# Vasil N. Kolev, Prof., Ph.D.

# CURRICULUM VITAE

## **EDUCATION**

- 1967 1972 Technical University, Sofia, Department of Radio-electronics
- 1982 Ph. D. (Physiology), Bulgarian Academy of Science, Central Brain Research Laboratory

#### CURRENT ACADEMIC STATUS

Professor at the Department of Cognitive Psychophysiology, Institute of Neurobiology, Bulgarian Academy of Sciences, Sofia, Bulgaria, retired

#### **PROFESSIONAL ACTIVITIES**

- 1974 1976 Research scientist at the Laboratory of Neuro Cybernetics, Central Brain Research Laboratory (CBRL), Bulg. Acad. Sci., Sofia, Bulgaria
- 1976 1980 Research scientist at the Laboratory of Brain Electrogenesis and Hyperbaric Physiology, CBRL, Sofia
- 1980 1987 Research scientist at the Bioelectronics Laboratory, CBRL (since 1985 Brain Research Institute), Sofia
- 1982 Ph. D. Thesis: Dynamics of the Brain Evoked Potentials in Time and Frequency Domain, CBRL, Sofia
- 1987 1989 Head of the Bioelectronics Laboratory, Brain Research Institute (BRI), Bulg. Acad. Sci., Sofia
- 1989 Assoc. Prof. (Physiology), BRI, Sofia
- 1989 1995 Head of the Laboratory of Neurophysiological Mechanisms of Information Processing, BRI, Sofia
- 11.1990 03.1991 Visiting scientist at the Institute of Physiology, Medical University of Lübeck, Germany (DFG grant 436 BUL-112/40/90)
- 11.1992 03.1993 Visiting scientist at the Institute of Physiology, Medical University of Lübeck, Germany (DFG grant 436 BUL-112/12/92)
- 05.1994 12.1994, 03.1995 12.1995, 11.1996 12.1996, 05.1997 11.1997 Visiting scientist at the Institute of Physiology, Medical University of Lübeck, Germany (DFG grant 436 BUL-113/76)
- 03.1995 03.2005 Head of Working Group on Neurophysiological Mechanisms of Information Processing at the Institute of Physiology, Bulgarian Academy of Sciences, Sofia
- 12.1998 04.1999 Visiting scientist at the Department of Physiology, Medical University of Istanbul, Turkey, NATO research program "Science for piece"

- 06.1999 12.2003 Head of the Department of Mechanisms of Perception and Motor Control at the Institute of Physiology, Bulgarian Academy of Sciences, Sofia
- 05.1999 07.1999, 10.2000 12.2000, 11.2001 12.2001 Visiting scientist at the Institute of Physiology, Medical University of Lübeck, Germany and the Institute of Psychology and Cognition, University of Bremen, Germany (DFG grant 436 BUL-113/105)
- 03.2002 02.2003 Visiting scientist at the Institute of Occupational Physiology at the University of Dortmund (IfADo), Germany, DFG Project Ho-965-5/3 "Objective measurement of mental processes during workload by means of event-related brain potentials"
- 09.2003 12.2003, 04.2004 08.2004 Visiting scientist at the Institute for Child and Adolescent Psychiatry, University of Göttingen, Germany (Grant from Klaus Tschira Foundation, Heidelberg, Germany)
- 03.2005 12.2006 Head of Cognitive Neurodynamics Laboratory, Institute of Physiology, Bulgarian Academy of Sciences
- 10.2004 09.2005 Visiting scientist at the Institute of Occupational Physiology at the University of Dortmund (IfADo), Germany, Project "Aging-related changes in behavioural mechanisms", Heinrich-Herz Foundation, Düsseldorf, Germany
- 02.2006 06.2009 Visiting scientist at the Neurology Clinic at the University of Lübeck, Lübeck, Germany, DFG Project SFB-654 "Plasticity and sleep"
- 2008 2012 Scientific secretary of the Institute of Neurobiology, Bulgarian Academy of Sciences
- 11-12.2009, 10.2011 01.2012, 10.2012 03.2013 Visiting scientist at the Clinic for child and adolescent psychiatry at the University of Göttingen, Göttingen, Germany (Project "Investigation of the oscillatory behavior in children with ADHD")
- 12.2010, 09.2011 Visiting scientist at the Central Institute of Mental Health (ZI), Mannheim, Germany, DFG Project SFB-636 "Learning, memory and plasticity of the brain"
- 03-05.2012, 06-07.2013, 04-06.2013, 10-11.2014, 10-12.2015 Visiting scientist at the Neurology Clinic at the University of Lübeck, Lübeck, Germany (DFG Project SFB-654 "Plasticity and sleep" – A2)
- since 2012 Full Professor (Psychophysiology) at the Institute of Neurobiology, Bulgarian Academy of Sciences
- 06.2012 05.2016 Deputy Director of the Institute of Neurobiology, Bulgarian Academy of Sciences

