SEERC –
Call for PhD Applications 2016-2017.

PhD Studies at SEERC – Call for Applications (Submission Deadline: 30/5/2016)

1. The PhD Programme

The PhD programme is run jointly by the International Faculty of the University of Sheffield CITY College and the Sheffield based Faculties of the University, under a joint supervision scheme. The programme is hosted by the South East European Research Centre (SEERC), a Research Centre of the University's International Faculty based in Thessaloniki, Greece.

At SEERC there are currently two possibilities for a PhD degree:

A) Full Time programme. The duration is 3 years (with a 4th year available for writing up the thesis) and it requires full time commitment on the part of the PhD student, which means that one would have to be physically present at SEERC premises located in Thessaloniki.

B) Part Time programme, with duration 6 years (with 2 years available for writing up). To be eligible for a part-time PhD the candidate should be able to prove significant experience in the selected field. In this case, the PhD student has the obligation for a minimum of two visits to Thessaloniki annually for supervision purposes. All other communication with supervisors occurs via e-mail, Skype and telephone.

Students applying for the programme (Full time and Part time) must have an excellent academic record (normally Degrees with Distinction) and should possess a Master's Degree. Potential work experience, research training and publications play important role also. Applicants for part time positions must submit proposals that demonstrate a clear linkage between their current work and their PhD topic.

2. Entry Requirements

The University has clear minimum entry requirements. These are the following:

➢ A relevant first Degree (Normally with Distinction)

➢ A Master's Degree (Normally with Distinction)

➢ Proof of English Language Qualifications

For # 1 Research topic, the standard English Language requirement is IELTS at 7.0 with a minimum of 6.0 in each component or equivalent.

For the # 2-6 Research Topics please see the English language requirements for prospective postgraduate students at The University of Sheffield:

http://www.sheffield.ac.uk/postgraduate/info/englang

3. Tuition Fees

The exact figures on tuition fees will be announced shortly. Interested students may enquire at eltsimiga@seerc.org

4. Fee Waivers

Once again this year, the University of Sheffield and its' International Faculty - CITY College will be offering a small number of <u>fee waiver positions</u> for students to read for a PhD **through SEERC in Thessaloniki**. The fee waivers are offered to applicants with outstanding academic records and the process is highly competitive. **<u>Please note that fee waivers are only given to the candidates applying for Full time studies</u>.**

More information on the terms of reference of the Fee waivers can be found at the following link: http://www.seerc.org/new/index.php/doctoral-programme/studentships.html

5. Submission process

We accept proposals from qualified students for Full-time or for Part-time study, **however fee waivers are offered for FULL TIME studies only. The topics on which we accept applications are the following:**

Research Track 1: Enterprise Innovation and Development	
Topic 1:	Decoding employee voice in countries of crisis: New models of understanding and development
Research Track 2: Information and Communication Technologies	
Topic 2:	Energy Conservation and QoS in IoT Communications
Research Track 3: Society & Human Development	
Topic 3:	Neural correlates of multisensory integration in older adults
Topic 4:	Cognitive correlates of bilingualism through the life-span
Topic 5:	Attitudes towards minority and immigrant languages in Greece
Topic 6:	A Corpus-based Analysis of English Use by Foreign Language Learners in South-East Europe

In order to apply, PhD candidates need to download the **Application Form** along with the **Guidance Notes** from SEERC's web site[1], complete the application, and then send, by post the application folder to SEERC.

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[1] http://www.seerc.org/new/index.php/doctoral-programme/how-to-apply.html

Please note that incomplete applications will be disqualified from the process. Candidates have to ensure that all supporting documentation is included in the application. The application form and supporting documents should be accompanied by a **Research Proposal** and an updated **CV**. **The CV and the proposal of the PhD candidate should be sent electronically also, by e-mail at phd_admissions@seerc.org**

The **Research Proposal** should be typed, the length should be about 1,500 – 2,000 words (6 to 8 pages) and should include the following:

a) *Title of the proposed thesis*

b) *Reference to one of the Specific Research Topics (section 6)*

c) *Proposed mode of work (full time or part time)*

d) *Proposed source of Funding: Fee Waiver (Full time Only), Personal funding, funded by any other institution/organization e.t.c.*

e) *Background to research topic*

This section needs to introduce the topic before discussing it in relation to wider academic debates. The section might seek to situate the topic and highlight why the issue being addressed is important - this should be identified and justified as an important/interesting academic issue not simply in terms of current media/political/popular interest.

