CURRICULUM VITAE

Kiriakos Kotzabasis

Professor of Plant Physiology & Biochemistry

Department of Biology – University of Crete

1. PERSONAL DETAILS

FULL NAME: Kiriakos Kotzabasis
FATHER'S NAME: Konstantinos
POSITION: Professor of Plant Physiology & Biochemistry in the Department of Biology, University of Crete (http://www.biology.uoc.gr/)
DATE OF BIRTH: February 29th, 1960
PLACE OF BIRTH: Komotini/Greece

2. TITLES OF STUDIES

- **Diplom der Biologie** – Biology Department at the Philipps University of Marburg (Germany).
- **Doctor der Naturwissenschaften (Dr. rer. nat.)** – Department of Biology at the Philipps University of Marburg (Germany).

3. HIGHER EDUCATION & POSTDOCTORAL EXPERIENCE

1978-1979: Training group study **(**Studienkolleg) at the Goethe University of Frankfurt, Germany.

1979-1985: Study of Biology at the Philipps University of Marburg

1985-1987: Ph.D. thesis at the Department of Biology in the University of Marburg, entitled: "The biosynthesis of chlorophylls and their regulation" (Supervisor Prof. Dr. H. Senger).

1987-1989: Postdoctoral researcher at the Biology Department of the Philipps University of Marburg. Research field: Regulating mechanisms of the chlorophyll biosynthetic pathways.

4. ACADEMIC APPOINTMENTS

1991-92: Adjunct Instructor (P.D. 407/1980) at the Department of Biology, University of Crete.

1992-98: Assistant Professor of Plant Physiology & Biochemistry at the Department of Biology, University of Crete.

1998-2008: Associated Professor of Plant Physiology & Biochemistry at the Department of Biology, University of Crete.

2008-today: Professor of Plant Physiology & Biochemistry at the Department of Biology, University of Crete.

5. ADMINISTRATIVE AND ORGANIZATIONAL ACTIVITIES

1991-today: Head of the **Plant Biochemistry and Photobiology Lab**
1998-99, 2004-05, 2007-08, 2009-12 & 2017-19: Director of the 2nd Research Section of the Biology Department (Section of Biology of Organisms, Populations, Environmental and Marine Biology) and member of Administrative Board of the Biology Department at the University of Crete.
2003-2010: Director of the Department of Botany in the Natural History Museum of Crete (http://www.nhmc.uoc.gr/).
2003-2010: Member of the Administrative Board of the Natural History Museum of Crete.
2008-2010: Vice-Chairman of Biology Department in the University of Crete.
2010-2016: Scientific coordinator of the graduate programme "Molecular Biology and Biotechnology of Plants" (http://147.52.104.50/METAPTYX/)
2012: Member of the Disciplinary Council of the University of Crete.

6. ACADEMIC FELLOWSHIPS

1984-1987: Sonderforschungsbereich (SFB)
1987-1989: Deutscher Forschungsgesellschaft (DFG)
1993: SFB short term fellowship (SFB 302)
1996-97: Alexander von Humboldt Foundation

7. MEMBERSHIP IN SCIENTIFIC SOCIETIES

Alexander von Humboldt Association
American Chemical Society
Federation of European Societies of Plant Biology (FESPB)
European Society of Photobiology
American Society of Photobiology
International Society of Photosynthesis
Deutscher Botaniker Gesellschaft
Hellenic Botanical Society

8. COMPETITIVE RESEARCH GRANT PROGRAMS

1993: Research Committee of the University of Crete *"Photoregulation of the biosynthesis of polyamines and their role in photoadaptation"* (Scientific Coordinator).
1994: Sonderforschungsbereich (Germany) (SFB 302) "*Photoadaptation/ Photoinhibition*".
1995-1996: Within the frame of the bi-national Hellenic-German cooperation (GSTR & Ministry of Research of Germany) "*Changes in the level of chloroplast polyamines under the ozone effect and UV-irradiation*" (Scientific Coordinator).
1995-1997: PENED 95 *"Study for the selection of the most suitable photoselective greenhouse cover with the aim of improving plant production and the photobiological protection against diseases"* (Scientific Coordinator).
1996-1998: PEP *"Development of know-how for the perfection of isolation conditions and qualitative characterization of pectins from citrons"* (Scientific co-coordinator).
1996-1997: Research Program within the frame of **Alexander von Humboldt-Foundation** "*The role of polyamines in the photoadaptation of the photosynthetic apparatus*" (Scientific Coordinator).
1998: Research Program (V-8151/98058-GRI/1032849) within the frame of Alexander von Humboldt- Foundation exclusively for the acquisition of research equipment.

