

MSCA INDIVIDUAL FELLOWSHIPS

EUROPEAN FELLOWSHIPS – STANDARD PANEL

EXCELLENCE

Strengths:

- The proposed research is relevant and clearly presented.
- The research objectives are clearly defined and show innovative and original aspects of the algorithms created to support highly-parallel architectures.
- The state-of-the-art is analyzed in depth, and the novel solutions are informed by this analysis.
- The quality of the research methodology is excellent, discussing in detail the design principles of algorithms to be developed and the empirical evaluation to be carried out in the project.
- The two way transfer of knowledge between the researcher and the host is clearly demonstrated.
- Very good training activities, seminars, courses are in place to enhance the researcher's skills in areas such as project management, teaching and curriculum development, proposal writing, and managing research activities.
- The researcher will transfer his programming skills through seminars and regular interactions with post-docs and PhDs within the host group.
- The supervisor has an impressive research track and 20 years of experience in the field. The supervisor's research background is very well suited for the proposed project.
- The researcher has already established the collaboration with the supervisor, through joint work during the last three (3) years.
- The measures taken to integrate the researcher in the different areas of expertise are clearly demonstrated.
- The host offers excellent hosting arrangements and resources to support the researcher.
- Participation in research projects, publications in top field journals and citations are clear indicators of the capacity of the researcher and his potential to reach independence and professional maturity.
- Research methodology is planned well and is of a multidisciplinary nature. WPs are well defined and interrelated.
- The credibility of the research is of the highest level.
- The innovative aspects of the research programme are precisely defined and clearly documented with respect to the state-of-the-art. The proposal identifies two research gaps related to reliability of XXXXX, which will be addressed by introduction of prognostics and novel design for reliability protocols.
- The training-through-research programme is thoroughly planned and is of the high quality and relevance needed for the fulfillment of the goals of this industry-oriented action.
- The quality of the two-way transfer of knowledge and technology between the applicant and the host is excellent. The host will train fellow in programming tools, data treatment tools, design and fabrication of XXXXX.
- The fellow demonstrates his expertise in advanced XXXXXXXX diagnostics.

- Supervision is of outstanding quality which is elaborated in detail. A world class team of two eminent professors and two main post-doctoral research experts in the PV area will be included in the supervision.
- The main supervisor is a well established scientist with excellent scientific results, extensive mentoring experience and experience in coordination of EU projects and collaboration with industry. He is also involved in preparation of European Strategic Research Agenda in the XXXXX field.
- The applicant will be fully integrated in the relevant team by participating at regular weekly team meetings and industrial project meetings.
- The applicant has exceptional capacity in reaching professional maturity because the results of his previous research are of the highest quality in terms of impact (acts as a reviewer to the upcoming standards), novelty (novel accelerated reliability testing) and applicability (collaboration with 7 industrial partners, patented methodology for XXXXX diagnosis applied to 5 XXXXX installations in France).
- The applicant has a strong track record for his age.
- The well planned training activities are fully appropriate to help further development of the applicant's professional maturity during the fellowship. Training will provide researcher with hands-on experience in innovative PV design and energy yield simulation tools.
- The capacity of the applicant to reach professional independence is already high taking into account the fact that he was the first author in the majority of his publications. Fellowship will ultimately help researcher to attain independent position with focus on industrial research.

IMPACT

Strengths:

- Positive impacts of the project on the researcher's potential is thoroughly elaborated and includes significant improvement of the applicant's scientific profile, better networking with research and industrial community, gaining project management skills, mentoring, proposal writing, etc.
- Innovative aspects of this action will strongly enhance future career prospects by bringing him to the forefront of the competitive job market
- Measures for exploitation of the action results are carefully planned since this is an industry-oriented action. They include complete IP protection which is extremely important since the action results can guide definition of new regulations and standards.
- Dissemination measures are excellent and fairly wide ranging, targeting both academic and industrial experts. They include highest impact conferences, specialist workshops, high impact journals, open access will be assured, white papers will be available on the web, etc.
- The unique quality and relevance of this action is assured by regular presentation of results to industrial partners in 6-monthly review meetings.
- Measures to communicate the action activities to different target audiences are excellent. The host has good experience in public outreach activities and the applicant will employ some of them.
- A wide variety of well established channels dedicated for reaching the general public are described in detail including, guided public tours, school visits, creation of educational materials, open days, workshops, etc..

