

How to improve proposal "NeutronDetection2.0" for topic:

HORIZON-INFRA-2024-TECH-01-01







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Competent Support for Excellent Research in Bavaria, Europe and the World



Brüsse

The Bavarian Research Alliance (BayFOR)

Initiative to promote Bavarian stakeholders into European projects, mainly for Horizon EUROPE

- Founded as non-profit 2006/2007 by our Associates
- Associates:
 - University of Bavaria e.V. (11 x in Bavaria) and
 - The Bavarian Universities of Applied Sciences e.V. (20xin Bavaria) Nürnberg
- Funded by the Bavarian state government and the BayFOR associates
- Headquarters in *Munich*, with branch in *Nuremberg* and Liaison office in *Brussels*
- BayFOR and its partners and cooperations:
 - in regional networks: Bavarian Research and Innovation Agency (BayFIA)
 - *in international networks*: EU-funded Enterprise Europe Network (**EEN**) and other EU-Initiative: german NCPs, BEPA-, DAIRO-, CCAM-EU-Partnerships

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München



BayFOR advisory services for EU-Funds

1. Project administrator for BayIntAn

 Bavarian Funding Programme for the Initiation of International Projects





2. Advisory services for mainly EU funds for R&I

- inform, advise, partner search, application support...
- Mainly on HORIZON EUROPE, DIGITAL EUROPE, ERA-NET, CEF, EFRE, ECSEL, Eurostars/EUREKA, IPCEI, KIC, PENTA...

3. Various EEN services

BayFOR as Bavarian EEN partner supports Bavarian SMEs

- advice & support
- connecting partners
- supporting innovation





HORIZON-INFRA-2024-TECH-01-01

1. Bavarian University Funding Programme for the Initiation of International Projects (BayIntAn)

GOALS

- Establishing and strengthening scientific cooperation between scientists at Bavarian state and state supported non-state universities, universities of applied sciences and intern. research institutes
- Increasing international network and cooperation of Bavarian scientists
- Increasing the participation of Bavarian universities and universities of applied sciences in international funding projects, in particular in EU research projects

APPLICATION

- scientists of Bavarian (state supported non-state) universities and universities of applied sciences
- Partners: at least one international partner
- Maximum grant per application: €10,000
- Purpose for which the money is used: grants for travel and accommodation expenses and in exceptional cases material costs. BayIntAn is based on partial financing.
- Further costs: comprehensive funding of the projects must be ensured by the partners involved
- Information: <u>www.bayfor.org/internationalisation</u>
- Subsidised by:

Bavarian State Ministry of Science and the Arts





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Dr. Panagiotou

Bavarian

Research Alliance



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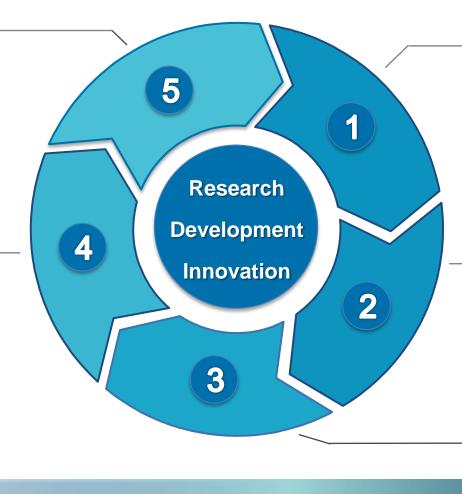
2. BayFOR as a "Full Service Provider"

Project management

- Administrative project
 management for EU projects
- Workshops/trainings for project participants and thirdparty staff
- Advice on questions related to EU project management
- Public relations for EU projects

Project implementation

- Support for grant agreement preparation
- Assistance with financial and organizational issues



Information

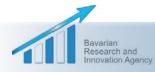
- Information on current and future EU calls for proposals and on how to write a successful application
- Lobbying activities strategic positioning of ideas

Advisory services

- General and call-specific expert advice on EU funding schemes
- Assistance in assigning project ideas to the appropriate funding scheme

EU application support

- Active support for the entire application process
- Preparation of call-specific information material
- Assistance in the search for cooperation partners (European / international)



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ESR results: Excellence chapter (4.5 / 5.0)

Criterion 1 - Excellence

Score: 4.50 (Threshold: 3/5.00, Weight: -)

The following aspects will be taken into account, to the extent that the proposed work corresponds to the description in the work programme:

- Clarity and pertinence of the project's objectives, and the extent to which the proposed work is ambitious and goes beyond the state of the art.

 Soundness of the proposed methodology, including the underlying concepts, models, assumptions, inter-disciplinary approaches, appropriate consideration of the gender dimension in research and innovation content, and the quality of open science practices, including sharing and management of research outputs and engagement of citizens, civil society and end users where appropriate.

NeutronDetection2.0 aims are clear and pertinent to provide the technology for the next generation of high performance neutron detection experiments that significantly enhance the scientific competitiveness at European large-scale facilities. The ultimate goal of the proposal which clearly goes beyond the state-of-the-art in the field, is to develop simultaneous capabilities in imaging and diffraction measurements. These ambitious technologies will be tested and characterised.

The proposal presents the methodology and path to success during its lifetime quite clearly.