2001-2003: IKYDA 2001 "*The photoregulated mechanism of methanol induced biomass enhancement. The role of the photosynthetic apparatus for the methanol assimilation and metabolism***"** (Scientific Coordinator).

2002-2005: HERACLITUS "*Comparative study of the role of polyamines in the photoindependent and photodependent development and functional organization of the photosynthetic apparatus*" (Scientific Coordinator).

2003-2005: NIARCHOS-Foundation (Collaboration between NHMC and Yale University) "*Phylogeography and ecophysiology of the Campanulaceae, Dipsacaceae, and Valerianaceae in the Cretan area*" (Scientific Coordinator).

2003-2007: ARCHIMEDES "*Examination of the pesticidal effect of capsaicin*".

2003-2007: PYTHAGORAS I "*The role of polyamines in the regulation of the sensitivity of lichens in atmospheric pollution and their characterization as new generation environmental factors of high sensitivity and immediate response*" (Scientific Coordinator).

2003-2007: E2050-5/1 COMPETITIVENESS – Research and Technological Development Co-operatives in the fields of National Priority "*OPTIMIZATION OF PRODUCTION METHODS FOR MEDITTERANEAN MARINE FINFISH*"**.**

2005: UNISTEP- Idea Hotbed "*Direct quality control of wet systems by recording the photosynthetic flow of electrons via fluorescence induction technics*" (Scientific Coordinator).

2005-2007: PYTHAGORAS II "*INTERACTION OF VIROIDS WITH PROTEINS AND THE PHOTOSYNTHETIC APPARATUS OF THE HOST*".

2007-2009: IKYDA 2007 "*The regulation mechanism of polyamines and their role in plant development*" (Scientific Coordinator).

2010-2013: "COOPERATION" SUB-ACTION II (Large Scale Cooperative Projects) "*Biotechnology for the exploitation of microalgae*" [**BioExplore**] (Scientific Coordinator for the University of Crete).

2012-2015: "THALES" - "*UNDERSTANDING TOLERANCE OF PLANTS TO ABIOTIC STRESSES: THE CROSS-TALK OF POLYAMINE DERIVED HYDROGEN PEROXIDE, HEAT SHOCK PROTEINS AND POLYPHENOLS IN TOLERANCE OF TRANSGENIC PLANTS TO SALINITY, HEAT AND HEAVY METALS*" [**ABISTOLE**] (Scientific Coordinator).

2012-2015: "THALES" - "*BIOHYDROGEN PRODUCTION BY UNICELLULAR ALGAE*" [**ALGAH2**].

2018-2021: "RESTART 2016-2020" "*Triggering Photoprotection in Photosystem II Antenna by Molecular Simulations and Raman Spectroscopy*" [**PhotoSim**].

2019-2020: "7th Call for Production Projects Accessing ARIS" – "*LHCIICRYSTAL – Driving the major LHCII antenna crystal structure from quenched to the light harvesting mode by metadynamics simulations*" [**LHCIICRYSTAL**] (Scientific Coordinator).

2020-2022: "Aquatic farming" "*Innovative cultivation of the unicellular green alga Chlorella vulgaris in a smart photobioreactor using micro-bubble technology as part of a blue circular economy*" [**Smart-BioreAI**] (Scientific Coordinator for the University of Crete).

2021-2025: "ASTROBIOTECHNOLOGICAL PERSPECTIVES OF LICHENS" "*Selection and preparation of lichens for open space experimentation on the International Space Station (ISS)*" within the framework of the **«Biorisk»** space experiment, included in the « Long-term program of targeted activities planned for the ISS Russian segment. (Scientific Coordinator).

9. TEACHING EXPERIENCE

Graduate level

1991- 2012: Teaching of the core course "**Plant Structure**" (3 hours/week) for the Biology Department of the University of Crete.

1991-2012: Teaching of the core **laboratory course** "**Plant Structure**" (3 hours/week) for the Biology Department of the University of Crete.

1991-today: Teaching of the elective course "**Photosynthesis**" (3 hours/week) for the Biology Department of the University of Crete.

