MIM 2022

International Conference on Injection Molding of Metals, Ceramics and Carbides

West Palm Beach, FL • February 21–23, 2022

Speaker Guide:

Schedule, Forms & Responsibilities

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METAL POWDER INDUSTRIES FEDERATION
APMI INTERNATIONAL

General Information and Instructions for:
TECHNICAL SESSIONS, SPECIAL INTEREST PROGRAMS, AND POSTER PROGRAM

Critical Dates – Speakers/Chairs

January 7, 2022	• Last date for early registration to save $100 on registration.All technical and exhibit speakers must to attend the conference. Go to: https://www.mpif.org/Events/MIM2022/MIM2022Registration.aspx to register and reserve your hotel rooms.
Feb 1, 2022: Photo and Bio Deadline	• Deadline to submit your photo and biography to MPIF at bedwards@mpif.org
Feb 4, 2022: Presentations intended to be presented at MIM2022 are due at MPIF for review. **Includes all Technical, Exhibitor and Student Presentations**	• Please upload your presentation to this website: https://filerequestpro.com/up/mim2022-submission
Feb 21, 2022 PIM Tutorial	• A separate registration fee applies
Feb 22-24, 2022 **MIM Technical Presentations**	• Technical speakers are schedule for 25 minute presentationsthat includes all Q&A needed after their presentation. Please limit your presentation to 30 slides. • Exhibitor presentation will be scheduled for 7 minutes also including any Q&A needed. See online agenda for your scheduled time. Schedule is subject to change depending onindividual presentation lengths needed.

MPIF Staff Contacts

Questions concerning your conference participation should be directed to the proper individual:

Bill Edwards – bedwards@mpif.org or 609-452-7700, ext. 101
- Technical Sessions
- Submission of Biography & Photo

Diane Haggerty – dhaggerty@mpif.org or 609-452-7700, ext. 103
- Exhibitor Presentations and Exhibitor Information

Paul Sedor – psedor@mpif.org or 609-452-7700, ext. 112
- Student Grants and Presentations

All presentations, Technical, Student and Exhibitor should be uploaded to:
https://filerequestpro.com/up/mim2022-submission

Speaker Photo & Biography

Submit your photo and bio to Bill Edwards (bedwards@mpif.org) by the deadline.

Photos

- Color, portrait orientation at least 200x300 pixels, saved as a jpg, or tif.

Bios

- 100 words or less.

SAMPLE OF A BIO

Rand German is Professor Emeritus, San Diego State University.
His PhD degree is from the University of California at Davis, MS from The Ohio State University, and BS from San Jose State University; he is distinguished alumnus from all three universities. In his career he held three Chaired Professorships and directed major research efforts winning $59 million in grants. He published 1023 articles, 20 books, 25 patents, and 19 edited books. He has an honorary doctorate, Tesla Medal, and is a Fellow of three technical societies.

Technical Presentations

Presentations in all conference programs must be given in English.

Presentations will be in person at the conference attendees during the week of Feb 22nd, 2022.

Technical Sessions

- Presentation length shall be 25 minutes maximum including all Q&A

PowerPoint Presentations

- **PowerPoint should be widescreen 16:9 resolution.**
- Title slide should include the presentation title, authors, company, conference logos, and company logo.
- Subsequent slides may include company name and style per speaker's corporate policy.
- Primary author is responsible for submitting the final presentation in PowerPoint to MPIF at the link provided. MIM2022 Logo

Units of Measurement

- All units of measurement must be expressed in SI units and the Inch-Pound equivalent (density excepted)provided in parenthesis, i.e., 2.5 cm (1 in.).

Figures and Tables

- All photos, illustrations, tables, etc. must be clear and legible.
- Photomicrographs must include a magnification marker within the body of the image, preferably onthe lower right corner of the image.

Comparisons

- Comparisons of products or processes used in research work should be referenced generically in presentation.