Besides the immediate use of the new technology at most European neutron beam facilities areas will be investigated. This consideration gives it a welcome inter-disciplinant consideration.

Specify more & concrete, what and who will process which data & how

potential for application in other scientific

The research outputs are presented clearly to cater the different requirements between infrastructures and user groups by adhering to FAIR However, the proposal does not sufficiently specify what kind of experimental data it expects to generate.



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ESR results: Impact chapter (3.5 / 5.0)

Criterion 2 - Impact

Score: 3.50 (Threshold: 3/5.00, Weight: -)

The following aspects will be taken into account, to the c programme:

- Credibility of the pathways to achieve the expected outcomes and and significance of the contributions from the project.

- Suitability and guality of the measures to maximise expected or exploitation plan, including communication activities.

The proposal significantly contributes to the expected impacts of the of a large and multidisciplinary user community in Europe. The de the operations at the neutron research infrastructures and it would achieve unprecedented data volumes in a shorter time.

Innovation-MGT: analysis - what is new/what is the innovation **IP-MGT:** how to exploit it (licensed, patent, open publishing (3x O's: Open data/access, Open to science, Open to the world) Clear responsibilities (name persons) and procedures

is specified in the work programme, and the likely scale

ies and impacts, as set out in the dissemination and

ork program. It directly aims at enhancing the scientific competitiveness opment of advanced detector systems would increase the performance of

The developments of novel neutron detectors would impact of radiation detectors in general and would promote broad range of new market opportunities and commercial applications will be identified and validated during the proposal. Therefore, it is highly likely that valuable Intellectual Property (IP) will be produced, but a plan for identifying IP and managing it is only vaguely hinted at in a rather generic way in the proposal.

The link between the proposal and the target communities is insufficiently described

3x O's: open to science/world, e.g. by Workshop, exhibitions, conference (ECNS), describe Dissemination plan/list...

The plans for the internal communication for partners within the consortium are well selected and sufficient. However, opportunities for early stage researchers on a larger scale are not sufficiently elaborated on and the participation in workshops seems to be limited mainly to

members of the consortium



fits to previous paragraph/sentence: include (more) early stage researcher (e.g. PhD, PostDoc - even if not in consortium/external), support them in (soft) skills development, PhD/Postdoc award and HORIZON-INFRA-202 include external PhD



ESR results: Implementation (3.5 / 5.0)

Criterion 3 - Quality and efficiency of the implementation

Score: 3.50 (Threshold: 3/5.00, Weight: -)

The following aspects will be taken into account, to the extent that the proposed work corresponds to the description in the work programme:

- Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall.

- Capacity and role of each participant, and the extent t Declare how and why the performance is adequate expertise.

The Work Packages (WPs) are in general well structure, accorded in clear and sufficient detail and mostly adequately staffed. However, WP2 where the detailed characterization is anticipated, does not sufficiently demonstrate whether the required performance will be adequate for the success of the proposal.

Risk analysis presented in a very minimalistic and generic manner,

Also essential during project implementation. Only risks mentioned in proposal can be

financed. (Else: termination of project)

The consortium brings all leading neutron infrastructures together as being the first European neutron detector development project. However, the availability of sufficient beam time at the institutions within the consortium in order to perform the experiments required for the empirical characterization of the new the technology are not addressed sufficiently, beam time MGT: detailed list of beam time schedule

The expertise in the infrastructures is complemented by additional partners who add valuable knowledge in software development, data evaluation, scintillator development and characterization and simulation and industry partners. Hence, the capacity of the consortium is high to reach the proposed aims.



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Overview improving proposal out of ESR / topic HORIZON-INFRA-2024-TECH-01-01: R&D for the next generation of scientific instrumentation, tools, methods, solutions for RI upgrade

More precise and and concrete description (e.g. IP, risk analysis, beam-time)

- Open to community, society, authorities
- Add "Advisory Board" with participants from industry and academia

Make a list how to address each point of "outcomes" and "aspects" of topic

Use concept of OITB: Open Innovation Test Bed (let Extarnal be part of yours)

Describe significant spill-over effects:

must be demonstrated, to have a positive impact of the project beyond the

- participating Member States,
- beneficiaries (RTO, companies) and
- (economical) sectors

Budget contribution: 5 – 10 mio. € / up to 7 proposals will be funded: use for "cascading funds"



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e.g. for PhD, PostDoc development Marie Skłodowska-Curie Actions: Doctoral Networks

A world reference for research and training





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Unit Information & Communication Technologies, Engineering & Natural Sciences

2007 – BayFOR – Head of Unit "STEM"



Dr. Panteleimon Panagiotou Head of Unit panagiotou@bayfor.org 2001 – 2006 PhD thesis at TU München / Physic at Prof. Petry Characterisation of thin film of ternary polymer blends by AFM, Synchrotron / Neutron scattering (GISAXS / GISANS) Research at DESY/HASYLab, ESRF, ILL
1999 – 2000 Diploma thesis at Physical Chemistry:

Characterisation on thin polymer films by AFM & Ellipsometry

1995 – 1996 Studies at École supérieure de chimie physique électronique de Lyon, CNRS (Laboratoire de Chimie de Surface)

1992 – 2000 Study Chemistry at the university of Bayreuth



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Thank you for your invitation

Thank you too for attention!

Bavarian Research Alliance GmbH



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