

Programme May 9, 2023

Responsible of the day: Lena Moestam, Volvo GTO and Mahesh Gopalakrishnan, Scania

Theme: Circularity - next manufacturing challenges

09.00	Registration, coffee, tea and mingle			
09.45	Welcome and introduction of the conference			
10.00	How we solve the plastic recycling paradox Mattias Philipsson, CEO of Swedish Plastic Recycling			
10.30	Coffee, tea and moving to the sessions			
Parallel sessions				
Time	Strategies and approaches towards circularity Cluster: Production Management Session leaders: Lena Moestam, Volvo GTO and Ulrika Harlin, RISE	Sustainable and effective manufacturing of components Cluster: Component manufacturing Session leader: Goran Justina, Aurobay	Efficient tolerance settings enable circular production from surface texture to aircraft Cluster: Geometry and Quality Session leader: Markus Zwörner, Väderstad and Helena Björk, RISE	Visit Smart Factory at Scania CV AB
11.00	Circularity Practices in Swedish Manufacturing Companies Filip Skärin, JU	HANS and GRETA – The foundry industry’s sustainability project Alexander Leicht, RISE	Surface Texture – a part of geometrical tolerancing to product performance, life-length and environmental impact Stefan Rosén, Toponova	
11.30	Green Design – efficient productions in resource investments Mikael Bohman, AstraZeneca och Monica Bellgran, KTH	A framework for the physics-based estimation of tool wear in machining process Charlie Salame and Amir Malakizadi, Chalmers	Enabling circular geometry assurance Richard Söderberg, Chalmers Tekniska Högskola	
12.00	Increasing sustainability in the Volvo Group Tuve plant. Helena Söderberg, Volvo GTO	Aluminium machining in a sustainable way Ulrika Brohede, Swerim	A systematic proceess planning approach (PRODEQ) Mohammad Haddadzade, Scania, and Magnus Lundgren KTH	
12.30	Lunch			
Time	Digitalization tools, 3D Printing, Logistics and Coating Cluster: Digital Manufacturing Session leaders: Alf Andersson, Volvo Cars, Magnus Widfeldt, RISE	Quality and business in component manufacturing Cluster: Component manufacturing Session leader: Eva Troell, RISE	Meeting future challenges in forming and joining Cluster: Forming and Joining Session leaders: Johan Berglund RISE and Joakim Hedegård, SWERIM	Visit Engine assembly plant at Scania CV AB
13.20	Circularity - Finding tools to make it work Adam Edström, RISE Intro: Business criteria for selection of 3D-printed components Markus Eriksson, RISE	Quality assurance of residual stress prediction using the Contour method Erik Nordgren, LEAX	Ongoing research in Forming and Joining Johan Berglund, RISE and Joakim Hedegård, SWERIM	
13.50	Digital manufacturing - several cases in production logistics Yongkuk Jeong and Erik Flores-García, KTH	Circular machining system - approaches for reuse and reconfiguration (REFUSE) Carin Rösiö, Högskolan i Skövde och Per-Åke Szekeres, Aurobay	Which way up? Effects of forming on composite properties Yvonne Aitomäki, RISE	
14.20	Virtual PaintShop - Simulation of Electrocoating Fredrik Edelvik, Fraunhofer-Chalmers Centre	Affärskriterier för urval av 3d-printade komponenter (SPARSAM) Markus Eriksson, RISE	Innovative methods for joining of mixed light-weight material combinations. Klara Trydell, Swerim	
15.00	Coffee, tea and moving to the plenary hall			



15.30	Circular Economy driven transformation in manufacturing: opportunities and challenges! <i>Amir Rashid, Professor in Manufacturing, KTH</i>
15.50	Panel discussion - Next steps within manufacturing Moderator: <i>Jenny Bramell, Chairman of the Board of IUC and Programme Council Chairman FFI HP</i> Strategy Board for the Manufacturing R&D Clusters <i>Staffan Vidén, Volvo Group, Lars-Henrik Jörnving, Scania CV AB, Hans Egestål, Volvo Cars, Peter Bryntesson, FKG</i>
17.00	Summary and closing of the first day
19.00	Dinner

With reservation for changes in the programme

Programme May 10, 2023

Responsible of the day: *Alf Andersson, Volvo Cars and Peter Bryntesson, FKG*

08.30	Registration, coffee, tea and mingle			
09.15	Welcome and introduction of the conference			
09.30	Towards 100% circularity, together Christoffer Wahlborg, Industry Manager Automotive, Stena Recycling AB			
10.00	Environmental goals for 2023 – will we make it? Maria Stenström, 2030 Sekretariatet			
10. 20	Coffee, tea and moving to the sessions			
Parallel sessions				
Time	AI and Data-Driven Solutions for Predictive Maintenance, Quality Monitoring, and Energy Management Cluster: Digital Manufacturing Session leaders: Gunilla Sivard, KTH and Per Gullander, RISE	Surface treatments for more sustainable products Cluster: Surface Treatment & Paint Session leaders: Charlotte Ireholm, RISE and Simon Palm, Volvo Cars	Deeper into the heart of production through optimization, kitting and work instructions Cluster: Assembly Session leaders: Robert Wester Volvo Group and Sandra Mattsson, RISE	Visit Smart Factory at Scania CV AB
10.50	AI solutions for predictive maintenance: Demonstrations from real world use cases Ebru Turanoğlu Bekar, Chalmers	Process control and increased lifespan of process baths Staffan Filipsson, IVL	Multi-objective optimization platform of worker well-being AND productivity Aitor Iriondo Pascual, Högskolan i Skövde	
11.20	Data augmentation with machine learning models in hard turning Yaoxuan Zhu, IPU, KTH	An overview of dry pre-treatment methods Charlotte Ireholm, RISE	Flexible Automation of Kitting, Transport and Assembly Robin Hanson, Chalmers	
11.50	Interoperable and scalable energy management system to smart up buildings. Alice Hallén, Virtual Manufacturing	Surface treatment development at Scania: past, present and future Lars Erhardsson, Scania	Current state digital work instructions at Swegon Johan Andersson and Patrik Åhman, Swegon	
12.20	Lunch			



THE SWEDISH
**Manufacturing
R&D Clusters**

Time	Resilient flexible circular flows Cluster: Logistics Session leader: Martin Kurdve, RISE	Next generation powertrain production and the innovation programs of tomorrow Session leader: Boel Wadman, RISE	Transition towards a sustainable manufacturing industry Session leader: Mats Lundin, SuPr	Visit Engine assembly plant at Scania CV AB
13.20	TBA	Achievements from "Next Generation Powertrain Production" <i>Lars Tööj, IDC West Sweden</i>	The Circular Car <i>Emma Enebog, RISE</i>	
13.50	TBA	Supporting the shift from innovation to market <i>Johanna Stiernstedt, Manufacturing North</i>	Competence transition for a sustainable industry, lessons learned and inspirational examples <i>Sasha Shahbazi, Södertälje Science Park</i>	
14.20	TBA	Workshop: Influence the Circularity missions of next generation Innovation Programs <i>Mats Lundin SuPr, Boel Wadman, RISE</i>		
14.50	Coffee, tea and moving to the plenary hall			
15.20	The future of manufacturing is circular and resilient <i>Cecilia Warrol, Program Manager Production 2030, Teknikföretagen</i>			
15.30	TBA			
16.00	Summary and closing the conference			

With reservation for changes in the programme

