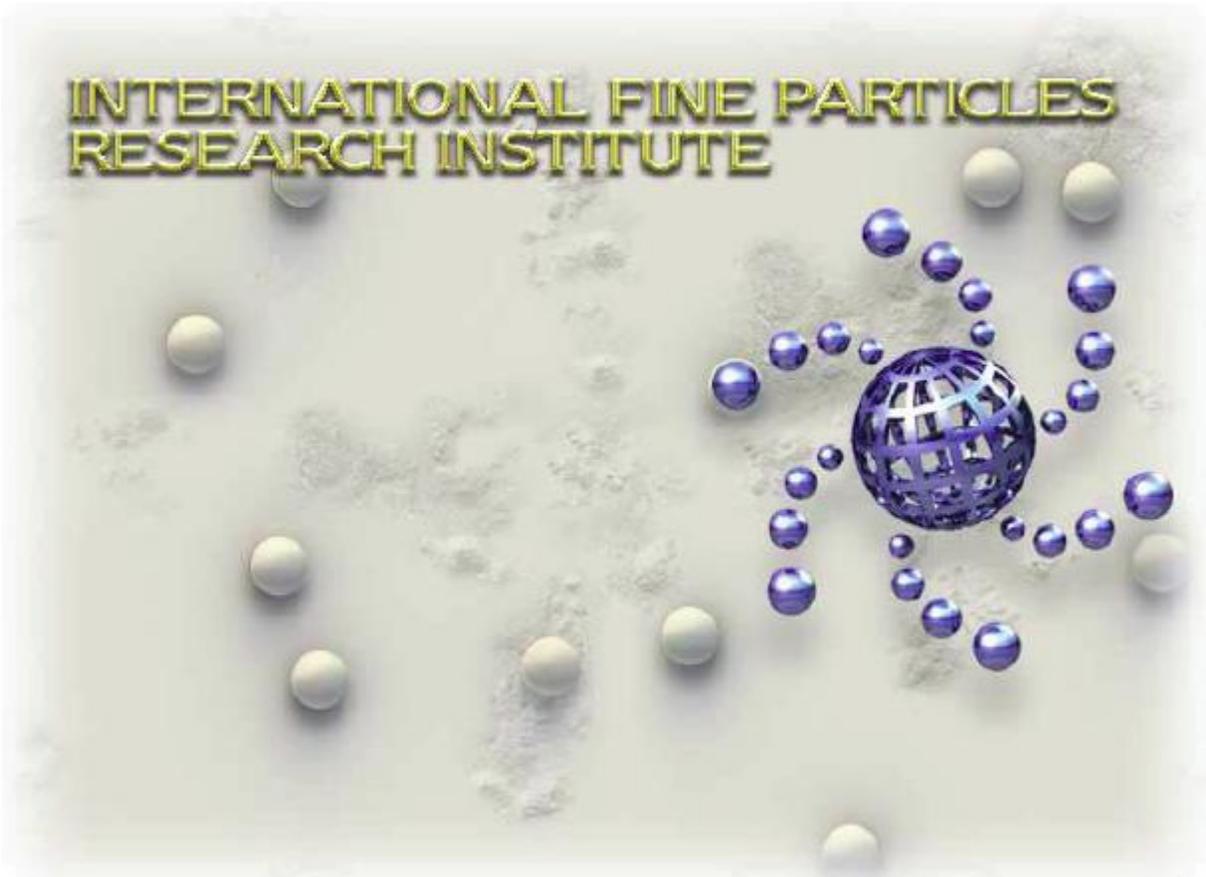


INTERNATIONAL FINE PARTICLES RESEARCH INSTITUTE



2025 AGM Briefing Notes

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May 9, 2025

It's time to prepare for IFPRI's 47th Annual General Meeting. We're hosted by Olivier Pouliquen of Aix-Marseille University, and the meeting hotel is the Village Club Miléade Carry-le-Rouet, about 30 km from downtown Marseille. Like last year, we'll be running a "partially virtualized" meeting, with major parts of it being provided for remote attendance using Zoom. The agenda indicates which sessions are web accessible. Note that the meeting returns to the traditional Sunday-Thursday schedule, June 15-19.

The information you need to prepare for the AGM is being uploaded to the 2025 AGM Materials Page. For ongoing projects, we're posting 20-minute presentation videos, presentation slides, and project abstracts (which are a convenient way of distributing project summaries in your companies). For new and renewing projects, we're posting proposals, most of which have been revised in response to feedback from the winter meeting. Since the objective of the AGM is to provide feedback on ongoing projects and select which proposals to fund, it's critical to review these materials prior to the meeting.