- High levels of good quality impact are planned by reaching out to major companies and policy makers through technological forums organized in Europe, US, Japan and Taiwan.
- The proposed project has a high potential to enhance the development of the researcher's competences and knowledge in the field.
- The dissemination activities are very well planned, and clearly defined in the proposal. All publications are planned to be made available through open access repositories
- The planned outreach strategy is presented in a comprehensive way, and effectively addresses important communication channels to be used in the project.
- The researcher will have a chance to gain new knowledge and skills as well as build a strong professional network. The proposed research will enhance the future career prospects of the researcher.
- The host institution will expose the fellow to fields of research that are essential for his development. - The quality and ambition of the dissemination strategies is adequate for reaching the expected impact. The planned dissemination of scientific results in journals and at conferences is appropriate.
- Provisions for exploiting the results of the project and exploring the proposed integrated multimedia communications and processing framework are in place and are of very high quality. Those plans cover both exploration of the commercial potential of the project's outcome and exploitation in academia.
- The provision of an open-access testbed for supporting autonomous driving applications is one of the main added-values of the proposal.
- The provisions for communicating the action activities to different target audiences are of very good quality.
- The researcher will gain training in a range of techniques including fish electrophysiology and bioinformatics/transcriptomics analysis of receptor function through hands-on learning in the host group with other researchers and technicians and through short advanced courses.
- The project will extend the researcher's experience of the interactions between XXXXXXX and XXXXXXXXX, through working with an expert on this topic.
- The training to be received is more than appropriate to equip the researcher with the necessary new skills required to complete the project.
- Specialised training in soft skills and laboratory management will augment transfer of knowledge from host to researcher.
- The researcher has a very good background in neuroendocrinology and molecular techniques which will enable rapidly learning of new techniques offered by the host.

IMPLEMENTATION

Strengths:

- The Gantt chart is straightforward and effective in conveying the work plan. The allocation of tasks and resources within the work packages is very clear and appropriate, with good objectives linked to outcomes. The schedule of tasks and time allocations are appropriate for the work proposed.
- Training, milestones, dissemination and deliverables are distributed in a good manner throughout the project's duration. The work plan consists of a sufficient number of milestones and deliverables that are interdependent and appropriately defined to track

progress. Good aspects of the work plan include the fact that convincingly described training activities and measures for dissemination of results are planned for each WP.