1992-today: Teaching of the elective course "**Photobiology**" (2 hours/week) for the Biology Department of the University of Crete.

2011-today: Participation (~30%) in the teaching of the elective laboratory course "**Green Biotechnology**" (3 hours/week) for the Biology Department of the University of Crete.

2012-today: Teaching of the core course "**Structure and Function of Plants**" (3 hours/week) for the Biology Department of the University of Crete.

2012-today: Teaching of the core laboratory course "**Structure and Functional Organization of Plants**" (3 hours/week) for the Biology Department of the University of Crete.

2012-today: Participation (50%) in the teaching of the core laboratory course "**Analytical Methods of Physiological Processes**" (3 hours/week) for the Biology Department of the University of Crete.

2012-today: Participation (2/11) in the teaching of the core course "**Analytical Methods of Cell Processes**" (3 hours/week) for the Biology Department of the University of Crete.

2012-today: Participation (1/11) in the teaching of the core course "**Methods of Functional Analysis of Biological Macromolecules**" (3 hours/week) for the Biology Department of the University of Crete.

- Number of Diploma theses successfully completed in my laboratory: **24**

Postgraduate level

1991-1997: Teaching of the postgraduate course "Photosynthesis (special topics)".

1992-1997: Teaching of the postgraduate course "Photobiology (special topics)".

1993-1995: Teaching of the postgraduate course "Photoadaptation and Photoinhibition Mechanisms".

1996: Teaching of the postgraduate course "Special Topics on Photomorphogenesis".

1996: Teaching of the postgraduate course "Photoreceptors and Signal Transduction Mechanisms".

1997-today: Teaching of the postgraduate course "Regulating Mechanisms of Photosynthesis - Bioenergetics" (12 h) for the postgraduate programme *Molecular Biology and Biotechnology of Plants.*

1997-2010: Teaching of the postgraduate course "Secondary Metabolism and Metabolic Genetics – *Anthocyanins*" (5 h) for the postgraduate programme *Molecular Biology and Biotechnology of Plants.*

1997-2010: Teaching of the postgraduate course "Plant Development – *Photobiology*" (7 h) for the postgraduate programme *Molecular Biology and Biotechnology of Plants.*

1997-2010: Teaching of the postgraduate course "Photosynthesis in a Changing Environment" (12 h) for the postgraduate programme *Environmental Biology.*

2010-today: Teaching of the postgraduate course "Regulatory mechanisms of Photosynthesis" (12 h) for the postgraduate programme *Molecular and Applied Plant Biology - Green Biotechnology.*

2010-today: Teaching of the postgraduate course "From photosynthetic energy management to "smart" Biotechnology and Astrobiology" (5 h) for the postgraduate programme *Molecular and Applied Plant Biology - Green Biotechnology.*
2010-today: Teaching of the postgraduate course "Photobiology – From light information to photoregulated response and to biotechnology" (5 h) for the postgraduate programme *Molecular and Applied Plant Biology - Green Biotechnology.*
2010-today: Teaching of the postgraduate course "Green Biotechnology – Biodegradation of toxic compounds, production of H2 and biofuels from microalgae" (5 h) for the postgraduate programme *Molecular and Applied Plant Biology - Green Biotechnology.*
2010-today: Teaching of the postgraduate course "Smart microalgae biotechnology" (5h) for the postgraduate programme *Environmental Biology*.
2020-today: Teaching of the postgraduate course "Mechanisms of H_2 production and biodegradation of toxic compounds by microalgae" (3 h) for the postgraduate programme *Protein Biotechnology*.

- Number of PhD theses successfully completed in my laboratory (Supervisor): **7**
- Member of 3-Party Counseling Committee for **18** PhD theses
- Member of 7-Party Examination Committee for **30** PhD theses
- Member of Qualifying Examinations for **20** PhD students
- Number of Master theses successfully completed in my Laboratory (Supervisor): **23**
- Number of Master theses (2nd Examiner) successfully completed: **23**
- Number of laboratory projects (rotations) in my lab for **50**