## **RESEARCH PROJECTS**

#### NATIONAL

1985 - 1990 National Neuroscience and Behavior Research Program at the Ministry of Healthcare, Sofia, Bulgaria – *participant* 

- 1991 1993 Project "Electrophysiological investigation of information processing during childhood" (PM-59/1991), National Brain and Behavior Program at the Ministry of Healthcare, Sofia, Bulgaria *principal investigator (PI)*
- 1992 1996 Project "Induced brain rhythms and stimulus probability processing" (NFNI-B-217), National Research Fund at the Ministry of Education, Science, and Technologies, Sofia, Bulgaria – PI
- 1992 1997 Project "Electrophysiological investigation of memory and brain functioning in children" (NFNI-B-225), National Research Fund at the Ministry of Education, Science and Technologies, Sofia, Bulgaria *participant*
- 1997 2001 Project "Functional significance of endogenous event-related brain potentials: analysis in time-frequency domain" (NFNI-B-703), National Research Council at the Ministry of Education and Science, Sofia, Bulgaria – **PI**
- 1998 2003 Project "Functional correlates of brain gamma band activity in humans" (NFNI-B-812), National Research Council at the Ministry of Education and Science, Sofia, Bulgaria – participant
- 2003 2007 Project "Time-frequency and spacial characteristics of neuroelectrical responses in child psychiatric disorders" (NSF-L-1316), National Science Fund at the Ministry of Education and Science, Sofia, Bulgaria – **PI**
- 2005 2009 Project "Central brain mechanisms of behavioural control during ageing" (NSF-L-1501), National Science Fund at the Ministry of Education and Science, Sofia, Bulgaria – *participant*
- 2012 2019 Project "Neurodynamic markers of cognitive aging" (DFNI-B01/24), National Science Fund at the Ministry of Education and Science, Sofia, Bulgaria *PI*
- 2017 Project "Functional connectivity and organization of motor cortical networks in aging" (DN13/7), National Science Fund at the Ministry of Education and Science, Sofia, Bulgaria *participant*
- 2019 Project "New biomarkers of brain states based on neuronal connectivity" (KP-06-N33/11), National Science Fund at the Ministry of Education and Science, Sofia, Bulgaria – **PI**

## **INTERNATIONAL**

- 1990 1991 Project "Induced brain rhythms in tasks with uncertainty" (DFG grant 436 BUL-112/40/90), Institute of Physiology, Medical University of Lübeck, Lübeck, Germany *partner*
- 1992 1993 Project "Induced brain rhythms in three-year-old children" (DFG grant 436 BUL-112/12/92), Institute of Physiology, Medical University of Lübeck, Lübeck, Germany *partner*
- 1994 1997 Project "Investigation of induced brain rhythms during cognitive processing of stimulus information in humans" (joint project between the Institute of Physiology, Medical University of Lübeck, Germany and the Institute of Physiology, Bulgarian Academy of Sciences, Sofia, DFG grant 436 BUL-113/76) – partner
- 1998 1999 Project "Time-frequency analysis of endogenous event-related brain potentials" (joint project between the Department of Physiology, Medical University of

Istanbul, Turkey and the Institute of Physiology, Bulgarian Academy of Sciences, Sofia), NATO research program "Science for piece" – *partner* 