The AGM is preceded by a milling workshop on June 13-14. Workshop presentations will be webcast via Zoom.

AGM Agenda

The AGM agenda is essentially the same as last year. The only significant changes are on Wednesday. We've eliminated the project feedback discussion by the academics because we received feedback from everyone that this is redundant. In its place, we've extended the discussion of new briefs. We also eliminated the "strategic planning session" and replaced it with additional free time to finish writing briefs, which will hopefully reduce the stress in completing and submitting them prior to the banquet. Finally, we've added a session for academic feedback on working with IFPRI. This is an academics-only session that runs in parallel with the members-only discussion of ongoing projects and renewals.

Status of the Technical Program

The 2024-2025 technical program is summarized in Tables 1 and 2. We funded 17 full projects, two collaboration projects, four reviews (one carryover from 2022-3), and two workshops last year.

Two projects end this year, and four projects are being considered for renewal (shown in yellow). We funded two collaborations, including a continuation of the 3-way collaboration between Envalor (Peter Vonk and Eric Grolman), Sandia (Jeremy Lechman) and Ken Kamrin to make Ken Kamrin's continuum powder flow model portable into industry. We also sent out five new project briefs: we reviewed the proposals against four of these at the winter meeting and should have updated proposals for the AGM, and we received a single proposal against the brief on assisted flow from hoppers in April. Adding all of this up, *we will have at least six project slots to fill and nine new or renewal project proposals to choose from when we vote on Wednesday at the AGM.*

Balance of the Technical Program

One of the challenges of managing IFPRI's technical program is to develop a project portfolio that is balanced and meets the needs and interests of our members. IFPRI veterans know that we use project categories to measure the balance of the program among our concentration areas: wet systems, dry

systems, formation, size reduction, characterization, and systems engineering. This categorization scheme is a bit arbitrary, as many projects belong to multiple categories. As a result, we recently began to assign multiple categories to each project. Both categorization schemes are shown in Table 1, with the red “X” denoting the master category. The two pie charts below show the project distributions in these two schemes.

The demographics of our program didn’t change this year. Based on the single-category scheme (right-hand chart), our program is over-weighted in formation and dry systems and severely underweighted in size reduction and characterization. The multi-category scheme is more balanced, however it also indicates that size reduction is underweighted. We have a chance to grow the size reduction portfolio based on output from the milling workshop.

