# SHORT TERM SCIENTIFIC MISSION (STSM) SCIENTIFIC REPORT

**This report is submitted for approval by the STSM applicant to the STSM coordinator**

**Action number: CA19102**
**STSM title: Language in the human machine era: climate change discourse and corpus analysis**
**STSM start and end date: 23/08/2021 to 11/09/2021**
**Grantee name: Amal Haddad Haddad**

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**PURPOSE OF THE STSM:**

I am a PhD student and research assistant at the University of Granada. I focus in my research on climate change discourse in English, Spanish and Arabic by using corpus analysis tools. The aim of the research stay at the University of Bergen is to meet the research group "Linguistic Representations of Climate Change Discourse and their Individual and Collective Interpretations" (LINGCLIM). The main purpose of this meeting is to share my research with them and learn how they obtain quantitative and qualitative results, above all, focusing on how they use corpus analysis in their research and which tools they use to analyse discourse. I am interested in observing all the phases of the process: which programs or software they use, the compilation of the corpus and its annotation as well as its analysis and result interpretation. The objective is to be able to apply new methods in my research in the future. On the other hand, I am also interested in compiling scientific research on the subject of climate change in the Scandinavian countries, for this reason, I plan to visit the library of the University of Bergen to access the available resources and amplify my corpus of study. Apart from that, I aim at fostering collaboration between the research group LexiCon of the University of Granada to where I belong, and the Norwegian research group LINGCLIM.

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**DESCRIPTION OF WORK  CARRIED OUT DURING THE STSMS**

During the first week, I met my tutor, dr. Øyvind Gjerstad. He explained the main objectives of the research group LINGCLIM, which focuses basically on studying the climate change discourse to generate comprehensive and integrated knowledge about the role of language in climate discourse through developing an innovative multidisciplinary methodology including an opinion survey and a psychological experiment in addition to comprehensive linguistic and discursive analyses. Dr. Øyvind showed me the main places and facilities in the Faculty of Humanities in Bergen and accompanied me to the library to show me how to search for relevant resources. I could also have a university ID card from the University of Bergen to use all facilities and to have access to all the resources of the library, including online resources which enabled me to download valuable resources to amplify my corpus of study.
On the second week, I had a meeting with the leader of the group, dr. Kjersti Fløttum and other members of the research group, who is also carrying out her research in climate change rhetoric. They explained how they carry out their research by using tools like AntConc as well as using the structural topic modelling with the help of other experts from other faculties. We talked about possibilities of future collaboration to compare Norwegian with other languages such as Arabic and Spanish. Dr. Kjersti Fløttum also facilitated information on how to access more resources on climate change, above all in the Norwegian Centre for Research Data (NSD) and the The Language Council of Norway.

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During the third week, I have met the research group LINGCLIM on their meeting together with other researchers from the Faculty of Humanities who share the same interests. I explained my research and highlighted the common objectives of my field of study. We also discussed the possibilities of future collaboration.

The research group explained how they use the narrative approach to analyse surveys related to climate change.

Finally, after our meetings, the research group published in their official page information about our encountres and the plans for future collaboration: https://www.uib.no/en/rg/lingclim/147808/%C2%ABclimate-change-discourse-and-corpus-analysis%C2%BB

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**DESCRIPTION OF THE MAIN RESULTS OBTAINED**

- Sharing my research with the research group LINGCLIM at the University of Bergen.
- Hearing about the research carried out by the members of the group both at quantitative and qualitative levels and learn how they study climate change discourse and from which perspectives.
- Learning the corpus analysis tools they use to analyses climate change discourse, above all, getting familiarized with the structural topic modelling.
- Discussing future possibilities to collaborate above all, to combine the theoritical approaches I use like, Frame-based Terminology together with the corpus analysis with the narrative approach they use in LINGCLIM to comprehend better the climate change phenomenon at social and linguistic levels.
- Discussing the importance of artificial intelligence to obtain more insights into our reseach in the field of climate change.
- Downloading more research on climate change from the online resources of the University of Bergen and amplify my corpus of study.

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**FUTURE COLLABORATIONS (if applicable)**

After having met the research group LINGCLIM and having discussed the available resources, we have decided to study the possibilities of fostering collaboration between the Norwegian group LINGCLIM and the research group LexiCon of the University of Granada. Apart from that, we discussed the possibility of publishing research on the cultural and linguistic aspects related to climate change discourse, comparing Norwegian terms with English, Arabic and Spanish making the most out of the available artificial intelligence faciltites.