10. PARTICIPATIONS IN CONGRESSES

1985-89: Participation in congresses of "German Botanical Society".
1985: International Meeting on the Regulation of Chloroplast Differentiation. Rhodes/Hellas.
1987: 2nd Congress of the European Society for Photobiology. Padova/Italy.
1987: Regulation in Bioenergetics, Control of Energy Transducing Proteins. Dortmund /Germany.
1989: VIIIth International Congress on Photosynthesis. Stockholm/Sweden.
1991: International Meeting on the Regulation of Chloroplast Biogenesis. Aghia Pelagia/Hellas.
1993: Fifth Congress of the European Society for Photobiology. Marburg/Germany.
1995: International Meeting on Molecular Biology, Biochemistry and Physiology of Chloroplast Development. Marburg/Germany.
1995: Xth International Photosynthesis Congress. Montpellier/France.
1995: Sixth Congress of the European Society for Photobiology. Cambridge/U.K.
1996: International Conference on UV/Blue light, perception and responses in plant and microorganisms. Marburg/Germany.
1996: 12th International Congress on Photobiology. Vienna/Austria.
1996: Photosynthesis meeting dedicated to Prof. Dr. Horst Senger. Marburg/Germany.
1996: 16th Meeting of Nobel Prize Winners for Medicine and members of Alexander von Humboldt Association. Lindau/Germany.
1997: Marine microorganisms for industry. Brest/France
1998: The Chloroplast: From molecular biology to biotechnology. Crete/Hellas.
1998: XIth International Photosynthesis Congress. Budapest/Hungary.
1999: 7th National Congress on Aquaculture. Las Palmas de Gran Canaria /Spain.
2000: 52nd Harden Conference: Signalling in Plants. Wye College, Kent/UK.
2001: 9th Congress of European Society for Photobiology. Lillehammer/Norway.

2001: 7th International Phycological Congress. Thessaloniki/Hellas.
2002: 13th Congress of the Federation of European Societies of Plant Physiology. Crete/Hellas.
2003: International Plant Photobiology Meeting. Marburg/Germany.
2003: 5th Workshop of Microalgal Biotechnology. Berlin/Germany.
2003: 3rd International Workshop on Biomonitoring of Atmospheric Pollution. Bled/ Slovenia.
2004: 14th International Congress of FESPP. Cracow/Poland.
2005: XVII International Botanical Congress. Vienna/Austria.
2006: 28th Hellenic Biological Society Congress. Ioannina/Hellas.
2006: 15th FESPB (The Federation of European Societies in Plant Biology) Congress. Lyon/France.
2006: International Meeting in honour of Professor James (Jim) Barber. PHOTOSYNTHESIS in the POST-GENOMIC ERA. II: Structure and Function of Photosystems. Pushchino, Moscow Region / Russia.
2006: 4th International Workshop on Biomonitoring of Atmospheric Pollution. Aghios Nikolaos, Crete/Hellas.
2007: VIth International Congress on Biotechnology and Agriculture. Centro de Bioplantas, Ciego de Avila / Cuba.
2007: 7th workshop of microalgal biotechnology. Nuthetal/Germany.
2007: 14th International Photosynthesis Congress. Glascow/UK.
2007: International Symposium on Clean Energy Technology (ISCET 2007) in conjunction with the third International Symposium on Bioenergy and Bioprocess Engineering (ISBBE 2007). Shanghai/ China.
2008: International Viroid Sattellite Meeting to the "RNA" congress. Berlin/Germany
2008: Gordon Research Conference on Photosynthesis. South Hadley, MA / USA.
2009: XVIII National Congress of Plant Physiology. Zaragoza/Spain.
2011: Light-Harvesting Processes - LHP 2011. Banz Monastery, Bayreuth/Germany.
2011: 12th Scientific Conference of the Hellenic Botanical Society. Rethymnon/ Greece.
2012: Cell Symposia - Functional RNAs. Sitges/Spain.
2012: 63rd Congress of Hellenic Society of Biochemistry and Molecular Biology, Heraklion/Creece.
2012: Plant Biology Congress, Freiburg/Germany (organized by FESPB and ESPO).
2013: 13th Scientific Conference of the Hellenic Botanical Society. Thessaloniki/Greece.
2014: 11th International Phytotechnologies Conference, Heraklion, Crete, Greece.
2014: Workshop of EU Network „Crop Life" - Polyamines, Leaf Senescence & Stress**,** Halle, Germany.
2015: 14th Scientific Conference of the Hellenic Botanical Society. Patra/Greece.
2015: 66th Congress of Hellenic Society of Biochemistry and Molecular Biology, Athens.
2015: International Conference: "Photosynthesis Research for Sustainability", Kolymbari, Crete, Greece.
2017: 15th Scientific Conference of the Hellenic Botanical Society. Chania/Greece.
2020: 1st Panhellenic Scientific Meeting of Plant Physiologists. Athens

