



CIRP Office : 9 rue Mayran - 75009 Paris - Tel. (33) 1 45 26 21 80
E-Mail: cirp@cirp.net Web : www.cirp.net

2025 GENERAL ASSEMBLY

Stockholm - Sweden

CIRP-2025-A-3

SCIENTIFIC TECHNICAL COMMITTEE "A" (LIFE CYCLE ENGINEERING & ASSEMBLY)

Meeting to be held on Friday, August 22, 2025
14.00 - 18.00

You are kindly invited to participate in the next LIFE CYCLE ENGINEERING & ASSEMBLY Scientific Technical Committee meeting to be held in Stockholm.

Agenda

1. Opening, welcome, introduction of invited guests (5 min)
2. Approval of Winter Meeting 2025 minutes and GA 2025 meeting agenda (2 min)
3. Update and Proposals on STC A Keynote Papers (65 min)
 - 2025 Keynote Questions & Answers (Lihui Wang, 10 min)
 - 2026 Keynote Update: “Decarbonisation of Manufacturing towards Net Zero” (Sebastian Thiede, 5 min)
 - 2027 Keynote Update: “Humans, AI and robots for resilient assembly operations” (Sotiris Makris, 10 min)
 - 2028 Keynote Proposals (LCE)
 - Sustainable manufacturing/life cycle engineering of lithium ion batteries for electric vehicles (Chris Yuan, 8 min incl. questions)
 - The Role of Digital Information Platforms for Circular Economy (Marcello Colledani, 8 min incl. questions)
 - LCE of product-system second-life strategies for circular industrial production systems (Peggy Zwolinski, 8 min incl. questions)
 - Discussions and Voting (15 min)
 - Call for Ideas on 2029 Keynote (Assembly) – to be presented at the next Winter Meeting (1 min)
4. Technical Presentations (48 min)
 - Abrasive processes towards manufacturing for sustainability—Progress and challenges, (Eraldo da Silva, 12 min incl. Q&A)
 - Leveraging Remote Sensing Technology for Life Cycle Assessment and the Circular Economy (Wen Li, 12 min incl. Q&A)

- NIST's efforts towards supply chain resilience of emerging technologies (Nehika Mathur, 12 min incl. Q&A)
- Digital twin and extended reality for teleoperation of the electric vehicle battery disassembly (Tero Kaarlela, 12 min incl. Q&A)

Break 16:00-16:30

4. Technical Presentations (continued) (60 min)

- Remaining useful life-aware trajectory planning for robot manipulators (Zhiguo Zeng, 12 min incl. Q&A)
- Biosignal-based stress reduction in assembly (Sebastian Schlund, 12 min incl. Q&A)
- Embodied AI Agents for Reconfiguring Robotic Task Sequences in Flexible Assembly Automation (Robert Schmitt, 12 min incl. Q&A)
- A Foundation Model-based 3D Joint Tool-Part Affordance Grounding and Task-aware Trajectory Generation Approach for Precise Industrial Robot Tool-use Manipulation (Tian Wang, 12 min incl. Q&A)
- AI-Assisted Framework for CAD-to-ROS2 Robot Programming in Micro Assembly (Annika Raatz, 12 min incl. Q&A)

5. STC LCE/A Conferences (15 min):

1. Conferences on Assembly Technology and Systems (CATS)

- Update CATS 2026 Hong Kong (3 min)
- Update CATS 2028 Patras/Greece (1 min)

2. Conferences on Life Cycle Engineering (LCE)

- Report LCE 2025 Manchester (3 min)
- Update LCE 2026 Kamakura/Japan (3 min)
- Update LCE 2027 (1 min)
- Update LCE 2028 (1 min)
- Suggestions on LCE 2029 (Outside of Europe, 3 min)

6. STC-A Sponsored Conferences (5 min)

7. CIRP Novel Topics in Production Engineering (5 min)

- General updates (Lihui Wang), call for proposals

8. Other Business and STC Matters (5 min)

- CMAG
- links to CWGs
- Any other business

9. Adjournment