- Management structures and procedures are appropriate and well organized because of extensive administrative experience already accumulated in over 100 EU projects. The host's offices will manage the financial and administrative aspects of the project.
- Excellent monitoring of the progress of the research is planned which includes regular meetings and specific presentations after completion of each WP or realization of a milestone.
- Host institution offers a well described institutional environment and infrastructure of outstanding quality which is absolutely appropriate for fulfillment of the action goals.
- The host will provide excellent working conditions for the applicant from basic needs (library access, administrative support, etc.) to special requirements needed for carrying out the goals (state-of-the-art labs, ISO-certified equipment, Energy facilities, ICT facilities, etc.)
- Another excellent aspect of working at the host is the well established bridge which exists between research and industry and which is extremely important for this industry-oriented action.
- The four work packages are focused and very well suited to achieve the goals of the proposed action. The description of the work packages provides sufficient details with respect to the complexity of the proposed developments.
- There is a credible work plan with realistic, adequately identified milestones and deliverables.
- The resources allocated to the tasks of the proposed action are adequate and well described.
- The management structure and procedures are adequately explained and they are sound, with regular progress monitoring, adequate support of the supervisor and clearly articulated available institutional support. The management of the action through the Management
- Committee is beneficial for an efficient and smooth steering of the proposed action and monitoring of the fellow's training progress.
- Financial and technical management procedures are in place.
- The proposal adequately addresses the research and/or administrative risks that might endanger reaching the objectives, and the contingency plans to be put in place should such risks occur.
- The host provides adequate institutional environment (infrastructure) to support the research work of the fellow, which includes a testbed design towards the end of its duration.
- The proposal includes appropriate descriptions of the host commitment, the research support environment, and the provided facilities of the hosting group.
- The work plan is very clearly described, including deliverables and milestones and is coherent with the objectives of the project.
- The allocation of tasks and resources is fully and convincingly justified.
- The amount of person-months in relation to the activities proposed is appropriate.
- Support provided by the host institution in management and execution of the proposed research is clearly described.
- Information provided on monitoring-related activities of the proposed research is clear and adequate.
- Potential risks are clearly identified and an adequate contingency plan is provided.
- Infrastructure of the host institution is well documented and appropriate for successful completion of the proposed research.
- The host institution provides a very good scientific environment for the researcher.

EXCELLENCE

Weaknesses:

- The proposal fails to provide convincing information on the innovative aspects of the project.
- The research methodology is not fully described. Technical aspects of the project are insufficiently considered.
- The state-of-the-art is not adequately described.
- The links between the existing XXXXXX project are not sufficiently clarified.
- The proposal does not provide convincing information about the knowledge transfer from the researcher to the host.
- Insufficient information is given on the training activities and assistance for the applicant.
- The secondment planned within the SME partner is not adequately justified.
- As a whole, the future integration of the applicant in the hosting institutions is not clear.
- The co-supervisor roles, especially in the SME, lack sufficient details.
- The match of the applicant's technical background to the project is not convincing. The proposal fails to demonstrate the capacity of the researcher to re-enforce a position of professional maturity.
- The state-of-the-art summarizes general trends in PV cells, but the specific subject of the action is not covered in detail. The innovative aspects are therefore not clearly identified nor justified.
- The research methodology is not convincing: it is unclear what are the new materials being considered or the role of materials based on In and Ga.
- Improvement from current 15.3% efficiency to the goal of 18% by the end of the project is very ambitious. How this goal will be reached by the novel technology is not sufficiently explained.
- Transfer of knowledge from researcher to host institution is not clear. The training plan for the researcher to acquire the new competences is insufficient.
- The scientific experience of second supervisor is not sufficiently supported by publications.
- Measures taken to integrate the researcher in the group and different areas of expertise are not fully specified.
- The researcher has minimal previous experience in the solar PV field, and the time to adapt to the new field of research is not sufficiently considered.
- The international networking capabilities are not sufficiently discussed in the proposal.
- The research focus is not clearly explained or justified in sufficient depth or clarity.
- The proposal does not elaborate enough on some crucial theoretical issues and does not give sufficient consideration to critical discussion of classical thinking.
- The project's relationship to memory studies is not explained in a convincing fashion.
- The purpose and methodology of the project's (limited) foray into cases beyond Spain is not explained convincingly.
- The identification of several targets is not clearly justified in terms of their clear coherence and internal connectedness.
- The proposal does not provide sufficient detail about the training methods or how they are linked to an overall training plan for the researcher.
- The proposal does not persuasively explain the transfer of knowledge from the researcher to the host institution.