11. REVIEWER IN SCIENTIFIC JOURNALS

- Planta
- PLoS ONE
- Photosynthesis Research
- Plant Physiology and Biochemistry
- Journal of Experimental Botany

- Physiologia Plantarum
- Plant Biology
- Photosynthetica
- Phytochemistry
- Plant Cell Reports
- Journal of Plant Physiology
- Journal of Photochemistry and Photobiology
- Environmental and Experimental Botany
- Plant Science
- Environmental Technology
- Functional Plant Biology
- Journal of Biotechnology
- Biotechnology Progress
- European Journal of Phycology
- Journal of Hazardous Materials
- Journal of Plant Growth Regulation
- Current Microbiology
- Acta Physiologiae Plantarum
- Applied Microbiology and Biotechnology
- Applied Biochemistry and Biotechnology
- Aquatic Biology
- Chinese Journal of Oceanology and Limnology
- Environmental Engineering and Management Journal
- Water Research
- ……

12. CURRENT RESEARCH INTERESTS

- **Plant Biochemistry and Physiology** with emphasis on the regulatory mechanisms of the molecular structure, function, bioenergetics and development of the photosynthetic apparatus.
- The role of polyamines on the regulatory mechanisms of the **plant stress tolerance/sensitivity.**
- **Photobiology/Photobiochemistry** with emphasis on photoreceptors and signal transduction chains.
- **Green Biotechnology** with emphasis on microalgae biotechnology for biodegradation of toxic substances, production of high quality biomass, production of bio-hydrogen (H_2) and biofuels.
- **Astrobiology:** Extremophilic behavior of microalgae and lichens — Astrobiotechnological applications.

13. PUBLICATIONS

- 96 original papers in international peer reviewed Journals
  [**total IF: ~300, *h*-index: 32, *i10*-index: 69, citations: 3069**]
- 10 papers in Referred Proceedings of International Congresses
- 4 Invited Chapters in Books.
- 6 Patents.
- 83 Abstracts in Books of Abstracts

A. In International Peer Reviewed Journals

(*: corresponding author)

1. **Kotzabasis K.** and H. Senger* (1986). Isolation and Characterisation of three protochlorphyllides from *Scenedesmus*. Z. Naturforsch. 41 c, 1001-1003.

2. **Kotzabasis K.** and H. Senger* (1986). Novel chlorophyllides in pigment mutant C-2A' of *Scenedesmus obliquus*. Naturwiss. 73: 681-682. http://dx.doi.org/10.1007/BF00366696

3. Oh-Hama T., **K. Kotzabasis** and H. Senger* (1987). Temperature inducible protochlorophyllide reduction in darkness in a pigment mutant of *Scenedesmus obliquus*. Physiol. Plant. 69: 29-34. http://dx.doi.org/10.1111/j.1399-3054.1987.tb01942.x

4. **Kotzabasis K.**, H. Senger*, P. Langlotz and H. Follmann (1989). Stimulation of protochlorophyllide oxidoreductase by thioredoxin. J. Photochem. Photobiol. B3: 333-339. http://dx.doi.org/10.1016/1011-1344(89)80037-5

5. **Kotzabasis K.**, M.-P. Schuring and H. Senger* (1989). Occurence of protochlorophyll and its phorotransformation to chlorophyll in mutant C-2A' of *Scenedesmus obliquus*. Physiol. Plant. 75: 221-226. http://dx.doi.org/10.1111/j.1399-3054.1989.tb06172.x

6. D. Dörnemann D., **K. Kotzabasis**, P. Richter, V. Breu and H. Senger* (1989). The regulation of chlorophyll biosynthesis by the action of protochlorophyllide on ^{glu}t-RNA-ligase. Bot. Acta 102: 112-115.

7. **Kotzabasis K.** and H. Senger*(1989). Evidence for the presence of chlorophyllide b in the green alga *Scenedesmus obliquus in vivo.* Bot. Acta 102: 173-177.

