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Horizon2020@recherche.gouv.fr

**Partner search**

**Date (03-09-20)**

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

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| * LC-GD-2-1-2020: Innovative land-based and offshore renewable energy technologies and their integration into the energy system
* LC-GD-5-1-2020: Green airports and ports as multimodal hubs for sustainable and smart mobility
* LC-GD-2-2-2020: Develop and demonstrate a 100 MW electrolyser upscaling the link between renewables and commercial/industrial applications
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* **Quick description of the project**

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| **(describe the objectives, activities, partners requested and their skills)** |

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

**Coordinator: ~~Yes~~/No**

**Participant: Yes/~~No~~**

**(\*) 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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| **+ key words :**  |

**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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| **Advanced Manufacturing and Process/Structural Health Monitoring*** Embedded instrumentation in the composite blade Test/validation and data analysis of embedded instrumentation for Monitoring - SHM
	+ Composite scaled blade manufacturing with embedded instrumentation (innovative QRS sensor)
	+ Structural validation of instrumented composite part of middle/large size to asses SHM
* Composite structure manufacturing process improvement for reducing CAPEX
* Role overseen => Task leader in sensor integration and test/assessment for SHM (**monitoring system**) and part composite **manufacturing process** optimization
* 2D & 3D Mobility: Mobile Robots & Crawlers and Cable Driven Parallel Robots
* Localisation and Positionning: Perception and Sensor based control; Visual servoing solutions
* Operator assistance: Operator augmentation and Empowerment and Collaborative support

 Digital Factory interaction: Smart Tools and Link to production IT, Virtual Factory and process Models**+key words : *composite manufacturing, additive manufacturing, Robotic & Cobotic, Embedded Structural health monitoring, advanced NDT, SoA structural test of large parts*** |

**Organisation information**

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| **Organisation and country:****IRT JULES VERNE, FRANCE** |
| **Type of organisation:****□ Enterprise □ SME □ Academic XResearch institute □ Public Body □ Other: Association** |
| **Former participation in FP European projects.****X Yes □ No** |
| **Web address:**<https://www.irt-jules-verne.fr/en/>  |
| **Description of the organisation:**Based in Nantes, France, and central to the Loire Valley’s economic strategies, since 2012 Jules Verne R&D Institute (JVERNE) has been developing industrial research dedicated to advanced manufacturing technologies and developing solutions for the design, processing and manufacturing of parts and structures for the aeronautic, shipbuilding, automotive and energy sector.The main figures of Jules Verne R&D Institute are: 25 M€, over 130 employees (about 70% of highly skilled professionals), 18 on-going PhD thesis, more than 95 R&T projects have been carried including **10 European Projects H2020**. JVERNE has about 50 patents, over 17 M€ in mutualized equipment and currently works with a network of 79 members and partners (Industrials, universities and R&D centres).JVERNE’s activities are mainly driven by industrial needs and manufacturing challenges and are performed under collaborative R&D projects. It brings together manufacturers, training facilities, private and public research laboratories, prototyping and industrial demonstration resources with the goal of becoming a reference in the field of advanced production for composite, metallic materials and hybrid structures parts. Another asset of JVERNE is its rich cluster; which can identify and bring to a potential consortium some of its industrials and end-users as participants and enrich any proposal.JVERNE’s research programme focuses in the following R&T topics: * Forming & Preforming Processes
* Assembly and Joining Technologies
* Additive Manufacturing
* Mobility in Industrial Environment
* Manufacturing Flexibility
* Structural and Manufacturing processes and Structural health monitoring

JVERNE’s experience in setting up European projects and high success rate (about 25%) is a real asset in producing a robust and competitive proposal**.** |

**(\*) Contact details**

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| **Country** | **FRANCE** |

**(\*) –Mandatory**