov SV, Špunda V, Gasanoff ES (2022) Structural and functional roles of non-bilayer lipid phases of chloroplast thylakoid membranes and mitochondrial inner membranes. Progress in Lipid Research. doi.org/10.1016/j.plipres.2022.101163
4. Sipka G, Magyar M, Mezzetti A, Akhtar P, Zhu Q, Xiao Y, Han G, Santabarbara S, Shen J-R, Lambrev P, Garab G (2021) Light-Adapted Charge-Separated State of Photosystem II: Structural and Functional Dynamics of the Closed Reaction Center. The Plant Cell. doi:10.1093/plcell/koab008
5. Nagy G, Garab G (2021) Neutron scattering in photosynthesis research: recent advances and perspectives for testing crop plants. Photosynthesis Research. doi.org/10.1007/s11120-020-00763-6