f) *Specific problem(s) to be examined*

In his section the discussion of the topic needs to be more specific. The focus should include reference to the framework or conceptual approach that the research might seek to draw on. Also the discussion is likely to highlight and make reference to parallel, comparable and complimentary research. The aim of this section is essentially to set up the area of research specifically. The challenge is to ensure that the proposed research has a substantive empirical and conceptual focus, both of which are suitably grounded in contemporary academic debate with appropriate citations to relevant literature. By the end of the section a gap in existing knowledge needs to be highlighted and and the research questions(s) that the thesis will address be stated.

g) *Methods of research proposal, plan and timetable of work*

The research methods section needs to highlight what methods will be used and how, with an appropriate level of detail. In the case on quantitative research the data set to be accessed and used should be identified and the nature if proposed statistical analysis detailed. In the case of more qualitative research, again the methods should be elaborated and proposed stakeholders/populations to be interviewed/surveyed should be detailed. Due consideration should be given to accessing relevant data/interviewees. Proposals should also highlight ethical issues and potential limitations.

h) *Resources available and required (if any)*

i) *Any other information in support of your proposal*

j) *The proposal should include correct literature citations and a brief bibliography*

All applications should be submitted at SEERC by 30/5/2016 (postmarked). (PLEASE NOTE THAT ON THE ENVELOPE/FOLDER SHOULD BE CLEARLY WRITTEN "SEERC-SHEFFIELD DOCTORAL PROGRAMME APPLICATION FOLDER")

Moreover, **an electronic version of the Research proposal and the CV should be sent by 30/5/2016 by email to SEERC at phd_admissions@seerc.org**.

Incomplete applications missing one or more documents or failure to submit the hard copies of the application by post (i.e. submission only of the proposal in electronic form) to SEERC will result to the application's disqualifying.

The possible outcomes of your application are:

- Acceptance to read for a PhD

- Acceptance to read for a PhD with a fee waiver (FULL TIME candidates only)

- Rejection

All candidates will be informed on the outcome of the evaluation procedure, which may involve an interview at SEERC premises with the proposed supervisors.

A step-by-step guide to submitting your application	
Step 1:	Read in detail the requirements from this Call for Proposals
Step 2:	Download the application form
Step 3:	Read the Guidance Notes for completing it
Step 4:	Prepare Research Proposal and an Updated CV according to Guidelines
Step 5:	Prepare supporting documents for inclusion in the application pack
Step 6:	Send by post or in person 1 envelope with the application and all the supporting documents to SEERC. Do this by **30/5/2016** (post stamp as proof of validity of the application).
Step 7:	Send by **30/5/2016** the Research proposal and the updated CV by e-mail to phd_admissions@seerc.org

6. Research Topics

Research Track 1: Enterprise Innovation and Development

Topic 1: Decoding employee voice in countries of crisis: New models of understanding and development

South Eastern Europe (SEE) is in the middle of an economic crisis that has been posited to be fundamentally altering the way that businesses operate but, even more critically the way that employees and organizations interact. Within this context, a body of literature related to employee voice (EV) has emerged. EV has been defined

by authors such as Wilkinson and Fay (2011) as an employee's ability to share an opinion in direct relation to work oriented situations and in the overall decision making process related to work but they also suggested that the times were changing in terms of EV understanding. Authors such as Millward et al (2000) suggested that EV comes through three disparate channels – trade union membership, direct employee involvement, and indirect representation; however, the economic crisis appears to be fundamentally changing the nature and impact of EV given the changes to working conditions and the power that now rests squarely at the feet of employers. As suggested by Psychogios et al. (2014), the consequences of the crisis for employees can be seen through: survivor syndrome, job insecurity, workload, burnout, health issues, and poorer perspectives related to pay, benefits and career prospects. No more have these issues impacted employees than those working for SMEs throughout the region.

SMEs rely directly and indirectly on indirect and informal voice mechanisms as a result of low rates of unionization and a general absence of formal employment mechanisms; personal characteristics are highly embedded in the specific context of the business, place and time. Very little has been written about EV and SMEs.

This project is seeking proposals to draw together the concept of EV along with the extreme (adverse) working conditions currently being seen throughout the region. It is anticipated that candidates can see these ideas from a number of angles which would assist in modeling the current state of EV in the region and comparing this to the literature. Policy development and organizational success, predicated at the SME level, is suggested to be included in the outcomes of such work

Millward N., Bryson A. and Forth J. (2000) All change at work: British employment relations 1980- 1998 as portrayed by the Workplace Industrial Relations Survey Series. London, Routledge.