Examples:

- "powder A versus powder B" or use the MPIF material designation such as "FN-0205 as-sintered versus FN-0205 heat treated."

Special Note:

Overt or blatant commercialism in technical presentations is forbidden and seriously damages the integrity of thetechnical presentation. Repeated use of corporate names, equipment or materials designations is an example of overt/blatant commercialism.

SI Units — Conversion Table
Quantities/Terms Used by MPIF

Quantity	Designation	Inch-Pound Units	Preferred Working Unit	Symbol	Approx. Conversi to SI Uni
Apparent Density	ρ_a	g/cm^3	gram per cubiccentimetre	g/cm^3	—
Applied Magnetic Field	H	oersteds (Oe)	amperes-turns/metre	A/m	X 79.6
Atmosphere Flow	—	ft^3/min	cubic centimetre per second	cm^3/s	X 472.0
	—	CFH	cubic centimetre per second	cm^3/s	X 7.867
Belt Speed	—	ipm	millimetre per minute	mm/min	X 25.40
Bulk Density	—	Ibm/ft^3	gram per cubiccentimetre	g/cm^3	X 0.016
	—	Ibm/gal	gram per cubiccentimetre	g/cm^3	X 0.120
Coefficient of Thermal Expansion	—	x10^{-6}/ºF		x10^{-6}/ºC	X 1.8
Coercive Field Strength	H_c	oersteds (Oe)	ampere-turns/metre	A/m	X 79.6
Compacting Pressure	—	tsi	megapascals	MPa	X 13.79
Crush Strength	K	10^3 psi	megapascals	MPa	X 6.895
Fatigue Limit (Strength)	—	10^{3}psi	megapascals	MPa	X 6.895
Force	—	lbf	newton	N	X 4.448
Flow Time	—	s/50 g	second per 50 grams	s/50 g	—
Fracture Toughness	K_{IC}	10^3 psi·inch^{½}	megapascals root metre	MPa·m^{½}	X 1.1
Green Density	ρ_g	g/cm^3	gram per cubiccentimetre	g/cm^3	—
Green Strength	—	psi	megapascals	MPa	X 0.0069
Heating Rate	—	degree Fahrenheit per second (°F/sec)	degree Celsius per second	°C/s	X 0.556
Impact Energy	—	ft·lbf	joule	J	X 1.356
Kinematic Viscosity	—	centistokes (cSt)	metres squared per second	m^2/s	X 1.0 x 1
Magnetic Induction	B	kilogauss (kG)	tesla	T	X 0.1
Particle Size	—	10^{-3} in.	micrometre	µm	—
Powder Mass	—	pound (Ibm)	kilogram	kg	X 0.454
	—	ton	megagram	Mg	X 0.907
	—	ton	metric ton	t	X 0.907
Sintered Density	ρ_s	g/cm^3	gram per cubic centimetre	g/cm^3	—
Specific Surface	—	m^2/g	square metre per gram	m^2/g	—
Surface Finish	—	microinches	micrometre	µm	X 0.0254
Tap Density	ρ_t	g/cm^3	gram per cubic centimetre	g/cm^3	—
Temperature	—	degree Fahrenheit (°F)	degree Celsius	°C	5/9 (°F -3
Tensile Strength	—	10^3 psi	megapascals	MPa	X 6.895
Thermal Conductivity	—	Btu·ft/(h·ft^2·ºF)	watts per metre kelvin	W/(m·K)	X 1.731
Torque	—	lbf ·ft	newton metres	N·m	X 1.356
Transverse Rupture Strength	—	10^3 psi	megapascals	MPa	X 6.895
Yield Strength	—	10^3 psi	megapascals	MPa	X 6.895
Young's Modulus	—	10^6 psi	gigapascals	GPa	X 6.895

**** Example: 1 psi = 0.0069 MPa***
If 100,000 psi, then MPa = 0.0069 X 100,000 = 690 MPa