- 1999 2001 Project " Parallel processing in the brain: the functional role of gamma band EEG activity in perception and cognition" (joint project between the Institute of Physiology, Medical University of Lübeck, Germany and the Institute of Physiology, Bulgarian Academy of Sciences, Sofia, DFG grant 436 BUL-113/105) – partner
- 1999 2002 Collaborative project "EEG oscillations and modes of cognitive processing in the human brain" (joint project between the Institute of Physiology, Medical University of Lübeck, Germany and the Institute of Physiology, Bulgarian Academy of Sciences, Sofia), James S. McDonnell Foundation (St. Louis, USA) Eastern European Cognitive Neuroscience and Cognitive Science Program – partner
- 2001 2004 Project "Time-frequency and self-adapting methods for biomedical signal analysis. Innovative applications in child and adolescent psychiatry" (joint project between the Institute for Child and Adolescent Psychiatry, University of Göttingen, Germany and the Institute of Physiology, Bulgarian Academy of Sciences, Sofia), Klaus Tschira Foundation, Heidelberg, Germany – partner
- 2002 2003 Project "Objective measurement of mental processes during workload by means of event-related brain potentials" (DFG Project Ho-965-5/3), Institute of Occupational Physiology at the University of Dortmund (IfADo), Germany – *participant*
- 2004 2005 Project "Aging-related changes in behavioural mechanisms", Heinrich-Herz Foundation, Düsseldorf, Germany – *partner*
- 2005 2009 Project "Electric neuronal oscillations and cognition (ENOC)", EU COST Action B27 – partner, representative of the Bulgarian side
- 2006 2009 Project "Plasticity and sleep" (DFG Project SFB-654), Neurology Clinic at the University of Lübeck, Lübeck, Germany *participant*
- 2007 2011 Project "Advanced methods for the estimation of human brain activity and connectivity (NeuroMath)", EU COST Action BM0601 *partner*, *representative of the Bulgarian side*
- 2009 2013 Project "Investigation of the oscillatory behavior in children with ADHD", Clinic for child and adolescent psychiatry at the University of Göttingen, Göttingen, Germany – *participant*
- 2010 2011 Project "Learning, memory and plasticity of the brain" (DFG Project SFB-636), Central Institute of Mental Health (ZI), Mannheim, Germany – *participant*
- 2012 2013 Project "Attention deficits in hemineglect patients: brain correlates studied through time-frequency analysis of neuroelectric oscillations", Royal Society International Exchanges 2011/R2, University of Nottingham, UK *partner*
- 2012 2016 Project "Plasticity and sleep" (DFG Project SFB-654 A2), Neurology Clinic at the University of Lübeck, Lübeck, Germany *participant*
- 2014 2015 Project "Hemispatial neglect: a disorder of spatial attention and its electrophysiological signatures", Visiting Scholarship Scheme of the School of Psychology Research Committee at the Iniversity of Nottingham, UK *partner*

2015 - 2017 Project "Aware Mind-Brain: bridging insights on the mechanisms and neural substrates of human awareness and meditation" (BIAL Foundation, Lisbon, Portugal, PI Dr. Antonino Raffone), Department of Psychology, Sapienza University of Rome, Rome, Italy – *partner* 

#### PARTICIPATIONS IN SCIENTIFIC FORA

A total of 176 participations (abstracts) in national and international scientific congresses, symposia, workshops, and meetings