Psychogios, A., Szamosi, L.T., and Brewster, C. (2015) Work Organization, Human Resource Management and the Economic Crisis. In Human Resource Management Challenges and Changes. Edited by Machado, C.F. and Davim, J.P. NOVA Science Publishers: New York. p. 1-19.

Wilkinson, A. and Fay, C (2011) New Times for Employee Voice. Human Resource Management, 50 (1), p. 65-74.

Proposed supervisor from the International Faculty: Dr Leslie Szamosi

(szamosi@city.academic.gr)

Research Track 2: Information & Communication Technologies

Topic 2: Energy Conservation and QoS in IoT Communications

One of the biggest challenges today in the area of computer networking and data communications is enabling the Internet of Things (IoT). A lot of research is now concentrated on techniques that would allow interoperability of connected devices.

On top of this necessary condition for the successful deployment of IoT applications is the ability of functioning in a power efficient manner. Different types of IoT devices are expected to be of small size, with limited energy autonomy. For instance, small sensing devices which are deployed in distributed locations far from some power source need to stay operational for long time without requiring recharging. Towards that direction, it is crucial to develop and apply smart techniques that allow advanced energy conservation without notable degradation of performance.

Additionally, the successfulness of the IoT paradigm greatly depends on the ability of the related applications to ensure high Quality of Experience (QoE). This implies the need for adaptive networking behaviour, which allows traffic differentiation and optimization of the crucial performance metrics. Moreover, IoT devices are planned to be used for critical monitoring applications, such as in industrial environments and healthcare systems. So, it is evident that efficient and reliable techniques for prioritising information are required, providing in that way advanced Quality of Service (QoS) support.

The main aim of this project is the conceptualization, development, and evaluation of protocols that provide energy conservation and QoS in IoT applications. Related cutting-edge techniques that enhance communications in the IoT architecture need to be thoroughly studied and the corresponding research gaps should be identified. The introduction of novel schemes for effective communications, focusing on the MAC, Network (routing) or higher layers of the protocol stuck, is an important parameter. The conceived protocols (or improved versions of existing ones) have to be evaluated in comparison with known approaches through simulation and/or mathematical analysis. By the end of this project, a working prototype that includes IoT devices programmed with different communication protocols should be developed and evaluated. Skills/experience on the following fields would be appreciated:

- Wireless sensors
- Network modelling/simulation
- Communications protocols
- Board-based Systems (such as Arduino or Raspberry Pi)
- Software development (programming/scripting)
- Unix-like systems
- Statistics (for mathematical analysis)

Proposed supervisor from the International Faculty: Dr Thomas Lagkas

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Research Track 3: Society & Human Development Psychology, Politics, Sociology, and English Studies

Topic 3: Neural correlates of multisensory integration in older adults

The human ability to integrate the input of several sensory systems is essential for building a meaningful interpretation out of the complexity of the environment and accurately adapting to it. The choice regarding which sensory information will be integrated in one percept may rely on physical characteristics of the stimuli, namely

temporal or spatial proximity (Innes-Brown & Crewther, 2009; Lee & Noppeney, 2011), it may be explicitly learned for specific stimuli (Naumer et al., 2009) or it may follow rules that bind the stimuli together (Paraskevopoulos, Kuchenbuch, Herholz, Foroglou, et al., 2014). Studying the brain mechanisms underlying this integration is not only important for understanding perception within an ecologically valid framework, but also for the development of effective multimodal interventions that aim to enhance neuronal plasticity.

Interestingly, multisensory processing does not show as much age-related decline as unisensory processing and can even be enhanced in older compared to young individuals. Recent evidence suggests that older adults experience changes related both to the choice of which stimuli to integrate, as well as to the perceptual gain of the interaction(Laurienti & Hugenschmidt, 2012). The neural processes underlying these changes are scarcely understood, but the reduced inhibition observed in older adults is proposed to play a crucial role in enforcing the automaticity of integration. Additionally, the time-window of integration of multisensory stimuli, that is, the time-window in which the input of two sensory modalities is considered to be simultaneous and hence to indicate a unified multisensory event, has been shown to be increased in older adults (Laurienti & Burdette, 2006).

The Mismatch Negativity (MMN) response is an ERP component that has been established as an index of neuronal processing strength. MMN is generated due to detection of unexpected events based on previously encoded regularities and it is thought to result from active cortical prediction rather than passive synaptic habituation(Wacongne, Changeux, & Dehaene, 2012).