8. **Kotzabasis K.** and H. Senger* (1989). Biosynthesis of chlorophyll b in pigment mutant C-2A' of *Scenedesmus obliquus.* Physiol. Plant. 76: 474-478. http://dx.doi.org/10.1111/j.1399-3054.1989.tb05465.x

9. **Kotzabasis K.,** V. Breu, and D. Dörnemann* (1989). The inhibitory effect of 4,5-dioxovalerate on 5-aminolevulinate dehydratase and its implication in the regulation of light-dependent chlorophyll formation in pigment mutant C-2A' of *Scenedesmus obliquus.* Biochim. Biophys. Acta *(BIOENERGETICS)* 977: 309-314. http://dx.doi.org/10.1016/S0005-2728(89)80085-4

10. **Kotzabasis K.** and H. Senger* (1990). The influence of 5-aminolevulinic acid on protochlorophyllide and protochlorophyll accumulation in dark-grown *Scenedesmus*. Z. Naturforsch. 45c: 71-73.

11. **Kotzabasis K**., M. Senge, B. Seyfried and H. Senger* (1990). Aggregation of monovinyl- and divinyl-protochlorophyllide in organic solvents. Photochem. Photobiol. 52: 95-101. http://dx.doi.org/10.1111/j.1751-1097.1990.tb01761.x

12. **Kotzabasis K**., S. Romer, and H. Senger* (1990). Temperature dependent reduction of protochlorophyllide in darkness followed by the assembly of active photosystems in pigment mutant C-2A' of *Scenedesmus obliquus.* Physiol. Plant. 78: 635-639. http://dx.doi.org/10.1111/j.1399-3054.1990.tb05253.x

13. **Kotzabasis K.,** S. Miyachi and H. Senger*(1990). Influence of calcium on formation and reduction of protochlorophyllide in the pigment mutant C-2A' of *Scenedesmus obliquus.* Plant Cell Physiol. 31: 419-422. http://pcp.oxfordjournals.org/content/31/4/419.abstract

14. **Kotzabasis K**., K. Humbeck and H. Senger* (1991). Incorporation of photoreduced protochlorophyll into reaction centers. J. Photochem. Photobiol. B8: 255-262. http://dx.doi.org/10.1016/1011-1344(91)80083-T

15. **Kotzabasis K**.*, M.D. Christakis-Hampsas and K.A. Roubelakis-Angelakis (1993). A narrow bore HPLC method for the identification and quantitation of free, conjugated and bound polyamines. Analytical Biochemistry 214:484-489. http://dx.doi.org/10.1006/abio.1993.1526

16. **Kotzabasis K.***, C. Fotinou, K.A. Roubelakis-Angelakis and D. Ghanotakis (1993). Polyamines in the photosynthetic apparatus. Photosystem II highly resolved subcomplexes are enriched in spermine. Photosynthesis Research 38:83-88. http://www.springerlink.com/content/v5n729p522j7304u/fulltext.pdf

17. Beigbeder A. and **K. Kotzabasis*** (1994). The influence of exogenously supplied spermine on protochlorophyllide and chlorophyll biosynthesis. J. Photochem. Photobiol. B23:201-206. http://dx.doi.org/10.1016/1011-1344(94)06991-3

18. **Kotzabasis K.*** and H. Senger (1994). Free, conjugated and bound polyamines during the cell cycle in photosynchronized cultures of *Scenedesmus obliquus* Z. Naturforsch. 49c:181-185. http://www.ncbi.nlm.nih.gov/pubmed/8018250

19. Beigbeder A., M. Vavadakis, E. Navakoudis and **K. Kotzabasis*** (1995). Influence of polyamine inhibitors on the Light-independent and the light-dependent chlorophyll biosynthesis, and on the photosynthetic rate. J. Photochem. Photobiol. B28:235-242. http://dx.doi.org/10.1016/1011-1344(95)07113-G

20. Wolff A., C. Paradellis and **K. Kotzabasis*** (1995). Influence of acid soil on nodulation in relation to polyamine and tannin concentrations in roots of *Phaseolus vulgaris.* Biol. Fertil. Soils 20:249-252. http://www.springerlink.com/content/x2l66t3hu325174m/fulltext.pdf

21. Miyachi S., J. Burger, **K. Kotzabasis**, J. Thielmann and H. Senger* (1996). Photosynthetic characteristics of three strains of cyanobacteria grown under low- or high-CO_2 conditions. Z. Naturforsch. 51c: 40-46.