#### **INVITED LECTURES AND TALKS**

- [1] Kolev, V., Yordanova, J. Relation between the P3-wave and evoked EEG rhythmicities. *Ist Turkish Neuroscience Congress, Istanbul, Turkey, 1993.*
- [2] Yordanova, J., Kolev, V. Developmental changes in the alpha response system. *Intern. Conf./Workshop on Alpha processes in the brain, Aug. 27-31 1994, Lübeck.*
- [3] Basar, E., Yordanova, J., Kolev, V. Effects of aging on frontal alpha responses. 40 Jahrestagung der Deutschen EEG Gesellschaft, Okt. 12-15 1995, Bielefeld.
- [4] Yordanova, J., Kolev, V. The development of the EEG-alpha system in children. Wissenschaftskonferenz für das Wintersemester 1995/96, Georg-August-Universität Göttingen, 14.11.1995, Göttingen, Germany.
- [5] Kolev, V., Yordanova, J., Basar, E. Phase-locking of event-related single-sweep potentials reveals new information about the brain dynamics. *3rd European Congress of Psychophysiology, May 29-31 1997, Konstanz, Germany.*
- [6] Basar, E., Yordanova, J., Kolev, V. Does the alpha rhythm control the brain responses? *3rd European Congress of Psychophysiology, May 29-31 1997, Konstanz, Germany.*
- [7] Yordanova, J., Kolev, V. Development of the EEG-theta response and its relationship to P300 in children. *Wissenschaftskonferenz für das Sommersemester 1997/98, Georg-August-Universität Göttingen, 14.07.1998, Göttingen, Germany.*
- [8] Rosso, O., Yordanova, J., Kolev, V., Blanco, S., Figliola, A., Schürmann, M., Basar, E. Time-frequency-analysis of sensorial brain activity. XV International Congress of Clinical Neurophysiology, May 27-29, 2001, Buenos Aires, Argentina.
- [9] Yordanova, J., Kolev, V., Hoormann, J., Hohnsbein, A., Falkenstein M. Aging and sensory-motor processing in humans. *Scientific Conference of the Institute of Occupational Physiology Dortmund, July 9, 2002, Dortmund, Germany.*
- [10] Banaschewski, T., Hasselhorn, M., Heinrich, H., Tiffin-Richards, M., Woerner, W., Yordanova, J., Kolev, V., Brandeis, D., Rothenberger, A. ADHS und Komorbiditäten. Wissenschaftskonferenz der Kinder- und Jügendpsychiatrie Essen, 04.09.2002, Essen, Germany.
- [11] Yordanova, J., Kolev, V., Hoormann, J., Hohnsbein, A., Falkenstein M. Effects of aging on sensory-motor processing in humans. *Interantional Workshop "The Cognitive Neuroscience of Individual Differences", Hanse Wissehschaftskolleg, November 7-10,* 2002, Delmenhorst, Germany.
- [12] Yordanova, J., Kolev, V. Parallel systems of error processing in the brain. International Conference Errors, Conflicts, and the Brain - Current Opinions on Performance Monitoring, July 3-6, 2003, Dortmund, Germany.

- [13] Yordanova, J., Kolev, V. Multiple functional subcomponents of P300: Evidence from the time-frequency domain. 5th Congress of the Federation of European Psychophysiology Societies, September 10-14, 2003, Bordeaux, France.
- [14] Yordanova, J., Kolev, V., Falkenstein, M. Age-related changes of sensorimotor processing as reflected by ERPs. *5th Congress of the Federation of European Psychophysiology Societies, September 10-14, 2003, Bordeaux, France.*
- [15] Yordanova, J., Kolev, V. Central stages of sensorimotor processing in the brain the ERP approach. *Wissenschaftskonferenz für das Wintersemester 2003/2004, Georg-August-Universität Göttingen, 21.11.2003, Göttingen, Germany.*
- [16] Yordanova, J., Kolev, V. Multiple functional subcomponents of P300: evidence from the time-frequency domain. *Intern. Symp. Event-related Potentials EPIC-XXIV, March 28-31, 2004, Leipzig, Germany.*
- [17] Yordanova, J., Kolev, V. Parallel systems of error processing in the brain. Wissenschaftskonferenz für das Sommersemester 2003/2004, Georg-August-Universität Göttingen, 23.04.2004, Göttingen, Germany.
- [18] Yordanova, J., Kolev, V. Time-frequency analysis of ERPs: What can we learn about error processing in the brain? *Conference on the IMAGE project.* 11-12.05.2004, *Göttingen, Germany.*
- [19] Rothenberger, A., Heinrich, H., Banaschewski, T., Kolev, V., Yordanova, J. Brain Oscillations in Child Psychiatry: Concepts and Applications. 12th World Congress of Psychophysiology, The Olympics of the Brain, Porto Carras, Halkidiki, Greece, September 18-23, 2004.
- [20] Yordanova, J., Kolev, V. Parallel systems of error processing in the brain. *X-th* International Conference on Motor Control, September 24-27, 2004, Sofia, Bulgaria, p. 48.
- [21] Yordanova, J., Kolev, V., Falkenstein, M. Sensorimotor mechanisms of aging-related slowing. Ist International Workshop "Neuroscience of Cognitive Ageing", October 13-15, 2004, Palma de Mallorca, Spain, pp. 16-17.
- [22] Yordanova, J., Kolev, V., Falkenstein, M. Motor-response generation as a source of aging-related behavioral slowing in sensorimotor tasks. *Fachtagung Psychologie & Gehirn der Fachgruppe Biologische Psychologie und Neuropsychologie der Deutschen Gesellschaft für Psychologie (DGPs) sowie der Deutschen Gesellschaft für Psychologie und ihre Anwendung (DGPA), May 25-28, Bochum, 2005, Germany.*
- [23] Yordanova, J., Falkenstein, M., Kolev, V. Substantial reorganization of error processing with aging: Time-frequency analysis of error-related potentials. 45th Annual Meeting of the Society for Psychophysiological Research, September 21-24, 2005, Lisbon, Portugal.
- [24] Yordanova, J., Kolev, V. Low Frequency Oscillations in Behavior/EEG/ERP. ADHD Neuroscience Network Meeting (ANNet) 2006: Practical Issues in the Analysis of Multisecond Oscillations – working across behavioral, hemodynamic and neural levels of analysis, July 7-9, 2006, New York, USA.
- [25] Yordanova, J., Kolev, V. Event-related oscillations along the life span: Power and synchronization effects of development and aging. *COST Action B27 Electric Neuronal Oscillations and Cognition (ENOC), Meeting "Electrical brain oscillations along the life-span", October 12-13 2007, Göttingen, Germany.*

