



# 2026 CIRP Annals' Keynote papers

## STC A

**Decarbonisation of Manufacturing towards Net Zero** - Sebastian Thiede (2), Christoph Herrmann (1), Sami Kara (1), Michael Hauschild (1)

## STC C

**Part distortion in machining: prediction, measurement, and control** – Jose Outeiro (1), Pedro-Jose Arrazola (1), Ismail Lazoglu (1), Jens Sölter (3), Aitor Madariaga

## STC E

**Laser-based manufacturing for the electric powertrain** – Leonardo Orazi (2), Alessandro Fortunato (3), Alessandro Ascari (3), Pasquale Franciosa, Ali Gokhan Demir, Darek Ceglarek (1), Lin Li (1)

## STC F

**Shear-dominated processes in sheet metal forming** – Wolfram Volk (1), Mathias Liewald (2), David Abedul, Junhe Lian, Christoph Hartmann

## STC G

**Abrasive finishing of additively manufactured components** – Jan Christian Aurich (1), Peter Krajnik (1), Hitomi Yamaguchi (1), Eraldo Da Silva (2), Jacques Platz

## STC M

**Digital Twins for Machine Tools** - Alexander Wilhelm Verl (2), Steffen Ihlenfeldt (2), Chinedum Okwudire (2), Erdem Ozturk (2), Anna Valente (1), Michael F. Zaeh (1)

## STC O

**Digitally enhanced maintenance: path towards continuous value creation and sustainability** - John Ahmet Erkoyuncu (2), Fazel Ansari (2), Benoit Iung (1), Shozo Takata (1)

## STC P

**Machine Learning for Metrology in Manufacturing** – Robert Schmitt (1), Wim Dewulf (1), Hans Hansen (1), Yang Zhang (2), Benjamin Montavon, Florian Stamer

## STC S

**Manufacturing of structured surfaces for tissue engineering and regenerative medicine** – Giovanni Lucchetta (2), Fengzhou Fang (1), Weiguang Wang (2), Enrico Savio (1)

## Cross-STC

**Innovations in advanced processes and systems for semiconductor manufacturing** – Albert Shih (1), Wei Gao (1), Greg Vogl (2), Dragan Djurdjanovic (2), Takafumi Fukushima, Ajay Malshe (1)