

# SKC Symposium *Programme*

20 - 21 October 2020  
Participation via Zoom

## *Day 1* 20 October

	<b>Welcome!</b>	10:30 — 11:00
11:00 — 12:00	<b>Advances in higher education</b> Uppsala University, Chalmers & KTH	
	<b>Time for lunch</b> Lunch not coordinated by SKC	
	<b>You are wanted by the Swedish nuclear power industry</b>	13:00 — 15:00
	Students, PhD students, post-docs and young researchers are invited to learn about their options in Sweden.	
	<b>Quick break!</b>	
15:15 — 16:15	<b>Research highlights 2019-2020</b> Uppsala University, Chalmers & KTH	
	<b>Quick break!</b>	
	<b>Project overview</b> Goals, plans & successes	16:30 — 17:00

## *Day 2* 21 October

8:30 — 9:30	<b>Nuclear power safety</b> Research project presentations	
	<b>Quick break!</b>	
	<b>Computational tools development</b>	9:45 — 10:45
	Research project presentations	
	<b>Quick break!</b>	
	<b>Sigvard Eklunds prize</b> Announcing the winners and learning about their work	11:05 — 12:20
	<b>Time for lunch</b> Lunch not coordinated by SKC	
13:20 — 14:40	<b>Nuclear materials</b> Research project presentations	
	<b>Quick break!</b>	
	<b>Nuclear fuel</b> Research project presentations	14:55 — 16:15
	<b>Farewell!</b>	



# SKC

Swedish Centre for Nuclear Technology  
[www.skc.kth.se/symposium](http://www.skc.kth.se/symposium)  
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# SKC Symposium Programme

## Day 1

<b>When</b>	<b>What</b>	<b>Who</b>
<b>10:30 - 10:45</b>	<b>Login and sound check</b>	Everybody
<b>10:45 - 11:00</b>	<b>Welcome</b>	Merja Pukari, SKC
<b>11:00 - 12:00</b>	<b>Advances in higher education 2019-2020</b>	
11:00 - 11:20	KTH Royal Institute of Technology	Jan Dufek
11:20 - 11:40	Chalmers University of Technology	Christophe Demazière Teodora Retegan Vollmer
11:40 - 12:00	Uppsala University	Michael Österlund
<b>12:00 - 13:00</b>	<b>Lunch</b>	
<b>13:00 - 15:00</b>	<b>You are wanted by the Swedish nuclear power industry</b>	
13:00 - 13:20	Vattenfall	Lilián del Risco Norrlid
13:20 - 13:40	BUND	Patrik Fors
13:40 - 14:00	Studsvik	Mi Wang Kyle Johnson
14:00 - 14:20	Westinghouse	Clara Anghel
14:20 - 14:40	SKB	Jessica Palmqvist
14:40 - 15:00	Forsmark	Johan Börjesson
<b>15:00 - 15:15</b>	<b>Quick break</b>	
<b>15:15 - 16:15</b>	<b>Research highlights 2019-2020</b>	
15:15 - 15:35	Uppsala University	Stephan Pomp
15:35 - 15:55	Chalmers University of Technology	Christophe Demazière
15:55 - 16:15	KTH Royal Institute of Technology	Weimin Ma
<b>16:15 - 16:30</b>	<b>Quick break</b>	
<b>16:30-17:00</b>	<b>Project overview</b>	
16:30 - 16:45	EU McSAFER	Dmitry Grishchenko, KTH
16:30 - 16:45	SSF SUNRISE	Pär Olsson, KTH

# SKC Symposium Programme

## Day 2

<b>When</b>	<b>What</b>	<b>Who</b>
<b>8:30 - 9:30</b>	<b>Nuclear power safety</b>	
8:30 - 8:40	Reduced-Order Modelling of xenon oscillations in nuclear reactors operating in load-follow conditions	Kristoffer Pedersen, Chalmers
8:50 - 9:10	Mechanistic modeling of annular flows at near-dryout conditions	Wenyuan Fan, KTH
9:10 - 9:30	"SEMRA project on Steam explosion modelling and Risk Analysis for Light Water Reactors"	Dmitry Grishchenko, KTH
9:30 - 9:45	Quick break	
<b>9:45 - 10:45</b>	<b>Computational tools development</b>	
9:45 - 10:05	CORE SIM+: a flexible solver for neutron noise simulations	Antonios Mylonakis, Chalmers
10:05 - 10:25	Calibration of fuel performance codes – treating model inadequacies, nuisance parameters, and unrecognized systematic uncertainties	Gustav Robertsson, Uppsala
10:25 - 10:45	Machine learning in nuclear safeguards and the back-end of the fuel cycle	Markus Preston, Uppsala Virginie Solans, Uppsala
<b>10:45 - 11:05</b>	<b>Break</b>	
<b>11:05 - 12:20</b>	<b>Sigvard Eklunds prize</b>	
11:05 - 11:10	Announcing the winners	Merja Pukari, SKC
11:10 - 11:40	Winner 1	
11:40 - 12:00	Winner 2	
12:00 - 12:20	Winner 3	
<b>12:20 - 13:20</b>	<b>Lunch</b>	
<b>13:20 - 14:40</b>	<b>Nuclear Materials</b>	
13:20 - 13:40	Irradiation effects in Zircaloy-2 fuel cladding studied by atom probe tomography	Johan Eriksson, Chalmers
13:40 - 14:00	Fracture assessment of aged low alloy steels	Magnus Boåsen, KTH Daniela Klein, KTH Shuyue Wang, KTH
14:00 - 14:20	Modelling of intergranular stress corrosion cracking mechanism	Michel Sedlak Mosesson, KTH
14:20 - 14:40	First-principles study of intergranular fracture of Ni containing impurities	Elin Toijer, KTH
<b>14:40 - 14:55</b>	<b>Break</b>	
<b>14:55 - 16:15</b>	<b>Nuclear Fuel</b>	
14:55 - 15:15	Gamma Emission Tomography of nuclear fuel at UU	Peter Andersson, Uppsala
15:15 - 15:35	Coated fuel cladding for accident tolerant fuel	Andrea Fazi, Chalmers
15:35 - 15:55	Advances in Accident Tolerant Fuel Research - SAFETY	Luis Gonzalez, Chalmers Marcus Hedberg, Chalmers
15:55 - 16:15	Uranium nitride production from fluoride precursors	Mikael Jolkkonen, KTH
<b>16:15 - 16:30</b>	<b>Farewell!</b>	Merja Pukari, SKC