- [26] Yordanova, J., Kolev, V. Electrical brain oscillations along the life-span: Extensions and applications. COST Action B27 Electric Neuronal Oscillations and Cognition (ENOC), Meeting "Electrical brain oscillations along the life-span", October 12-13 2007, Göttingen, Germany.
- [27] Heinrich, H., Kolev, V., Rothenberger, A., Yordanova, J. Event-related oscillations and cognitive processes in children. *COST Action B27 Electric Neuronal Oscillations and Cognition (ENOC), Meeting "Electrical brain oscillations along the life-span", October 12-13 2007, Göttingen, Germany.*
- [28] Yordanova, J., Kolev, V. Event-related brain oscillations: Advanced methods for neuroelectric signal processing and their application to cognitive brain research. *Invited lecture presented at the International Master of Neuroscience, University of Barcelona, March 6, 2008.*
- [29] Йорданова, Ю., Колев, В. Централно-мозъчни механизми на преработка на сензо-моторна информация: Ефекти върху скоростта на поведенческите реакции. *Лекция пред Софийския градски клон на Дружеството по физиологични науки, София, 20.05.2008.*
- [30] Yordanova, J., Kolev, V. Event-related alpha oscillations: Functional and developmental aspects. *X. International Conference on Cognitive Neuroscience, September 1-5, 2008, Bodrum, Turkey.*
- [31] Garcia-Garcia, M., Yordanova, J., Kolev, V., Dominguez-Borras, J., Escera, C. Specific gamma-band phase-synchronization reflects the contextual effect of emotion on brain mechanisms of involuntary attention. X. International Conference on Cognitive Neuroscience, September 1-5, 2008, Bodrum, Turkey.
- [32] Yordanova, J., Kolev, V., Wagner, U., Verleger, R. Bringing implicit knowledge to consciousness: Different roles of early- and late-night sleep. "Consciousness and its Descriptors", Advanced Workshop in the framework of COST Action B27 "Electric Neuronal Oscillations and Cognition (ENOC)", March 27-28, 2009, Crotone, Italy.
- [33] Yordanova, J., Kolev, V. Event-related brain oscillations: Concepts, methodology, and application to cognitive brain research. *Institut für Neurowissenschaft, Ruhr-Universität Bochum, Forschungskolloquium Biopsychologie, WS 2009/2010, December 7, 2009, Bochum, Germany.*
- [34] Yordanova, J., Falkenstein, M., Kolev, V. Response-related theta oscillations reflect differences in error production during aging. *International conference "Aging & Cognition", Konferenzzentrum Westfalenhallen, October 14-16, 2010, Dortmund, Germany.*
- [35] Kolev, V., Falkenstein, M., Yordanova, J. Synchronization of neuroelectric theta oscillations plays an important role for error processing during aging. *International conference "Aging & Cognition", Konferenzzentrum Westfalenhallen, October 14-16, 2010, Dortmund, Germany.*
- [36] Yordanova J., Kolev V. Response-related theta oscillations play an important role for error production during aging. XI International Conference on Cognitive Neuroscience, Pre-ICON XI Satellite symposium: Cognitive Aging, September 25, 2011, Palma de Mallorca, Spain.
- [37] Yordanova J., Kolev V. Oscillatory EEG patterns and performance fluctuations in ADHD. 2. Europäisches Symposium "ADHS von der Pathophysiologie zur Therapie", 30.03.2012, Dresden, Germany.

