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**Partner search**

**Date (DD-MM-YY)**

* **(\*) Indicate numbers of relevant topics for Green Deal call:**

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| **LC-GD-**8-1-2020  Innovative, systemic zero-pollution solutions to protect health, environment and natural resources from persistent and mobile chemicals |

* **Quick description of the project**

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| **(describe the objectives, activities, partners requested and their skills)**  The objective of the proposed project is to boost the natural defense system of higher plants/crops through exploiting potential venues leading to the enhancement of SAR (System Acquired Resistance) by means of gaining in-depth knowledge regarding the stress-adaptation strategies of plants. Particularly, the VOC (Volatile Organic Compounds)-based communicational channel surmised to be complemented by biophoton-assisted supra-individual signal transduction.  It has been known for long that plants posses an intricate and complex network of communication including intra-and inter-individual communication. Recently, spontaneous and induced autoluminescence has been intensely studied with the aim of deciphering if and to what extent photons emitted by an organism convey coded information. Additionally, VOC-transmission presumed to be pertinent in induced defense mechanisms would be unraveled via a complex approach ranging from stress physiological methods, biochemical analysis, assessment of the stress status based on UPE (Ultra-Weak photon Emission) and its characterization.  Capitalizing on the rapid advancement in the field of artificial intelligence and integrating the findings in plant neurobiology research, plant societies will be conceptually deemed to be composed of entities having cognitive faculties and as such possessing a network of individuals bestowed with perception and cellular memories with learning abilities.  Partners having expertise and skills in machine learning/compilation of algorithms used in artificial intelligence which will be complemented by VOC-profile analysis and biophoton imaging available in our institute. |

* **(\*) Do you intend to apply as ? :**

**Coordinator:**

**Participant: Yes**

**(\*) Either Description of the expertise requested (up to 1000 characters) - *specify which points of the "expected impact" of the call you are targeting***

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| Partners having expertise and skills in compiling algorithms used in artificial intelligence with special regard to perception and machine learning which will be complemented by VOC-profile analysis and biophoton imaging available in our institute. Capitalizing on the rapid advancement in the field of artificial intelligence and integrating the findings in plant neurobiology research, plant societies will be conceptually deemed to be composed of entities having cognitive faculties and as such possessing a network of individuals bestowed with perception and cellular memories with learning abilities.    **+ key words :** Innovative, systemic zero-pollution solutions to protect health, environment and natural resources from persistent and mobile chemicals |

**Or Description of the expertise proposed (up to 1000 characters) - *specify which points of the "expected impact" of the call you are targeting***

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| **Xxxxxxxxx** +key words : |

**Organisation information**

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| **Organisation and country:**  **Kaposvár Campus of the Saint Stephan University** |
| **Type of organisation:**  **□ Enterprise □ SME x Academic □Research institute □ Public Body □ Other: Association** |
| **Former participation in FP European projects?**  **□ Yes X No** |
| **Web address:** <http://www.english.ke.hu/faculty-of-agricultural-and-environmental-sciences/institute-of-plant-science> |
| **Description of the organisation:**  The Institute of Plant Sciences has a wide range of activities including teaching and research activities in the field of plant protection and plant physiological research with particular regard to studying stress adaptation strategies of crops/higher plants. Recently the Department of Plant Production and Plant Protection focuses on attempting to boost the natural defense system of higher plants/crops through exploiting potential venues leading to the enhancement of SAR (System Acquired Resistance) by means of gaining in-depth knowledge regarding stress-adaptation strategies of plants. Particularly, the VOC (Volatile Organic Compounds)-based plant communicational channel surmised to be complemented by biophoton emission will be studied. |

**(\*) Contact details**

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**(\*) –Mandatory**