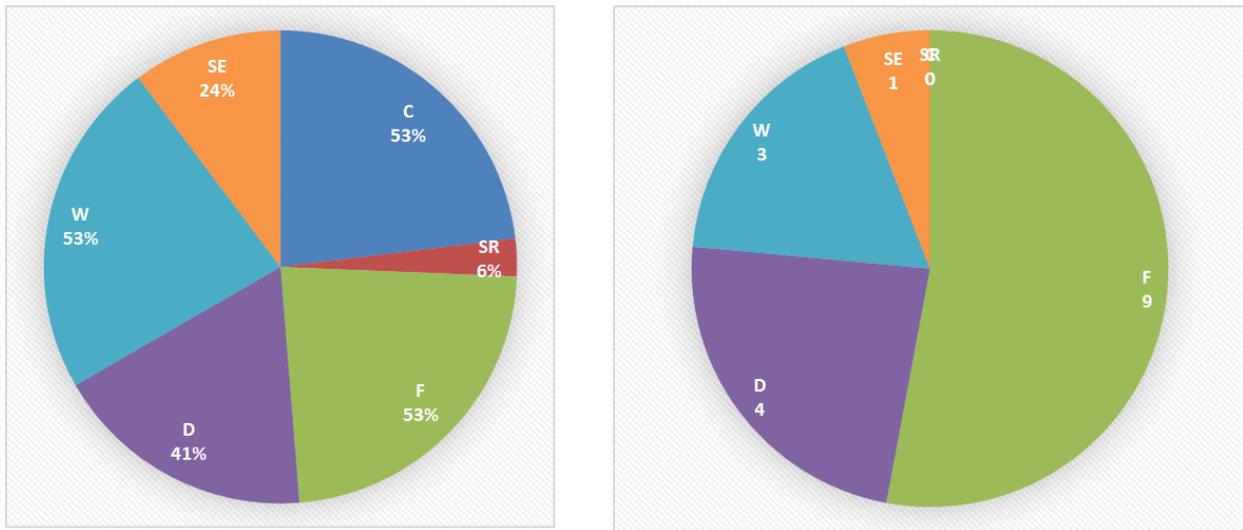


Figure 1: Balance of the technical program

Type	No.	C	SR	F	D	W	SE	Project	Research Associate	Institution	Country	End
Projects	1	X		X		X		Characterization of Spray Nozzles at Industrial Conditions	N. Ashgriz	U. Toronto	Canada	2025
	2	X				X		Slurry and Paste Rheology	E. Koos	U. Leuven	Belgium	2025
	3	X			X			Aeration & Deaeration of Geldart C Powders	Olivier Pouliquen	Aix Marseille U.	France	2025
	4	X		X	X	X		Drying of Wet Powders with Shear to Prevent Agglomerate Formation	Alban Sauret	UCSB	US	2025
	5			X		X		Spray Drying of Pastes to Improve Sustainability	Volker Gaukel	KIT	Germany	2025
	6	X		X		X	X	Numerical Modeling of Spray Droplet Formation	Olivier Desjardins	Cornell U.	US	2025
	7	X		X			X	Model-based Design of Granular Products	R. Smith	U. Sheffield	UK	2026
	8	X				X		Simplified Industrial Formulations of Colloidal Dispersions	J. Vermant	ETH	Switzerland	2026
	9	X	X		X		X	A Systems Engineering Approach to Dry-Milling with Grinding Aid Additives	A. Kwade	TU Braunschweig	Germany	2026
	10				X		X	Precision powder feeding	P. Nott	IISc Bangalore	India	2026
	11				X			Predicting Powder Flow from Flexible-Wall Containers	M. Jones	U. Newcastle	Australia	2026
	12			X		X		Porosity Development During Drying	Reza Kharagani	OVGU Magdeburg	Germany	2026
	13	X				X		Understanding Accelerated Aging of Gels	Lilian Hsiao	NCSU	USA	2026
	15				X			Selection of Flow Aids	Raj Dave	NJIT	US	2027
	16			X				Air-Induced Defect Formation During Compaction	Ken Kamrin	M.I.T.	US	2027
	17				X		X	Segregation of Cohesive Powders	Rich Lueptow	Northwestern U.	US	2027
	18					X	X	Syneresis	Emanuela Del Gado	Georgetown U.	US	2027
	Collab	1	X				X	X	Simulation of Colloidal Dispersions	Jan Vermant, Mike Howard	ETH, Auburn U.	Switzerland, USA
2					X		X	Continuum Flow Modeling	Ken Kamrin Peter Vonk	M.I.T. Envalior	US Netherlands	2024
Workshop	1		X					Milling of Complex Materials	Jarrod Hart Wolfgang Peukert	Imrys U. Erlangen	UK Germany	2025
	2	X			X	X		Friction and adhesion in wet and dry systems	Eric Furst Wilson Poon John Hone	U. Delaware U. Edinburgh Syngenta	US UK UK	2026

Table 1: 2024-2025 Projects

Type	No.	C	SR	F	D	W	SE	Project	Research Associate	Institution	Country
Reviews	1							Tribocharging of powders in process	Scott Waitukaitis	ISTA	Austria
	2							Surface Energy of Heterogeneous Surfaces	Hans-Jurgen Butt	Max Plank Institute for Polymer Research	Germany
	3							Characterization of multimodal particle size			
	4							Process Intensification of Particle Processes	Kamelia Boodhoo	U. Newcastle	England
Proposals	1							Fish Eye Avoidance & Break Up	Patrick Spicer	U. New South Wales	Australia
									Gul Ozcan-Taskin	U. Loughborough	England
	2							HTR of Jamming	Daniel Hodgson	U. Edinburgh	Scotland
									Yimin Luo	Yale U.	USA
	3							Model-Based Control of Granule Porosity	Johannes Khinast	TU Graz	Austria
									Hideya Takamura	Osaka Metro U.	Japan
	4							Vibrators and Air Assistance for Reliable Flow	S.S. Mallick	Thapar Inst. Of Tech	India
									Berend van Wechem	U. Magdeburg	Germany
	5							Wetting of heterogeneous particles	Lucio Isa	ETH	Switzerland
									Eckart Meiburg	UCSB	USA

Table 2: 2024-2025 Reviews and New Project Briefs