

## SHORT CV-MICHAEL KOKKINIDIS

### Education

Degree	Discipline	University	Year of Award
Dipl. Phys.	Physics	TU Munich, Germany	1977
Dr. rer. nat.	Crystallography	MPI Biochemie, Martinsried, Munich	1981

### Postdoctoral Training

MPI Biochemie, Martinsried, Munich (1984)

EMBL, Heidelberg, Division of Biological Structures (1984-1987)

### Academic Appointments

1982-1983 visiting professor, Dept. of Physics, Univ. of Crete

1987-1992 Assistant Professor, Univ. of Crete, Dept. of Biology

1992-2000 Associate Professor, Univ. of Crete, Dept. of Biology

2000-present Professor, Univ. of Crete, Dept. of Biology

In addition: 1987-present: group leader at IMBB

### Selected administrative responsibilities, committee assignments, reviewing and evaluation of international research projects

- Head of the Executive Board, Hellenic Pasteur Institute (2002-2004)
- Member of ESUO
- National coordinator of the XFEL project
- National Focal Point Coordinator, ICGEB, Trieste, Italy
- International Human Frontier Science Programme (HFSP), Strasbourg, France (Μέχρι 1995: EU representative of the post-doctoral programme; 1998-: evaluator of HFSP research grants)
- Founding member of the SGI for Biological Macromolecules (European Crystallographic Association)
- Founding member of the Greek Crystallographic Association
- European Science Foundation, Network on the Crystallography of Biological Macromolecules
- Member of the EU-P.R. China Committee on Protein Engineering
- Reviewer of a) the EU programmes, b) the SON (Netherlands Foundation for Chemical Research) programme, c) GSRT d) the HFSP (Strasbourg/France) research programmes
- Final evaluator STRIDE, ΙΣΤΟΣ
- Evaluator of Democritus Research Centre, Athens

### General Fields of Research

- Protein Crystallography & development of crystallography methods
- Protein Folding
- Protein Engineering & development of novel biomaterials
- Protein-DNA interactions & development of gene therapy tools
- Mechanisms of bacterial pathogenicity
- Enzymatic mechanisms

### Research Publications

**Total Number of Original Articles in Peer-reviewed Journals**

Approx. 100

**Total Number of Non-Self Citations**

Approx. 1300

**Publications in Conference Proceedings** approx. 50

**Books** 1

**Presentations in Scientific Meetings** approx. 100

**Press-Releases Concerning Research** 5

### **Teaching Responsibilities**

#### **Undergraduate**

‘Protein crystallography’ course, Dept. of Biology, University of Crete

‘Biotechnology II’ course, Dept. of Biology, University of Crete

‘Protein Engineering course, Dept. of Biology, University of Crete

#### **Graduate**

Parts of four courses (BIO501, BIO503, BIO505, BIO408) of the Dept. of Biology plus one course at the Medical School (total of approx. 30 hours)

### **Total Degrees Awarded or In Progress**

**Master’s** 14

**PhD** 12

### **International Research Grants-Participating as coordinator**

Genetic and structural analysis of the four-alpha-helix motif in proteins (ICGEB/UNIDO, 1990-1993) 50000 USD

Structure-function relationships of the ApoA-I protein: a multidisciplinary approach to the molecular basis of atherosclerosis (Commission of the European Communities, BIOMED programme 1994-1996) 140000 ecu

«Restriction Endonucleases and DNA Methyltransferases: Structures, Interactions with DNA and Engineering of Novel Functions» (Commission of the European Communities, Biotechnology Programme (1999-2000), 160.000 ecu

Development of Highly Specific Enzymes for Genome Manipulation, (Commission of the European Communities, Quality of Life Programme, Contract number QLK3-CT-2001-00448 (2002-2005), € 240.000 euro

MenuG: Meganucleases for Gene Replacement (Commission of the European Communities, FP6 Programme, Contract number 015509 (2006-2009), € 295.000

### **National Research Grants-Participating as coordinator**

Computer-based design of enzymes, PENED programme, GSRT (1989-1990) 3.448 MDrs (MDrs= Million Drachmas)

«Structural studies of Aib-containing peptides». Univ. of Crete, Research Committee (KA 284) 0.504 MDrs

“IMBB-FORTH open doors”, GSRT, (1995-1996) 11 MDrs.

