

# Short Term Scientific Missions Continued Open Call for Applicants 3<sup>rd</sup> Grant Period

By 2050, the number of people in the EU aged 65 and above is expected to grow by 70% and the number of people aged over 80, by 170%, which will increase demand and costs for healthcare. Integrating ICT solutions into habitats, along with improved building design, will allow us to live at home and stay active and productive for longer despite cognitive or physical impediments.

Improving accessibility, functionality, and safety at home, at work and in society in general requires combining many disciplines together to develop solutions that integrate ICT, ergonomics, healthcare (psychological and physical), building and community design.

The furniture sector plays an incredibly important role. Not only is it a critical part of the European economy, it also can significantly improve the accessibility of the built environment for the elderly by integrating ICT solutions, ergonomic design, and taking into account the health needs of the elderly more completely.

The COST Action CA16226 Indoor living space improvement: Smart Habitat for the Elderly (Sheldon) is a science and technology network where relevant actors from academic, research and industry sectors utilise networking tools and activities to address the ageing population challenges facing Europe, helping to reduce redundancy in RDI efforts, ensure solutions are developed with a broader set of expertise, and help refine the efforts of diverse group of researchers.

Short Term Scientific Missions (STSM) are institutional visits aimed at supporting individual mobility, fostering collaboration between individuals. Sheld-on regularly launches calls for potential researchers in any of the Sheld-on topics to apply for Short Term Scientific missions.

APPLY for an STSM!

- Interested in bringing expertise to your country?
- Apply for a STSM within a Specific Area of Interest
- Propose a related STSM area of interest related to the SHELD-ON Cost Action
- Select a Host Institution that has the knowledge you seek to receive
- Make your innovative proposal to study what you cannot in your country
- Make your case, why is your study important, how will you use it to expand understanding in your country and abroad and GO!

The call for applications remains open for the duration of the grant period (until 30 April 2020), however submitted applications will be evaluated and processed at pre-defined cut-off dates as follows:

- 15 July 2019
- 30 September 2019
- 15 December 2019
- 15 February 2020
- 31 March 2020 (last selection date)

Reports must be completed and submitted 30 days after the STSM is finished, no later than April 30th, 2020

The third call for Short Term Scientific Missions (STSMs) for COST Action CA16226, Indoor living space improvement: Smart Habitat for the Elderly (SHELD-ON), is now open. SHELD-ON is seeking applicants for STSMs that may begin from 1st July 2019 and end before 30th April 2020.

### **Short Term Scientific Missions in SHELD-ON**

STSMs are research visits to a host institution where the applicant will perform research activities where the applicant will perform research activities to advance the objectives of SHELD-ON. STSMs must be between 5 and 30 days. STSMs are financially supported by the Action with a fixed contribution of up to 2500 EUR (longer STSMs are available for Early Career Investigators, please see the COST Vademecum<sup>1</sup>).

### **STSM Areas of Interest**

You may apply for an STSM related to the following areas of interest, or alternatively for an STSM related to the working group descriptions and key themes. Please see Appendix A for details about the Working Groups, or their respective pages on this website.

Areas of interest:

- psychology and physiology of older adults
- research on active ageing
- design and ergonomics of smart products for older adults
- multifunctional furniture and living space development for older adults
- innovative ICT solutions for ageing or older adults
- safe, comfortable and healthy environment assurance for older adults
- home automation, along with telecare and telehealth services
- integration of ambient assisted living solutions in furniture

<sup>1</sup> <https://www.cost.eu/wp-content/uploads/2019/05/Vademecum-May-2019.pdf>

- mobile and wearable sensors
- standardisation of smart furniture production, certification schemes
- and others...

## Applying for an STSM

The applicant should confirm the eligibility of their STSM by carefully reading the rules in Section 8 of the COST Vademecum (<http://www.cost.eu/participate>).

Applications must include:

- An invitation letter from the host institution
- A letter of support from the applicant's home institution
- The applicant's CV, including relevant publications
- A completed application form, including the following items:
  - Aim and Motivation – please explain the scientific and/or other motivation for the STSM and what scientific and/or other outcomes you aim to accomplish with the STSM
  - Proposed contribution to the scientific objectives of the Action
  - Techniques – please detail what techniques or equipment you may learn to use, if applicable
  - Planning – please detail the steps you will take to achieve your proposed aim.

Applications should be made online at the e-COST website, in <https://e-services.cost.eu/user/login/STSM> (more info here [http://www.cost.eu/COST\\_Actions/networking](http://www.cost.eu/COST_Actions/networking)).

Your STSM application will be considered by the STSM Committee for SHELD-ON. You will be notified by the STSM Committee on the decision of your application.

## Assessment criteria:

	Description	Grading	Weight
1.	Quality and feasibility of the work plan	1 to 10	20.0 %
2.	Quality and feasibility of the planned outcomes	1 to 10	20.0 %
3.	Suitability of the applicant to work plan objectives	1 to 10	17.5 %
4.	Benefits of the STSM for the applicant (visitor)	1 to 10	17.5 %
5.	Suitability of the STSM for the selected Working Group objectives	1 to 10	25.0 %



Priority will be given to applications that support the objectives of the working group they wish to work within. Please consult the SHELD-ON website and the Memorandum of Understanding for details.