The proposed studies intend to investigate the cortical underpinnings of these changes in older adults and the role that bottom-up driven habituation vs. top-down effects have in this process, via electroencephalographic (EEG) and behavioral measurements. An appropriately adapted multi-feature mismatch negativity paradigm will be used that combines uni- and multi- sensory deviances within one run (Paraskevopoulos, Kuchenbuch, Herholz, & Pantev, 2012, 2014). Additionally, age-related changes in the cortical mechanism underlying the temporal window of integration are going to be investigated via EEG and behavioral measurements during exposure to synchronous and various levels of asynchronous audiovisual stimulation.

How does this studentship fits into the SEERC's/Department's/Research Track strategy:

The project will bring together expertise in multisensory processing (at City College) and expertise in cognitive research and aging (in Sheffield), and thereby it will develop a multi-disciplinary networks of researchers, linking Greece to the UK. The project we propose will connect with ongoing work in Sheffield which is exploring other aspects of age related changes in cognition and hence it will establish a common research pathway across the two institutions and allow the student to join an emerging research network. At the same time, the project will integrate specialist physiological methods developed in Greece with behavioral methods and sophisticated analytical techniques developed in Sheffield, to attack the central issues in the project from different angles. Hence, the student will receive an excellent grounding in a range of approaches to modern psychological research. Furthermore, given the timeliness of the project and the current level of interest in multisensory perception and aging, we expect the outputs from the project to reach journals of high impact and we further expect that the collaboration between the supervisors which underpins the work will lead to future grant applications. In the current funding climate, the research strategy of the Psychology Department in Sheffield is

very much towards multi-disciplinary approaches (as in this project), and establishing networks that can position themselves to take advantage of funding available at the European level. The studentship will be an important first step in this direction for the collaboration between the two supervisors.

Candidates Profile:

The candidate should hold a Bachelor degree in Psychology or related disciplines, and ideally should be able to demonstrate further post-graduate qualifications, or experience, on research in cognitive neuroscience. The candidate is also expected to have a good knowledge of research methods. The mode of study is F/T.

Proposed supervisor from the International Faculty: Dr Evangelos Paraskevopoulos (vparaskevopoulos@city.academic.gr)

Topic 4: Cognitive correlates of bilingualism through the life-span

Over the last decade, a significant number of studies have explored the linguistic and cognitive consequences of using two languages in daily life. For example, a bilingual advantage in non-linguistic cognitive tasks, such as the attentional network test (ANT) and the Simon task has frequently been reported in children (e.g., Carlson & Meltzoff, 2008) and adults (e.g. Bialystok & Craik, 2010), along with evidence of advanced working memory, updating functions, and metalinguistic awareness (see Adesope et al., 2010). Specifically, the bilingual benefit in attentional control, emerging early in the life span, has been explained as the control mechanisms in bilingual functioning (switching between languages) are also deployed in tasks requiring flexible control of attention and executive functions (e.g. set shifting, updating, inhibition, etc.). In our lab at the South-East European Research Centre (SEERC - the research centre of the University of Sheffield International Faculty, City College in Thessaloniki), we have conducted research to investigate brain mechanisms of the suggested cognitive advantage in Albanian-Greek bilinguals, including measures of updating, switching, inhibition, working memory, and planning.

Exploring the Bilingual Advantage hypothesis is of particular interest in Greece, since bilingual individuals constitute a significant part of its population. For example, Albanian and Russian-speaking bilinguals (prevalent bilingual groups in Greece) constitute rather homogeneous populations in terms of their socio-economic status (mostly of low SES), with those younger in age being mostly early bilinguals (their parents have migrated to Greece from Albania in early 90s), and those older in age, being late bilinguals. It should moreover be noted that both age groups consist of monoliterate, as well as biliterate individuals. These characteristics point at the additive value of exploring the cognitive and linguistic correlates of bilingualism, as a function of both age and bilingual experience (i.e. being an early or late bilingual, a dominant or balanced bilingual, and having received literacy instruction in one or both languages). For example, several researchers have questioned the observation of bilingual cognitive advantage in lower than middle-class status populations (e.g. Ladas, Vivas, & Carroll, 2015; Chrysochoou et al., 2015), whereas others have criticized the fact that previous studies are based on poor sample generation - description and uncontrolled factors, which may have confounded their findings. Potential confounding variables at the debate include SES, second language proficiency, automaticity in switching between the two languages, categorizations of bilinguals as

early versus late, dominant versus balanced, monoliterate versus biliterate, and so on. The proposed studentship is expected to provide a novel insight into the controversial relationship between bilingualism and enhancement in executive functions, the reliability and prevalence of which has been seriously questioned.