«Crystallographic and computational studies of type II restriction endonucleases». GSRT, PENED programme, 95EA/903 (1996-1999) 8 MDrs

«Development of a common framework for Internet-based Biotechnology courses in 4 greek Universities», EPEAEK Programme, (1987-2000) 226.7 MDrs –*coordinator*-

«Establishment of the X-ray facility for Macromolecular Crystallography at the Univ. of Crete & IMBB», Univ. of Crete, Res. Committee, KA1002 (1997-98), 1.5 MDrs

«Crystallographic studies of type II restriction endonucleases». GSRT, YPER 97 Programme, (1999-2001) 13.5 MDrs

Development of crystallogenesis tools for biological macromolecules (GSRT PENED Programme, € 150.000, 2002-2005) –*coordinator*-

Design and structural studies of asymmetric restriction endonucleases (GSRT PENED Programme, 2002-2005)

Chitin and peptidoglycane deacetylases: Structure function relationships & development of applications, Greek Ministry of Education, Pythagoras I Programme (€ 65000, 2004-2006) –*coordinator*-

Purification, characterization and crystallographic study of a thermostable gellan lyase, synthesized by a thermophilic aerobic bacterial strain. GSRT-JOINT RESEARCH AND TECHNOLOGY PROGRAMMES 2004 – 2006 (€ 11700, 2005-2007)

Bacterial pathogenesis and development of computer tools for antimicrobials design, PEP programme, Region of Crete (2006-2008), € 170.000

Network To Optimize Use Of The European X-Fel By The Greek Research Community, GSRT, 2010, € 125.000

Bacterial Type III Secretion Systems: Study of Supramolecular Structures, France-Greece JOINT RESEARCH AND TECHNOLOGY PROGRAMMES, 2010 – 2011 (EGIDE

### **International Research Grants-Participating with other investigators**

Model systems for production, folding and assembly of stable proteins overexpressed in E.coli. (Commission of the European Communities, BAP programme, 1987-1990) 205000 ecu

Design and engineering of alpha-helix bundle proteins: modified structures and novel functions (Commission of the European Communities, BRIDGE programme, 1991-1993) 150000 ecu

Genes required for pathogenicity of bacteria to plants and application of knowledge in biological control of diseases of crops (Commission of the European Communities, BRIDGE programme, 1991-1993) 140000 ecu )

Structure, function and dynamics of HIV regulating proteins (Commission of the European Communities, BIOMED Programme 1994-1996) 30000 ecu

«The European Bio-Crystallogenesis Initiative» (Commission of the European Communities, Biotechnology Programme (1999-2000), 144.000 ecu

Genestream: Massive Genetic Data will become critical Knowledge (Commission of the European Communities, Information Society Programme, Contract number IST-2001-35041, 2002-2004) € 140.000

Human Resources Development In The Study Of Nucleic Acids, Commission of the European Communities, FP6 ASIA LINK PROGRAMME (2005-2008)

### **National Research Grants-Participating with other investigators**

«Protein Engineering studies of the development of enzymes for medical and biotechnological applications» GSRT, EPETII Programme (1999-2001) 126 MDrs. (joint project with Prof. Bouriotis & Prof. Zannis. Our share is approximately 40 MDrs)

«Psychrophilic enzymes: Structural basis of stability & biotechnological applications» University of Crete, Research Committee, (1999-2000) KA 1193, 1.0 MDrs

«Protein engineering of the GST protein: applications in biosensors and transgenic plants» (1999-2000) GSRT, PENED programme 1999, 17.97 MDrs.

Study of psychrophilic enzymes: Design of enzymatic stability and catalytic properties (GSRT PENED Programme, 2002-2005) € 150.000

Design and structural studies of asymmetric restriction endonucleases (GSRT PENED Programme, 2002-2005)

Αναπτυξη & Εφαρμογή Ένός Προτυπου Συστηματος Διδασκαλιας Μεσω Διαδικτυου Στις Βιολογικες Επιστημες (ΑΦΡΟΔΙΤΗ), e-learning/ GSRT-Information Society Programme (2003-2006), € 42.400

Pathogenicity proteins and Chaperones III: novel antibacterial targets and applications in the classical genetic improvement of plants € 45.000 (2006-2008, Pythagoras II programme)

Neural system-specific GDH: Effects of regulatory mutations to the basic activity of the enzyme and crystal structures (PENED 2003 programme, 2006-2008)

*Fusarium graminearum* Chitin deacetylases: purification, biochemical and structural characterization, their role in pathogenicity and biotechnological applications (PENED 2003 programme, 2006-2008)