- [38] Yordanova J., Kolev V. Event-related oscillations and error processing. *Neuro-cognitive colloquium of the Department of Neurology, University Clinics Schleswig-Holstein, 10.04.2012, Lübeck, Germany.*
- [39] Yordanova J., Kolev V. Independent oscillatory patterns determine performance fluctuations in children with attention deficit/hyperactivity disorder. *Neuro-cognitive colloquium of the Department of Neurology, University Clinics Schleswig-Holstein, 29.05.2012, Lübeck, Germany.*
- [40] Yordanova, J., Kolev, V., Wagner, U., Born, J., Verleger, R. Increased alpha (8-12 Hz) activity during slow-wave sleep as a marker for the transition from implicit knowledge to explicit insight. 52nd Annual Meeting of the Society for Psychophysiological Research, September 19-23, 2012, New Orleans, Louisiana, USA, Psychophysiology, 2012, 49 (Sup. S1), S3.
- [41] Yordanova J., Kolev V. Synchronization of brain oscillations and aging. 2<sup>nd</sup> International Conference "Aging & Cognition 2013", Congresscenter Westfalenhallen, April 25-27, 2013, Dortmund, Germany.
- [42] Kolev, V., Yordanova, J. Aging is associated with reduced inter-regional synchronization of oscillatory theta networks during error monitoring. 2nd International Conference of the European Society for Cognitive and Affective Neuroscience ESCAN'2014, May 7-10, 2014, Dortmund, Germany.
- [43] Kolev, V., Yordanova, J. Aging is associated with reduced inter-regional synchronization of oscillatory theta networks during error monitoring. *Neuro-cognitive* colloquium of the Department of Neurology, University Clinics Schleswig-Holstein, 13.05.2014, Lübeck, Germany.
- [44] Yordanova, J., Kolev, V. Event-related oscillations in neural activity and behaviour: studies of attention, behavioural monitoring, and cognitive development. Seminar "Neural oscillations" (B37), School of Psychology at the University of Nottingham, 10.10.2014, Nottingham, UK.
- [45] Yordanova, J., Kolev, V., Verleger, R. Sleep spindles from the frontal cortex and the transition from implicit learning to explicit knowledge. *Plenum session of the DFG* project SFB-654 "Plasticity and Sleep", Institute of Biomedical Optics, University of Lübeck, 22.10.2014, Lübeck, Germany.
- [46] Yordanova, J., Kolev, V., Verleger, R. Sleep spindles from the frontal cortex and the transition from implicit learning to explicit knowledge. *Neuro-cognitive colloquium of the Department of Neurology, University Clinics Schleswig-Holstein, 28.10.2014, Lübeck, Germany.*
- [47] Yordanova, J., Kolev, V. Error processing in aging is associated with altered lateral asymmetry of oscillatory motor networks operating in the theta frequency range. 3<sup>*d*</sup> *International Conference "Aging & Cognition 2015", April 23-25, 2015, Dortmund, Germany.*
- [48] Kolev, V., Yordanova, J. Aging-related reduction of oscillatory theta synchronization between medial frontal and motor regions during response generation. 3<sup>*d*</sup> International Conference "Aging & Cognition 2015", April 23-25, 2015, Dortmund, Germany.
- [49] Yordanova, J., Kolev, V., Verleger, R. Local spindle networks in the right hemisphere enhance awareness of regularity after sleep. *1st International Conference on Sleep Spindling, May 12–14, 2016, Budapest, Hungary.*

