

Projekta Nr.:	1.1.1.2/VIAA/1/16/211
Projekta nosaukums:	Jaunas metodes izpēte nanocelulozes izdalīšanai no biomasas un tās atlikumiem

Konsolidētais vērtējums

Excellence	<p>A comparably new approach to the isolation and functionalization of nanocellulose by means of ammonium persulfate oxidation was studied. The process is comparable to the scientifically well-studied TEMPO-oxidation procedure and delivers similar results in a more efficient and less costly manner.</p> <p>1. The number of scientific articles published meets the stipulations of the original plan and the quality of some of the articles are in Q1 and indexed in Web of Science and SCOPUS. Participation in the conferences described and respective six presentations, oral or poster, indicate a good value.</p> <p>2. The progress of the activities, tasks completed, results achieved, milestones reached, time to completion and verification method, presented in the framework of the final report, are in accordance with the work originally planned, and the research methodologies are properly described as well as the results achieved, highlighting the increase in the innovation and new methodologies. Reasonable adaptations to the work plan were undertaken without diminishing the success of the project.</p> <p>3. A new product and technology, which can be commercialized, was developed and its importance was clearly described in WP3 and presented as competitive with the most used method. The economic evaluation in WP4 was presented as promising for a potential industrial application.</p> <p>4. For the Pos-Doc and Institution the added value and knowledge acquired in the project allowed the submission of other projects in the area directly related to nanocellulose applications, which will enable the deepening of concepts and research in a field that is important for Latvia.</p> <p>5. The scientific mobility is excellent and meaningful measures could be implemented in spite of Covid-19 restrictions. Publications resulted from mobility measures.</p> <p>6. The Post doc is involved in follow-up projects, granting a long-term impact of the research carried out</p>	98%
Impact	<p>The impact in terms of improving the scientific qualification of the applicant Post doc and the applicant institution is very clear.</p> <p>The development and innovation of a technology to extract, refine and use nanocellulose in high-value applications will allow the creation of new enterprises and industrial activities within the wood treating sector.</p> <p>The investigation of the utilization potential of the regional natural sources in Latvia will obviously increase the productivity in the sector. The work resulting from the project has already allowed the participation/coordination in the attraction of external funding by two other funded projects.</p> <p>The impact of the project for the future of Pos-Doc and Institution is notorious, with the progression in these two projects, being able to develop other applications for the previously proposed. Moreover, the coordination of scientific projects, Ph.D., MSc, and BSc thesis supervisions, and the increased H-index show the irrefutable impact of the project.</p>	100%

Pielikums

	Mobility measures have significantly contributed to this impact. Dissemination is excellent, both on the level of scientific conferences and papers as well as at the level of popular science communication	
Capacity	<p>Overall the capacity of the applicant and the applicant institution are very clear in terms of managing the project. The scientific capacity of the applicant was greatly improved by the measures conducted within the project. The future career of the applicant will be supported.</p> <p>The results of the project have motivated the development of good post-doctoral capacities for future research. Participation in workshops, conferences, and the use of educational tools was reasonably achieved. The report describes the dissemination activities in a good and clear manner and gives also a very good and logical overview of the results, this clearly shows the capacity developed during this project. The work plan was handled flexibly with necessary adaptations. A competent management process was established. The administrative routines, economic follow up and scientific supervisions are adequate.</p> <p>The post-doctoral fellowship has set up scientific cooperation and research group to implement the research activities and tasks, sufficient to attract EU funding, industrial partners, and national funders</p>	100%
Overall	-	100%