

# PROGRAM

<p>07:45-08:30  <b>Registration, Exhibition</b>            Covered Events Garden</p>		
<p>08:30-09:45  <b>Opening Session - Plenary</b>            Main Rayman Hall            Chair: Prof. Adin Stern &amp; Dr. Amnon Shirizly</p>		
<p><b>Greetings and Opening Remarks:</b>            ICAM 2023 Chairpersons - Prof. Adin Stern and Dr. Eitan Tiferet            Mr. Guy Shasha - Chairmen of The Association of Engineers, Architects and Graduates in Technological Sciences in Israel (AEAI)</p>		
<p><b>Plenary Lecture: (ICAM101) Advances in metal additive manufacturing using laser powder bed fusion</b>            Dr. Manyalibo J. Matthews, Lawrence Livermore National Laboratory</p>		
<p><b>Plenary Lecture: (ICAM100) New materials and approaches for 3D and 4D printing</b>            Prof. Shlomo Magdassi, The Hebrew University of Jerusalem</p>		
<p>10:30- 09:45  <b>Exhibition, Poster Presentation, Breakfast</b>            Covered Events Garden</p>		
<p>10:30-12:00  <b>Parallel Sessions 1</b></p>		
<p><b>Polymers</b>            Rayman Hall West            Chair: Prof. Naum Naveh &amp;            Dr. Lior Zonder</p>	<p><b>Metals</b>            Main Rayman Hall            Chair: Dr. Ehud Galun &amp;            Dr. Alex Diskin</p>	<p><b>Industry Spotlight</b>            Rayman Hall East            Chair: Mr. Ziv Sadeh &amp;            Mr. Ohad Dolev</p>
<p><b>(ICAM104) KEYNOTE: 4D printing: From the "ink" to the medical device</b>            Prof. Daniel Cohn, Hebrew University of Jerusalem</p>	<p><b>(ICAM103) KEYNOTE: Neutron-based characterization to improve additive manufacturing of alloy components</b>            Dr. Sven Vogel, Los Alamos National Laboratory (LANL)</p>	<p><b>(ICAM115) Innovative zirconia-based material shaped by SLA 3D printing</b>            Mr. Arnaud Roux, 3DCERAM</p>
<p><b>(ICAM116) Characterization and analysis of ULTEM 1010 cellular structures</b>            Mr. Idan Distelfeld, Rafael Defense Systems</p>	<p><b>(ICAM145) Compositionally graded SS316 to C300 Maraging steel using additive manufacturing</b>            Dr. Adi Ben-Artzy, Ben Gurion University of the Negev, University of California at Berkeley, P.Jetropulsion Laboratory, California Institute of Technology and Lawrence Berkeley National Laboratory</p>	<p><b>(ICAM113) There is no one size fits all – Complementary use cases of different polymer technologies</b>            Ms. Ronny Eden, Su pad Ltd.</p>
<p><b>(ICAM117) Improvement of green density of binder jetting as printed ceramics parts</b>            Dr. Gary Muller-Kamskii, Israel Institute of Materials Manufacturing Technologies – Technion R&amp;D Foundation, Israel Ceramic and Silicate Institute, Israel Plastics and Rubber Center</p>	<p><b>(ICAM140) Tailoring dynamic mechanical properties using the Taguchi method</b>            Mr. Ben Amir, Ben Gurion University of the Negev, NRCNand Israeli Aerospace Industries</p>	<p><b>(ICAM133) Applying finite elements practices to predict manufacturing distortions in a sintered 3D printed mold Jet® metal part</b>            Mr. Omri Yannay, Ansys</p>
<p><b>(ICAM129) 3D-printing transparent <math>\gamma</math>-alumina structures by combining sol-gel and photopolymerization processes</b>            Ms. May Yam Moshkovitz, The Hebrew University of Jerusalem</p>	<p><b>(ICAM158) Anisotropy of additive manufacturing of 316L</b>            Mr. Yohanan Nahmana, BSEL-Ltd</p>	<p><b>(ICAM161) Innovation in mechanical design using guidelines and optimization tools for additive manufacturing</b>            Mr. Guy Yaros, Systematics</p>

Posters - Hall TBD | Chair: Dr. Dana Ashkenazi  
 Poster Judging Committee: Dr. Avi Raveh, Dr. Guy Ben-Hamu, Mr. Amos Fridman & Mr. Yuval Gale

12:00-12:20  
**Exhibition, Poster Presentation, Coffee Break**  
 Covered Events Garden