## **REVIEWER OF INTERNATIONAL JOURNALS**

**Biomedical Research International** Brain Research Chaos Cerebral Cortex Clinical Neurophysiology Computational Intelligence and Neuroscience Cognitive Processing Conference Papers in Neuroscience Computational and Mathematical Methods in Medicine Computational Intelligence and Neuroscience CR Acad. Bulg. Sci. Dove Press Electrotechnica + Electronica (E+E) eNeuro European Journal of Neurology European Physics Journal B Frontiers in Behavioral Neuroscience Frontiers in Human Neuroscience Frontiers in Psychology Frontiers in Neuroinformatics **IEE Biomedical Engineering Journal IEEE Transactions on Biomedical Engineering** International Journal of Bioautomation International Journal of Psychophysiology Journal of Neural Engineering Journal of Neuroscience Methods Journal of Psychophysiology Medical and Biological Engineering and Computing Neuropsychologia Neuroscience Letters **OBM** Neurology Philosophical Transactions A Physica A Physiological Measurement Psychophysiology The Open Medical Informatics

## PARTICIPATION IN CONSORTIA FOR EU APPLICATIONS

- FP6-2002 Expression of interest for a network of excellence on "Neurophysiological assessment of cognitive changes due to ageing and age-related diseases", PI Prof. Dr. Michael Falkenstein, IfADo, Leibniz Research Center, Dortmund, Germany.
- FP6-2004 Network of excellence on "Neurophysiological assessment of cognitive changes due to ageing and age-related diseases", PI Prof. Dr. Michael Falkenstein, IfADo, Leibniz Research Center, Dortmund, Germany.
- FP6-NEST-2005-Path-HUM topic ref. "What it means to be human", project "Human Brain Dynamics", PI Prof. Dr. Murat Özgören, Brain Dynamics Research Center and Department of Biophysics, Faculty of Medicine, Dokuz Eylul University, Izmir, Turkey.

- EU-COST Action, 2006, project "Neurophysiological assessment of cognitive changes due to ageing and age-related diseases (COGAGE)", PI Prof. Dr. Michael Falkenstein, IfADo, Leibniz Research Center, Dortmund, Germany.
- HEALTH-2007-2.2.1-2: Coding in neuronal assemblies, project "Oscillatory Coding in Neuronal Assemblies", PI Prof. Dr. Tamer Demiralp, Istanbul University, Istanbul Faculty of Medicine, Department of Physiology, Istanbul, Turkey.
- EU Coordination and Support Action FP7-REGPOT-2011-1 "Unlocking and developing the research potential of research entities established in the EU's convergence regions and outermost regions" 2011, project "Reinforcement of multidisciplinary neuroscience research of cognitive aging in the Institute of Neurobiology at the Bulgarian Academy of Sciences:, PI Prof. Dr. Juliana Yordanova, Sofia
- Fonds National Suisse de la Recherche Scientifique (FNS), project "Effects of socioeconomic status on neurofunctional brain development", PI Prof. Dr. Juliana Yordanova, Sofia
- EU Horizon 2020 Research and Innovation Framework Programme, Call: H2020-PHC-2014-single-stage \_CNECT 2014, project "ICT solutions for independent living with cognitive impairment: The MEMory HOME", co-applicant Prof. Dr. J. Yordanova, Sofia
- EU Horizon 2020 Research and Innovation Framework Programme, Call: H2020-PHC-2015-two-stage \_RIA 2015, project "Healthy mindful ageing: mental training for enhanced brain function, cognition and well-being in old age", co-applicant Prof. Dr. J. Yordanova, Sofia

## **MEMBERSHIP**

International Brain Research Organization (IBRO) Society for Psychophysiological Research (SPR) – USA European Cognitive Aging Society (EUCAS) Federation of the European Psychophysiology Society (FEPS) Bulgarian Society for EEG and Clinical Neurophysiology Bulgarian Society for Biomedical Physics and Techniques Bulgarian Neuroscience and Behaviour Research Society

## MEMBER OF EDITORIAL BOARDS OF SCIENTIFIC JOURNALS

- Physiology Journal (2013 2016)
- Conference Papers in Neuroscience (2013 2015)
- Frontiers in Human Neuroscience (since 2017)

## SCIENCE-METRIC DATA

Web of Science Researcher ID: B-4595-2008 ORCID: 0000-0002-2694-2149 Scopus Author ID: 35588624300

Number of Publications: 137

Total Impact Factor: 301.344 Individual Impact Factor: 77.878 Number of Citations: 3354 h-index: 34