IMPACT

Weaknesses:

- Opportunities for career prospects of the researcher in the academic sector is insufficiently considered.
- The proposal fails to provide a clear link between the applicant's previous domain of expertise and future research directions.
- The exploitation plans are non-specific to the project and the support from the host is not convincing.
- Dissemination plans have insufficient structure and lack detailed actions. The academic dissemination targets do not adequately match the scope of the project.
- IPR information is insufficiently detailed.
- The proposal fails to provide clear communication solutions targeting the industrial environment.
- The measures for communication to the larger public are not clearly identified nor detailed.
- The exploitation activity is not sufficiently detailed and justified.
- Given the researcher's academic status and past collaborations between the researcher and the proposed host organisations, the proposal does not convincingly explain the added value, in terms of skills, competences and networking, that the project would bring to the researcher's profile.
- The organization of conferences and workshops run the risk of distracting the researcher's attention and preventing them from devoting sufficient time to research and training.
- The envisaged publication plan is too ambitious. For instance, publishing two books, one a translation, and several articles in peer-refereed journals within the given time period is not realistic, especially in view of the other planned activities.
- The general public or other stakeholders are not sufficiently targeted as recipients of the action activities. The proposed involvement of the public via mass media or ARTE channel is not sufficiently described in the proposal.
- Open Access is not given sufficient consideration in the proposal.
- The width of the academic career prospects opened by the fellowship is insufficiently argued, particularly in light of the specificity of the language subject of the research.
- The researcher's career opportunities outside academia are also insufficiently elaborated.
- The proposal does not convincingly demonstrate the appropriateness and feasibility of the publication strategy in academic journals.
- The time set aside for the creation of the blueprint for a software is insufficiently explained.
- The exact way in which produced framework would be applied and impact many other languages is not convincingly exposed. Little detail is given about how to reach researchers who would test it in other languages.
- This section of the proposal describes vaguely the new competences that the researcher would have at the end of the fellowship, focusing mainly on the classic outputs related to the scientific community.
- The communication strategy is not convincing as far as the society at large is concerned, offering almost no detail about the strategy and the concrete measures to impact the general public. Workshops and lectures are generically mentioned.

IMPLEMENTATION

Weaknesses:

- The proposal fails to provide an effective and coherent work plan. Information on dissemination and communication actions is not detailed in the work packages.
- Details on the dates for secondments are inadequate. There is insufficient reference to training activities carried out by the partners.
- Allocation of resources is not appropriately planned. The workload for the researcher is not credible.
- The proposal fails to provide clear information on the management structure and procedures for the implementation of the project.
- The proposal provides a limited list of possible risks. Risk in project governance due to the large number of participants is underestimated.
- There are significant weaknesses in work plan, the Gantt chart, and the description of the allocation of tasks and resources to the various activities, all of which are not presented in sufficient detail. For example, the project is not appropriately divided into Work packages or step-by-step phases that are linked to the expected outcomes.
- The management structure of the project is not well explained.
- The risk management is limited.
- The feasibility of the large annotation task, given the allotted time, is not sufficiently argued in the work plan.
- The logical organization of the activities discussed in the work plan is insufficiently convincing.
- The allocation of resources (mainly financial) for annotation and for the blueprint are not completely apparent. The general allocation of resources is also not fully transparent.
- The management of the risks and its mitigation strategies at several stages of the project have been insufficiently addressed.
- The specific tasks of the host institution in the project are not duly clarified.
- The information on the tasks allocation and on the resources to be mobilized to ensure that the research and the training objectives will be reached is not sufficiently detailed.
- The Gantt Chart is not comprehensively elaborated and the work plan is not sufficiently consistent with the planned activities.
- The list of major deliverables is not sufficiently aligned with the work described in other sections.
- The list of milestones does not provide adequately specified information on when the milestones will be achieved.
- The management structure and procedures are not comprehensively elaborated.
- The risk mitigation measures are not addressed in sufficient detail.
- Work packages are scarcely described (e. g. deliverables and milestones are not listed).
- The Gantt Chart is unclear in defining each particular phase (e. g. the description states that the edited volume is expected to be outside the fellowship, but the Gantt chart includes it in the graph (months 17 -22)).
- The proposal presents organization and management structure in a very limited manner, without sufficient details.
- The project lacks a clear identification of risks.
- The proposal gives a minimal and not clear description of the infrastructure in the host institution.