12:20-13:50  
**Parallel Sessions 2**

Application Rayman Hall West Chair: Dr. Galit Katarivas Levy & Mr. Michael Librus	Emerging Technologies Main Rayman Hall Chair: Prof. Genady Ziskind & Dr. Adi Ben-Artzy	Industry Spotlight Rayman Hall East Chair: Mr. Dani Safranchik & Mr. Yair Sharon	Posters - Hall TBD   Chair: Dr. Dana Ashkenazi Poster Judging Committee: Dr. Avi Raveh, Dr. Guy Ben-Hamu, Mr. Amos Fridman & Mr. Yuval Gale
<b>(ICAM120) KEYNOTE: Patient-specific Ti-6Al-4V lattice implants for critical-sized load-bearing bone defects reconstruction</b> Dr. Amit Benady, Tel Aviv Sourasky Medical Center	<b>(ICM110) KEYNOTE: A study of pre-heating stages in electron beam melting using numerical simulations</b> Mr. Eran Landau, Ben Gurion University of the Negev, AM Center, Rotem Industries LTD and Nuclear Research Center Negev	<b>(ICAM108) The challenges of identifying parts for additive manufacturing</b> Mr. Omer Blaier, CASTOR	
<b>(ICAM125) Hydrogen trapping in additive manufactured stainless steel</b> Ms. Polina Metalnikov, Sami Shamoon College of Engineering and Ben-Gurion University of the Negev	<b>(ICAM135) 3D printing of stretchable foams for soft robotics</b> Mr. Ouriel Bliach, Hebrew University of Jerusalem	<b>(ICAM156) Tritone MoldJet® metal &amp; ceramic AM process, materials &amp; performance</b> Mr. Amnon Sommer, Tritone Technologies	
<b>(ICAM 143) 21st century geometric modelling: porosity/heterogeneity in the equation</b> Prof. Gershon Elber, Technion – Israel Institute of Technology	<b>(ICAM137) PCRT validation with micro-CT for 15-5PH AM steel</b> Mr. Thomas Koehler, Vibrant GmbH	<b>(ICAM168) Hybrid manufacturing: Combining Metal 3D Printing and CNC Post Processing</b> Dr. Emil Somekh, Solidcam	
<b>(ICAM111) A sustainable Shift in additive manufacturing for the Construction Industry</b> Asst. Prof Shany Barath and Arch. Avraham Cohen, Technion – Israel Institute of Technology	<b>(ICAM130) Qualification of AM ceramic components for aerospace applications</b> Dr. Oleg Kovalenko, Rafael Advanced Defense Systems	<b>(ICAM172) Two-photon polymerization based on Nanoscribe's Quantum X series: A powerful 3D-microfabrication tool</b> Dr. Julian Ochsmann, Nanoscribe	

13:50-14:30  
**Closing Session - Plenary**  
 Main Rayman Hall  
 Chair: Dr. Eitan Tiferet & Dr. Dana Ashkenazi

**Plenary Lecture: (ICAM102) Neutron and high energy X-ray diffraction characterization of materials under simulated manufacturing conditions**  
 Dr. Don Brown, Los Alamos National Laboratory (LANL)

**Best Poster Awards**  
 Poster Judging Committee: Dr. Dana Ashkenazi, Dr. Avi Raveh, Dr. Guy Ben-Hamu, Mr. Amos Fridman & Mr. Yuval Gale

15:30 -14:30  
**Exhibition**  
 Covered Events Garden  
**Lunch**  
 Hotel Dining Room

\* Please note that at this point the program is still subject to changes

## Posters

Hall TBD

Chair: Dr. Dana Ashkenazi

Poster Judging Committee: Dr. Avi Raveh, Dr. Guy Ben-Hamu, Mr. Amos Fridman & Mr. Yuval Gale