A related topic, which could add to this studentship, is the relationship between bilingualism and mental health. Recently, a few studies have suggested that life-long experiences of using two languages delay the onset of terminal mental disorders such as the Alzheimer disease (e.g., Schweizer et al., 2012). This line of research has received great interest lately, due to significant increases in the aging population in Europe over the last decades. The hypothesis that bilingualism acts as a 'mental reserve' posits that managing two languages on a regular basis prevents functional, and perhaps neuroanamotical, decline of cognitive skills against aging. However, the nature of this relationship is underexplored, primarily due to the difficulty of accessing suitable participants. As mentioned above, the studentship at SEERC offers a great opportunity to study a wide range of bilingual population, a significant part of which is elderly bilingual speakers.

How does this studentship fits into the SEERC's/Department's/Research Track strategy:

The project will bring together expertise in bilingualism and cognitive research (at SEERC) and bilingualism and language (in Sheffield), thus allowing the student to join a collaborative research strand across the two institutions. The project will connect to ongoing work a) at SEERC, systematically investigating the cognitive correlates of bilingualism via behavioural measures and event-related potentials (the two labs have already cooperated in the context of a relevant COEUS Summer Scholarship grant, in 2015), and b) in Sheffield, exploring the brain mechanism in bilingualism (e.g. on how bilingual speakers develop their comprehension-production capacities in the second language), on the basis of both behavioural measurements and event-related potentials (ERPs). Hence, the student will receive an excellent grounding in a range of approaches to modern psychological research, examining the central issues in the project from different theoretical perspectives and methodological angles. Furthermore, given the timeliness of the project and the current level of interest in bilingualism and cognitive aging, we expect the outputs from the project to find homes in good quality journals. The studentship will also be an important first step in enhancing the collaboration between the supervisors and the exchange of perspectives and ideas for future collaborative research work, thus encouraging future grant applications involving both labs. In the current funding climate, the research strategy of our Psychology Departments in Thessaloniki and in Sheffield clearly encourage the establishment of networks, adopting different methodological approaches (i.e. behavioural measurements, event-related potentials, etc.), that can position themselves to take advantage of European-level funding.

Candidates Profile: The candidate should hold a Bachelor degree in Psychology or related disciplines, and ideally should be able to demonstrate further post-graduate qualifications, or experience on research in cognitive/language psychology and neuroscience. The candidate is also expected to have a good knowledge of research methods. The mode of study is F/T.

Proposed supervisor from the International Faculty: Dr Elisavet Chrysohoou

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Topic 5: Attitudes towards minority and immigrant languages in Greece

The increasing influx of migrants and refugees in South-East Europe and Greece in particular has brought to the forefront the lack of language services resources and policies, as well as the fact that the vast majority of immigrant or minority languages are not recognized by the Greek state. Although the literature has discussed how these languages - some of which have been spoken in Greece for hundreds of years - are regarded by the Greek state and the limited range of provision offered to their speakers, it has not examined the attitudes of the Greek public and the possible correlation between the state's inaction and the public's opinion. The proposed Call for PhD research should examine the attitudes of different members of the Greek community towards immigrant and minority languages as well as towards existing or suggested language policies.

Proposed supervisor from the International Faculty: Dr Zoi Tatsioka

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Topic 6: A Corpus-based Analysis of English Use by Foreign Language Learners in South-East Europe

The ongoing development and intensive use of corpora in the field of Applied Linguistics has undoubtedly provided researchers and EFL teachers with numerous opportunities to explore certain neglected or unclear areas of second language acquisition. The aim of the present doctoral project is to study L2 learners' output through the creation of a Learner Corpus consisting of written-production data by university students coming from South-East European (SEE) countries. Through the adoption of a Contrastive and Error Analysis approach, this study can greatly contribute to second/foreign language acquisition research, as its originality lies in the university students' diverse L1 background. A quantitative and qualitative analysis of errors will be also attempted focusing on the difficulties advanced learners of English face in relation to the use of certain lexical and grammatical features/structures in their writing. Examining learners' written production in their first years of studies in an English-speaking academic environment will help us uncover specific patterns as well as identify affinities and differences among L2 learners of different L1 backgrounds. Building a large corpus database of student essays will assist us in exploring consistencies and variations found among foreign language learners of English (possibly indicating a particular impact of their L1, namely a SEE language, on the L2). Such observations will not only offer a better insight into English language learners' difficulties, but will be used to predict language problems that SEE incoming students may encounter, and, thus, remedy them in the early stages of their learning procedure, potentially through a computerised application.

Proposed supervisors from the International Faculty: Dr Paschalia Patsala

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