The STSM grantee may be invited to present their STSM work at a SHELD-ON Working Group meeting or International Meeting. It is strongly advised that each STSM may produce a scientific publication, and all outcomes from the STSM must include the following text (please see <https://www.cost.eu/wp-content/uploads/2018/08/how-to-acknowledge-COST-funding.pdf>):

*This article/publication is based upon work from COST Action CA16226 Sheld-on – Indoor Living Space Improvement: Smart Habitat for the Elderly, supported by COST (European Cooperation in Science and Technology)."*

*COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.*

[www.cost.eu](http://www.cost.eu)

Before filling the application, please consult the STSM rules in the COST Vademecum (Section 8). In case you have any questions about the application procedure or STSM rules, please contact the STSM Committee team at [ngarcia@di.ubi.pt](mailto:ngarcia@di.ubi.pt) and [fj.melero@cetem.es](mailto:fj.melero@cetem.es).

### **After the STSM has taken place**

It is important that within 30 days from the end date of the STSM but not later than April 30, 2020, the successful applicant must submit a scientific report in the STSM platform. The applicant is also responsible for acquiring an official acceptance letter / Email confirmation of acceptance from a senior Researcher affiliated to the Host institution formally accepting the scientific report.

Failure to submit the scientific report until April 30, 2019 will effectively cancel the Grant.

**NOTICE OF COMPLETION:** The STSM coordinator will approve the final report and send the completion notice to the Grant Holder. The Grant Holder will then execute the payment of the grant directly to the grantee.

## Vademecum (COST Action Rules)

<https://www.cost.eu/wp-content/uploads/2019/05/Vademecum-May-2019.pdf> **This is a must-read document prior to making your STSM application**

## SHELD-ON COST Action Link

<https://e-services.cost.eu/action/CA16226/overview>

## STSM Committee

STSM Leader: Prof. Ivan Chorbev, St. Cyril & Methodius University Skopje (MK).  
[ivan.chorbev@finki.ukim.mk](mailto:ivan.chorbev@finki.ukim.mk).

STSM Vice-Leader: Prof. Susanna Spinsante, Marche Polytechnic University (IT),  
[s.spinsante@staff.univpm.it](mailto:s.spinsante@staff.univpm.it)

Action Chair: Francisco Melero, CETEM, the Technical Research Centre of Furniture and Wood of the Region of Murcia (ES). [fj.melero@cetem.es](mailto:fj.melero@cetem.es)

Action Vice-Chair: Michael Burnard, University of Primorska (SI)

Working Group 1 Leader: Jake Kaner, Nottingham Trent University (UK)

Working Group 2 Leader: Petre Lameski, University of Sts Cyril and Methodius in Skopje, Faculty of Electrical Engineering and Information Technologies (MK)

Working Group 3 Leader: Signe Tomsone, Riga Stradins University (LV)

Working Group 4 Leader: Rafael Maestre, The Technical Research Centre of Furniture and Wood of the Region of Murcia (ES).

## **Appendix A**

### **Working Group One: Furniture and Habitat Industry.**

#### **Objectives:**

The role of STSMs in this working group is to design, develop and test novel research ideas that generate fixed and moveable furniture with smart functions that contribute to meeting the needs of the elderly and their careers in the domestic and work environment. This includes research innovations that integrate smart technologies seamlessly with furniture to provide solutions to extend active ageing in both the domestic and work habitats. STSMs can also be used to foster collaboration and knowledge exchange between the visiting and host institutions.

Leader: Jake Kaner, Nottingham Trent University, School of Art & Design (UK)

Vice-Leader: Rafael Maestre, CETEM, the Technical Research Centre of Furniture and Wood of the Region of Murcia (ES)

### **Working Group Two: ICT Developments.**

#### **Objectives:**

The role of STSMs in this working group is to identify the state of the art and research, design and develop novel and innovative ICT solutions that will be integrated into smart support furniture and habitat environments. This includes (but is not limited to) research, design and development of advanced sensor systems, communications and security protocols, signal processing, feature selection, machine learning, deep learning and other technologies designed for various distribution platforms such as embedded systems, cloud based systems etc. that can be applied in AAL environments and can be used for health monitoring and enhancing the furniture and living habitat of the elderly. STSMs can also be used to foster collaboration and knowledge exchange between the visiting and host institutions.

Leader: Petre Lameski, University of Sts Cyril and Methodius in Skopje, Faculty of Electrical Engineering and Information Technologies (MK)

Vice Leader: Kuldar Taveter, Tallinn University of Technology, Department of Informatics (EE)

Vice Leader: Michal Isaacson, University of Haifa (IL)

### **Working Group Three: Healthcare.**

#### **Objectives:**

The role of STSMs in this working group is to explore current health policies supporting the AAL solutions to improve the conditions of life for older adults at their environments (home, work community), to explore elderly and their career perspective on needs and current examples of the ICT elements supporting independent life, health monitoring and communication. STSMs include research related to topics proposed for exploration. STSMs can also be used to foster collaboration and knowledge exchange between the visiting and host institutions.

Leader: Signe Tomsons, Riga Stradins University (LV)

Vice-leader: Petra Maresova, University of Hradec Kralove (CZ)

**Working Group 4:** Solutions for Ageing Well at Home, in the Community, and at Work.

STSMs in this working group will work towards the support of the design, development and testing of smart support furniture and habitat environments according to users needs and further validated by these users (elderly and caretakers) for an active ageing. Working Group 4 will focus in 4 main areas:

Leader: Rafael Maestre (ES)

Sub Working group 4.1: Solutions for Ageing Well at Home. Vice-Leader: Jake Kaner (UK).

Sub Working group 4.2: Solutions for Ageing Well in the Community, Vice-Leader: Birgitta Langhammer (NO).

Sub Working Group 4.3: Solutions for Ageing Well at Work, Vice-Leader: Petre Lameski (MK)

Sub Working Group 4.4: Technology Adoption, Vice-Leader: Michal Isaacson (IL)