- 1. (ICAM163) 4D printing of commercial based conductive polylactic acid: Strength and resistance properties**  
Mr. Amihai Amram & Mr. Matan Faigenblat, Afeka Academic College of Engineering
- 2. (ICAM154) 3D printed cultivation system for microorganisms**  
Dr. Asher Wishkerman, Ruppin Academic Center
- 3. (ICAM138) Sintering conditions effect on 3DP ceramic parts**  
Ms. Dana Benes Dahan, Kulicke and Soffa
- 4. (ICAM122) AM of superalloys for aerospace turbines – A review**  
Dr. Daniel Moreno, Bet Shemesh Engines, F.A.A & E.A.S.A.
- 5. (ICAM171) Localized electrochemical deposition of overhanging multimaterial metal structures by hydrodynamic flow confinement**  
Mr. Daniel Widerker, Technion - Israel Institute of Technology and IBM Zurich Research Lab
- 6. (ICAM146) Structure, mechanical performance, and fractography of ABS produced by the fused filament fabrication additive manufacturing**  
Mr. Dmitry Richkov, Afeka Academic College of Engineering, Ben-Gurion University of the Negev and Tel Aviv University
- 7. (ICAM157) Structure and fracture visualization of tilted ABS samples processed via fused filament fabrication additive manufacturing**  
Mr. Dmitry Richkov, Afeka Academic College of Engineering, Ben-Gurion University of the Negev and Tel Aviv University
- 8. (ICAM112) Investigation of process parameters for EB-PBF 316L stainless steel**  
Mr. Dor Braun, Ben-Gurion University of the Negev, Rotem Industries LTD and Nuclear Research Center Negev
- 9. (ICAM132) 3D objects composed of 100% proteins by two-photons printing**  
Mr. Doron Kam, The Hebrew University of Jerusalem
- 10. (ICAM141) 3D-printing: A powerful tool for miniaturizing bioinspired robots**  
Mr. Dror Kobo, Tel-Aviv University
- 11. (ICAM124) Investigating the process efficiency in EBM AM process**  
Mr. Elroei Damri, Nuclear Research Center of the Negev
- 12. (ICAM118) Ultra-precise deposition: Additive manufacturing process for next-generation electronics**  
Mr. Filip Granek, XTPL SA
- 13. (ICAM159) The effect of location in the built space on the mechanical properties in Ti-6Al-4V samples produced by EBM**  
Mr. Gennady Rafailov, Ben Gurion University of the Negev, Nuclear Research Center of the Negev and Los Alamos National Laboratory
- 14. (ICAM166) Determining the processes environment: The effect of temperature on the electrical properties of Ti-6Al-4V powder in PB EBM process**  
Mr. Grisha Rudelson, Nuclear Research Center Negev
- 15. (ICAM155) Vat and cured photopolymerization of antibacterial medical applications embedding zinc oxide nanoparticles**  
Mr. Guy Naim, The Hebrew University of Jerusalem
- 16. (ICAM119) 3D printing of bio-inspired amorphous calcium carbonate composites**  
Ms. Hadar Shaked, Technion - Israel Institute of Technology
- 17. (ICAM147) Mechanical and cell testing of 3D printed PEEK-CF for dental and orthopedic implants**  
Mr. Itamar Tulpan, Ben Gurion University of the Negev

**18. (ICAM169) Fabrication of customizable diffractive optical elements by thermocapillary fluidic shaping**

Mr. Jonathan Ericson, Technion - Israel Institute of Technology

**19. (ICAM153) Zinc-based filaments for biodegradable orthopedic implants**

Mr. Mark Bezner, Ben Gurion University of the Negev

**20. (ICAM150) Corrosion fatigue of 316L alloy produced by WLAM**

Mr. Maxim Bassis, Ben Gurion University of the Negev and Kotliar Ltd., LWS Laser Welding Solutions

**21. (ICAM167) Fabrication of eyeglass lenses using fluidic shaping**

Mr. Mor Elgarisi, Technion - Israel Institute of Technology

**22. (ICAM 109) A new approach towards regulation of 3D printed medical devices**

Dr. Nadav Sheffer Afeka - Academic College of Engineering and Ariel University

**23. (ICAM151 ) 4D-bioprinting of skin tissue patches**

Ms. Noa Gabay Bass, Ben Gurion University of the Negev

**24. (ICAM164) Fluidic shaping of optical components in microgravity: From parabolic flights to the international space station**

Mr. Omer Luria, Technion - Israel Institute of Technology

**25. (ICAM149) Additive manufacturing of direct clear aligners using shape memory resin**

Mr. Or Ariel, Ben Gurion University of the Negev

**26. (ICAM148) Development of filaments based on PEI for electrochemical biosensors**

Mr. Shahar Halevi, Ben Gurion University of the Negev

**27. (ICAM160) Additive manufacturing of anisotropic graphene-based composites for thermal management application**

Ms. Shani Ligati Schleifer, Ben Gurion University of the Negev

**28. (ICAM162) Inorganic ZnO and triethoxymethylsilane coating for dental implants made of PEEK**

Ms. Shelly Betsis, The Hebrew University of Jerusalem

**29. (ICAM131) Particle-free compositions for 3D printing ceramics by photopolymerization**

Ms. Tamar Rosental, The Hebrew University of Jerusalem

**30. (ICAM152) Properties of HEA WTaMoNbV produced by SLM proces**

Mr. Ron Tomer, Ben Gurion University of the Negev and Israel Institute of Metals - Technion

**31. (ICAM127) Sinter based additive manufacturing of shape memory alloys**

Mr. Yeshurun Cohen, Rafael LTD and Technion - Israel Institute of Technology

**32. (ICAM170) Design for AM - The fun way**

Mr. Yoram Retter, IAI

**33. (ICAM114) Enhancement of Resistance to Moisture of Bulk Metal® Foil Resistors**

Mr. Albert Dadashev ,VPG Foil Resistors