22. Andreadakis A. and **K. Kotzabasis*** (1996). The role of polyamines in the chloroplast photodevelopment. Changes in the biosynthesis and catabolism of the polyamines in isolated plastids during the chloroplast photodevelopment. J. Photochem. Photobiol. B33:163-170. http://dx.doi.org/10.1016/1011-1344(95)07240-3

23. **Kotzabasis K.*** (1996). A role for chloroplast-associated polyamines? Bot. Acta 109:5-7.

24. Dörnemann D., E. Navakoudis and **K. Kotzabasis*** (1996). Changes in the polyamine content of plastidal membranes in light- and dark-grown wild type and pigment mutants of the unicellular greenalga *Scenedesmus obliquus* and their possible role in chloroplast

photodevelopment. J. Photochem. Photobiol. B36: 293-299. http://dx.doi.org/10.1016/S1011-1344(96)07393-9

25. **Kotzabasis, K.*** and D. Dörnemann (1998). Differential changes in the photosynthetic pigments and polyamine content during photoadaptation and photoinhibition in the unicellular green alga *Scenedesmus obliquus*. Z. Naturforsch. 53c:833-840.

26. **Kotzabasis K.***, A. Hatziathanasiou, M.V. Bengoa-Ruigomez, M. Kentouri and P. Divanach (1999). Methanol as alternative carbon source for quicker efficient production of the microalgae *Chlorella minutissima*. Role of the concentration and frequence of administration. J. Biotechnology 70: 357-362. http://dx.doi.org/10.1016/S0168-1656(99)00088-7

27. **Kotzabasis K**.*, E. Navakoudis, G. Tsolakis, H. Senger and D. Dörnemann (1999). Characterization of the photoreceptor(s) responsible for the regulation of the intracellular polyamine level and the putative participation of heterotrimeric G-proteins in the signal transduction chain. J. Photochem. Photobiol. B50:38-44. http://dx.doi.org/10.1016/S1011-1344(99)00066-4

28. **Kotzabasis K**.*, B. Strasser, E. Navakoudis, H. Senger and D. Dörnemann (1999). The regulatory role of polyamines on structure and functioning of the photosynthetic apparatus during photoadaptation. J. Photochem. Photobiol. B50: 45-52. http://dx.doi.org/10.1016/S1011-1344(99)00067-6

29. Tsolakis G., E. Parashi, P.Galland and **K. Kotzabasis*** (1999). Blue light signaling chains in *Phycomyces*: Phototransduction of carotenogenesis and morphogenesis involves distinct protein kinase/phosphatase elements. Fungal Genetics and Biology 28:201-213. http://dx.doi.org/10.1006/fgbi.1999.1175

30. Theodoridou A., D. Dörnemann and **K. Kotzabasis*** (2002). Light dependent induction of strongly increased microalgal growth by methanol. Biochim. Biophys. Acta *(GENERAL SUBJECTS)*1573: 189-198. http://dx.doi.org/10.1016/S0304-4165(02)00438-5

31. Navakoudis E., C. Lütz, C. Langebartels, U. Lütz-Meindl and **K. Kotzabasis*** (2003). Ozone impact on the photosynthetic apparatus and the protective role of polyamines. Biochim. Biophys. Acta *(GENERAL SUBJECTS)* 1621: 160-169. http://dx.doi.org/10.1016/S0304-4165(03)00056-4

32. Logothetis K., S. Dakanali, N. Ioannidis and **K. Kotzabasis*** (2004). The impact of high CO_2 concentrations on the structure and function of the photosynthetic apparatus and the role of polyamines. J. Plant Physiol. 161: 715-724. http://dx.doi.org/10.1078/0176-1617-00942

33. G. Tsolakis, N. K. Moschonas, P. Galland and **K. Kotzabasis*** (2004). Involvement of G proteins in the mycelial photoresponses of *Phycomyces.* Photochem. Photobiol. 79(4): 360-370. http://dx.doi.org/10.1111/j.1751-1097.2004.tb00022.x

34. Sfichi L., N. Ioannidis and **K. Kotzabasis*** (2004) Thylakoid-associated polyamines adjust the UVB-sensitivity of the photosynthetic apparatus by means of LHCII changes. Photochem. Photobiol. 80: 499-506.http://dx.doi.org/10.1111/j.1751-1097.2004.tb00121.x

35. Pirintsos S.A.*, **K. Kotzabasis** and S. Loppi (2004). Polyamine production in lichens under metal pollution stress. J. Atmospheric Chemistry 49: 303-315. http://www.springerlink.com/content/v4u671nu637216w1/

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