

Annual report for SNS research projects

Submit the report to sns@slu.se by 24:00 CET, 1st of March, 2020 and 2021, at the latest.
The report should not exceed 2000 words (including words in the template).

Please adjust the box size according to the length of your answer.

1. Project title:	Hemisurf
2. Reporting year:	2019

3. Project coordinator:	Tiina Nypelö
Email:	Tiina.nypelo@chalmers.se
Address:	Kemivägen, 41296 Gothenburg, Sweden

Activities during the reporting year:

<p>4. Project status</p> <p>a) Does the project develop according to the plans? b) Describe the activities during the reporting year</p> <p>a) The aim of the project is to communicate about the following research items that are in the current research activities of the partners Tiina Nypelö (SWE), Kirsi Mikkonen (FIN) and Bjørge Westereng (NOR):</p> <ul style="list-style-type: none"> • Liberation of wood hemicelluloses (NOR) • Oxidation (SWE) followed by introduction of aliphatic substitutes on hemicelluloses (SWE) • Variety of surface-active hemicellulose grades for emulsifications (FIN). <p>The activities around exchange of information on these topics have started as planned in the form of meetings, planning of common activities and conducting joined research.</p> <p>b) The first consortium meeting was held via skype on 22.01.2019. A plan was made on joined research activities and an activity on joined work between the NOR and FIN partner on utilizing NOR hemicelluloses in emulsions at FIN was initiated.</p> <p>Skype meeting took place on 14.6.2019. The NOR student had visited FIN partner for 2 weeks in March and the results of the stay were discussed. The student used mannans from spruce brought from Norway, and made emulsions with these under supervision of Mikkonen group. Analyzes included stability over time. A report on that can be found at : https://blogs.helsinki.fi/foodmaterialsscience/2019/04/02/emulsions-from-norway-spruce-started-the-hemisurf-project/.</p> <p>First physical meeting took place in Helsinki on 15.8.2019: https://blogs.helsinki.fi/foodmaterialsscience/2019/09/09/hemisurfing-in-helsinki/. We got to know the premises of FIN partner and continued planning for project activities according to the aim described in a).</p>
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5. List the published outputs during the reporting year (peer-reviewed articles, other publications):

6. List other practical outputs during the reporting year (websites, policy recommendations, conferences, scientific meetings, large-scale project applications, research training etc.)

<https://blogs.helsinki.fi/foodmaterialsscience/2019/04/02/emulsions-from-norway-spruce-started-the-hemisurf-project/>

<https://blogs.helsinki.fi/foodmaterialsscience/2019/09/09/hemisurfing-in-helsinki/>

Economic report

7. Received grant from SNS for the reporting year (SEK):
350 000 SEK

8. Transfer of SNS funds to project partners

Country	Partner organization	Sum (SEK)
Denmark		
Finland	University of Helsinki	114 664
Sweden		
Norway	NMBU Norges miljø- og biovitenskaplige universitet	115 000
Iceland		
Other countries (specify)		
Total SUM		

9. Costs

	SNS funding	External funds*	Total*
Travel and hotel	21 571	6 501	28 072
Meeting costs	4 910		4 910
Consumables	19 634		19 634
Salary			
Communication			
Other costs (specify)			
Total SUM (SEK)	46 116	6 501	52 617


* If possible, provide details otherwise summarize the total sum for external funds and total.

Optional: Comments to the economic overview:

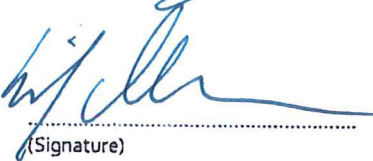
The project started 2019 with a start-up period during the first months and with lower costs connected to the project during the initial time period. Costs increased during the second half of 2019 and are expected to increase and follow budgeted costs during 2020.

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Main applicant's signature, place and date


.....
(Signature) Chalmers university of Technology 27/2/2020
.....
(Institution) Dept. Chem & Cinen Eng. (Day / Month / Year)

Signature of the head of the main applicant's research institution


.....
(Signature) Leif Åhman
HEAD OF DEPARTMENT 27/2/2020
.....
(Institution) (Day / Month / Year)

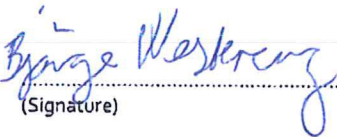


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Department of Chemistry and Chemical Engineering
S-412 96 GOTHENBURG
Sweden
.....
(Printed name, function)

Second applicant's signature, place and date


.....
(Signature) University of Helsinki 25/2/2020
.....
(Institution) (Day / Month / Year)

Third applicant's signature, place and date


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(Signature) Norwegian University of Life Sciences 25/2/2020
.....
(Institution) (Day / Month / Year)